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| Nr   | ion     | Transit. | E(eV)  | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2  | 4.4  | 4.6  | 4.8  | 5.0   | 5.2   | 5.4   | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6 | 7.8 | 8.0 | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |
|------|---------|----------|--------|-----------|------|-------|-----|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 396  | Ne VIII | LI12     | 16.094 | 770.400   | 5.79 | 0.06  | -   | -    | -    | -    | -    | -     | -     | -     | 1.49 | 0.07 | 0.72 | 1.35 | 1.71 | 2.19 | 3.17 | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 132  | N IV    | BE13     | 16.204 | 765.140   | 5.18 | -0.74 | -   | -    | -    | -    | 1.55 | -0.19 | -0.73 | 0.65  | 2.37 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 114  | N III   | B11      | 16.228 | 764.010   | 5.00 | 0.15  | -   | -    | -    | 1.53 | 0.54 | 0.15  | 0.60  | 2.74  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 238  | O V     | BE14A    | 16.305 | 760.400   | 5.40 | -0.62 | -   | -    | -    | -    | -    | 2.78  | 0.32  | -0.62 | 0.60 | 2.18 | 3.34 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 862  | Si IX   | C18      | 16.404 | 755.800   | 6.02 | 1.06  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 2.15 | 1.07 | 1.75 | 4.18 | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 601  | Mg IX   | BE14B    | 16.496 | 751.600   | 5.98 | 1.27  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 2.47 | 1.28 | 2.43 | 3.65 | 4.49 | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 768  | Si IV   | NA5      | 16.533 | 749.900   | 4.90 | 5.51  | -   | -    | -    | 7.72 | 5.78 | 5.65  | 6.03  | 6.38  | 7.33 | 8.88 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 105  | N II    | C13      | 16.598 | 746.980   | 4.77 | 1.89  | -   | -    | 3.44 | 2.32 | 1.89 | 2.18  | 3.24  | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 288  | Ne I    | NE7      | 16.848 | 735.890   | 4.40 | 2.01  | -   | 3.61 | 2.01 | 2.51 | 2.63 | 3.33  | 4.75  | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 186  | O II    | N14      | 17.255 | 718.540   | 4.83 | 0.82  | -   | -    | 2.87 | 1.45 | 0.84 | 1.11  | 2.10  | 3.74  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 992  | S VI    | NA11     | 17.447 | 710.620   | 5.28 | 1.36  | -   | -    | -    | -    | 4.21 | 1.64  | 1.68  | 2.24  | 2.86 | 4.44 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 569  | Mg VIII | B14      | 17.490 | 708.900   | 5.91 | 0.46  | -   | -    | -    | -    | -    | -     | -     | -     | 2.64 | 0.74 | 0.74 | 2.79 | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 600  | Mg IX   | BE15     | 17.564 | 705.880   | 5.98 | 0.39  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 1.47 | 0.41 | 1.67 | 2.95 | 3.86 | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1171 | Ar VIII | NA12     | 17.590 | 704.870   | 5.56 | 1.55  | -   | -    | -    | -    | -    | -     | -     | 2.85  | 1.60 | 2.31 | 3.00 | 4.51 | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 203  | O III   | C7       | 17.627 | 703.360   | 5.04 | -0.95 | -   | -    | -    | -    | 1.77 | -0.29 | -0.93 | -0.68 | 0.35 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 708  | Al III  | NA6      | 17.816 | 695.900   | 4.62 | 4.67  | -   | -    | 6.49 | 4.69 | 5.12 | 5.66  | 6.06  | 6.86  | 8.16 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 453  | Na IX   | LI12     | 17.858 | 694.260   | 5.92 | 2.20  | -   | -    | -    | -    | -    | -     | -     | -     | 6.19 | 2.83 | 2.35 | 3.03 | 3.52 | 3.86 | 4.54 | 5.64 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 46   | C III   | BE9      | 17.956 | 690.500   | 4.97 | 1.13  | -   | -    | -    | 3.46 | 1.72 | 1.15  | 2.49  | 4.00  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 32   | C II    | B6       | 18.041 | 687.250   | 4.76 | 0.91  | -   | 4.33 | 2.24 | 1.14 | 0.94 | 1.44  | 3.56  | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 113  | N III   | B10      | 18.081 | 685.710   | 5.01 | -0.36 | -   | -    | -    | 1.15 | 0.07 | -0.36 | 0.05  | 2.17  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 452  | Na IX   | LI12     | 18.187 | 681.720   | 5.92 | 1.89  | -   | -    | -    | -    | -    | -     | -     | -     | 5.89 | 2.53 | 2.04 | 2.72 | 3.21 | 3.55 | 4.23 | 5.33 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 750  | Si III  | MG2      | 18.425 | 672.900   | 4.82 | 2.46  | -   | -    | 5.73 | 3.35 | 2.47 | 3.31  | 4.71  | 5.83  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 104  | N II    | C5       | 18.464 | 671.480   | 4.77 | 1.89  | -   | -    | 3.44 | 2.32 | 1.89 | 2.18  | 3.25  | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 971  | S V     | MG7      | 18.742 | 661.520   | 5.21 | 1.16  | -   | -    | -    | -    | 4.75 | 2.22  | 1.17  | 2.29  | 3.66 | 4.93 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 963  | S IV    | AL4      | 18.746 | 661.400   | 5.09 | 0.26  | -   | -    | 3.06 | 1.25 | 0.36 | 0.44  | 2.37  | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1262 | Ca IV   | CL8      | 18.771 | 660.500   | 5.24 | 1.20  | -   | -    | -    | 2.92 | 1.71 | 1.22  | 1.46  | 2.56  | 4.98 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1267 | Ca V    | S8       | 19.163 | 647.000   | 5.40 | 3.40  | -   | -    | -    | -    | 5.42 | 3.91  | 3.40  | 3.90  | 5.82 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 103  | N II    | C12      | 19.223 | 644.990   | 4.83 | 0.77  | -   | -    | 2.43 | 1.26 | 0.78 | 1.03  | 2.07  | 4.71  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 185  | O II    | N18      | 19.248 | 644.150   | 4.86 | 0.28  | -   | -    | 2.83 | 1.12 | 0.32 | 0.48  | 1.38  | 2.95  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1164 | Ar VII  | MG10     | 19.455 | 637.300   | 5.52 | 1.82  | -   | -    | -    | -    | -    | 4.73  | 2.33  | 2.18  | 3.77 | 5.19 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1277 | Ca VI   | P6       | 19.461 | 637.100   | 5.56 | 1.09  | -   | -    | -    | -    | -    | 3.08  | 1.47  | 1.11  | 2.36 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 102  | N II    | C12      | 19.520 | 635.180   | 4.87 | 1.79  | -   | -    | 3.99 | 2.50 | 1.83 | 1.96  | 2.94  | 5.55  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1288 | Ca VII  | SI11     | 19.534 | 634.720   | 5.67 | 1.93  | -   | -    | -    | -    | -    | -     | -     | 3.32  | 2.03 | 2.56 | 5.50 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 3790 | Fe XX   | N19      | 19.683 | 629.900   | 6.95 | 2.29  | -   | -    | -    | -    | -    | -     | -     | -     | -    | -    | -    | -    | -    | 4.73 | 2.78 | 2.35 | 3.56 | 5.47 | -   | -   | -   | -   | -   | -   | -   | -   |
| 237  | O V     | BE13     | 19.688 | 629.730   | 5.39 | -1.49 | -   | -    | -    | -    | 1.67 | -0.64 | -1.49 | -0.21 | 1.41 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 679  | Mg X    | LI12     | 19.829 | 625.280   | 6.04 | 1.02  | -   | -    | -    | -    | -    | -     | -     | -     | 3.43 | 1.09 | 1.41 | 2.01 | 2.37 | 2.81 | 3.71 | 4.85 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1075 | S XI    | C18      | 20.101 | 616.800   | 6.24 | 1.70  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 2.94 | 1.73 | 2.45 | 4.81 | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 909  | Si XI   | BE14B    | 20.332 | 609.800   | 6.20 | 1.41  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 2.78 | 1.41 | 2.32 | 3.41 | 4.20 | 5.03 | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 678  | Mg X    | LI12     | 20.332 | 609.800   | 6.04 | 0.71  | -   | -    | -    | -    | -    | -     | -     | -     | 3.12 | 0.78 | 1.11 | 1.70 | 2.06 | 2.51 | 3.40 | 4.54 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 215  | O IV    | B11      | 20.347 | 609.350   | 5.26 | -0.85 | -   | -    | -    | -    | 2.14 | 0.01  | -0.80 | -0.56 | 1.53 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 202  | O III   | C15      | 20.678 | 599.600   | 5.06 | -0.84 | -   | -    | -    | 2.34 | 0.01 | -0.79 | -0.65 | 0.31  | 2.97 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1299 | Ca VIII | AL15     | 20.935 | 592.220   | 5.74 | 1.23  | -   | -    | -    | -    | -    | -     | -     | 4.26  | 1.82 | 1.50 | 3.75 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 14   | He I    | HE4      | 21.218 | 584.350   | 4.51 | 0.99  | -   | 3.83 | 1.43 | 1.10 | 1.35 | 1.95  | 2.85  | 3.62  | 4.32 | 4.96 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 908  | Si XI   | BE15     | 21.270 | 582.900   | 6.19 | 0.62  | -   | -    | -    | -    | -    | -     | -     | -     | -    | -    | 1.88 | 0.62 | 1.61 | 2.76 | 3.62 | 4.49 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 101  | N II    | C10      | 21.298 | 582.150   | 4.87 | 2.41  | -   | -    | 4.56 | 3.10 | 2.45 | 2.59  | 3.58  | 6.20  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 100  | N II    | C11      | 21.576 | 574.650   | 4.87 | 1.87  | -   | -    | 4.08 | 2.58 | 1.91 | 2.05  | 3.02  | 5.63  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 45   | C III   | BE8      | 21.589 | 574.300   | 4.98 | 1.30  | -   | -    | 3.90 | 1.98 | 1.31 | 2.58  | 4.05  | 5.21  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 331  | Ne V    | C8       | 21.712 | 571.040   | 5.47 | -0.14 | -   | -    | -    | -    | 3.77 | 1.04  | -0.06 | 0.06  | 1.58 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 731  | Al XI   | LI12     | 21.809 | 568.500   | 6.16 | 2.17  | -   | -    | -    | -    | -    | -     | -     | -     | -    | 3.16 | 2.22 | 2.79 | 3.25 | 3.60 | 4.25 | 5.28 | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 749  | Si III  | MG1      | 21.882 | 566.600   | 4.82 | 2.52  | -   | -    | 5.48 | 3.30 | 2.52 | 3.40  | 4.80  | 5.89  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 1338 | Ca X    | NA12     | 21.944 | 565.000   | 5.81 | 1.76  | -   | -    | -    | -    | -    | -     | -     | 4.29  | 1.76 | 2.29 | 3.04 | 4.64 | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 376  | Ne VII  | BE14A    | 22.077 | 561.600   | 5.72 | 0.28  | -   | -    | -    | -    | -    | -     | -     | 3.22  | 0.79 | 0.51 | 2.00 | 3.26 | 4.10 | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 350  | Ne VI   | B12      | 22.086 | 561.380   | 5.63 | -0.27 | -   | -    | -    | -    | -    | 3.32  | 0.67  | -0.25 | 0.54 | 2.82 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | -   | -   | -   | -   | -   |
| 707  | Al III  | NA2      | 22.124 | 560.400   | 4.64 | 5.39  | -   | -    | 7.56 | 5.45 | 5.68 | 6.10  | 6.42  | 7.17  | 8.45 | -    | -    | -    | -    | -</  |      |      |      |      |     |     |     |     |     |     |     |     |





















Table with columns: Nr, ion, Transit., E(eV), Lambda(A), Tmax, -Qmax, and various wavelength bands from 4.0 to 9.0. The table lists 350 spectral lines with their respective parameters.



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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0  | 5.2  | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|---|
| 4253 | Fe XXI   | C7E      | 102.290 | 121.210   | 7.02 | 3.06  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.21 | 3.07 | 3.72 | 5.16 | 6.59 | -    | -    | -    | -   | -   | -   |   |
| 278  | O VII    | HE7      | 103.040 | 120.330   | 6.31 | 2.30  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.09 | 4.96 | 5.76 | -    | -    | -    | -    | -    | -   | -   | -   |   |
| 493  | Mg IV    | F1B      | 103.320 | 120.000   | 5.40 | 2.40  | -   | -   | -   | -   | -   | 5.73 | 3.16 | 2.40 | 2.99 | 4.49 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   |   |
| 3121 | Fe XIX   | O6D      | 103.320 | 120.000   | 6.89 | 2.09  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.59 | 3.41 | 2.23 | 2.36 | 4.01 | -    | -    | -    | -   | -   | -   |   |
| 1583 | Fe VIII  | K12B     | 103.860 | 119.380   | 5.70 | 2.51  | -   | -   | -   | -   | -   | -    | 6.48 | 3.64 | 2.60 | 2.58 | 3.21 | 5.25 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 319  | Ne V     | C9       | 104.180 | 119.010   | 5.58 | 1.49  | -   | -   | -   | -   | -   | -    | 4.05 | 1.99 | 1.50 | 2.62 | 5.16 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 788  | Si V     | NE8      | 104.220 | 118.960   | 5.42 | 1.18  | -   | -   | -   | -   | -   | 3.78 | 1.98 | 1.18 | 1.50 | 2.58 | 4.64 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1582 | Fe VIII  | K12A     | 104.270 | 118.910   | 5.71 | 2.54  | -   | -   | -   | -   | -   | -    | -    | 3.72 | 2.64 | 2.59 | 3.22 | 5.25 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 4252 | Fe XXI   | C7B1     | 104.460 | 118.690   | 7.02 | 4.49  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.64 | 4.50 | 5.15 | 6.59 | 8.01 | -    | -    | -    | -   | -   | -   |   |
| 3779 | Fe XX    | N6C      | 104.490 | 118.660   | 6.95 | 1.71  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.25 | 2.25 | 1.76 | 2.92 | 4.79 | -    | -    | -    | -   | -   | -   |   |
| 5350 | Ni XXIV  | B12A     | 104.610 | 118.520   | 7.09 | 2.68  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.13 | 2.93 | 2.96 | 4.05 | 5.10 | 6.07 | -    | -    | -   | -   | -   |   |
| 1332 | Ca X     | NA5      | 104.890 | 118.200   | 5.83 | 3.82  | -   | -   | -   | -   | -   | -    | -    | 6.83 | 3.86 | 4.11 | 4.70 | 6.21 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5372 | Ni XXV   | BE13A    | 105.120 | 117.950   | 7.15 | 2.33  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 6.13 | 3.01 | 2.37 | 2.95 | 3.60 | 4.24 | 4.95 | 5.74 | -   | -   | -   |   |
| 787  | Si V     | NE7      | 105.200 | 117.850   | 5.42 | 1.52  | -   | -   | -   | -   | -   | 4.16 | 2.34 | 1.53 | 1.84 | 2.92 | 4.97 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5301 | Ni XXII  | N6A      | 105.240 | 117.810   | 6.96 | 2.56  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.53 | 3.15 | 2.58 | 3.84 | 5.89 | -    | -    | -    | -   | -   | -   |   |
| 4251 | Fe XXI   | C7B      | 105.510 | 117.510   | 7.02 | 2.02  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.17 | 2.03 | 2.68 | 4.12 | 5.55 | -    | -    | -    | -   | -   | -   |   |
| 1581 | Fe VIII  | K11B     | 105.790 | 117.200   | 5.71 | 2.12  | -   | -   | -   | -   | -   | -    | -    | 3.31 | 2.22 | 2.17 | 2.79 | 4.82 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 4571 | Fe XXII  | B11      | 105.820 | 117.170   | 7.08 | 1.32  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.30 | 1.48 | 1.60 | 2.61 | 3.67 | 4.77 | -    | -    | -   | -   | -   |   |
| 1580 | Fe VIII  | K11A     | 106.010 | 116.960   | 5.71 | 1.97  | -   | -   | -   | -   | -   | -    | -    | 3.11 | 2.07 | 2.03 | 2.66 | 4.69 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 373  | Ne VII   | BE8      | 106.250 | 116.690   | 5.74 | 1.03  | -   | -   | -   | -   | -   | -    | -    | 4.85 | 1.81 | 1.16 | 2.43 | 3.55 | 4.33 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 4570 | Fe XXII  | B10B     | 106.620 | 116.290   | 7.08 | 2.69  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.66 | 2.84 | 2.96 | 3.97 | 5.03 | 6.13 | -    | -    | -   | -   | -   |   |
| 249  | O VI     | LI2      | 107.040 | 115.830   | 5.52 | 1.36  | -   | -   | -   | -   | -   | 5.33 | 1.91 | 1.45 | 1.85 | 2.16 | 2.31 | 2.82 | 3.95 | 5.16 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 372  | Ne VII   | BE7      | 107.330 | 115.520   | 5.74 | 1.34  | -   | -   | -   | -   | -   | -    | 5.18 | 2.13 | 1.47 | 2.73 | 3.86 | 4.63 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 4569 | Fe XXII  | B10A     | 108.370 | 114.410   | 7.08 | 2.07  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.04 | 2.22 | 2.34 | 3.35 | 4.41 | 5.50 | -    | -    | -   | -   | -   |   |
| 511  | Mg V     | O1C,2A   | 108.470 | 114.300   | 5.55 | 1.40  | -   | -   | -   | -   | -   | 3.89 | 1.80 | 1.44 | 2.22 | 4.22 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 3777 | Fe XX    | N6F      | 109.390 | 113.340   | 6.95 | 4.58  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 7.13 | 5.12 | 4.63 | 5.79 | 7.66 | -    | -    | -    | -    | -   | -   |     |   |
| 4247 | Fe XXI   | C7G      | 109.430 | 113.300   | 7.02 | 4.49  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.64 | 4.49 | 5.14 | 6.58 | 8.01 | -    | -    | -    | -   | -   | -   |   |
| 1579 | Fe VIII  | K10      | 109.790 | 112.930   | 5.72 | 2.43  | -   | -   | -   | -   | -   | -    | -    | 3.66 | 2.55 | 2.48 | 3.09 | 5.11 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1578 | Fe VIII  | K9B      | 110.220 | 112.490   | 5.72 | 2.26  | -   | -   | -   | -   | -   | -    | -    | 3.50 | 2.38 | 2.30 | 2.91 | 4.93 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1577 | Fe VIII  | K9A      | 110.240 | 112.470   | 5.71 | 2.30  | -   | -   | -   | -   | -   | -    | -    | 3.49 | 2.41 | 2.36 | 2.98 | 5.00 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5326 | Ni XXIII | C6A      | 110.840 | 111.860   | 7.03 | 2.46  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.85 | 2.49 | 3.16 | 4.74 | 6.19 | -    | -    | -    | -   | -   | -   |   |
| 526  | Mg VI    | N3B      | 110.970 | 111.720   | 5.71 | 1.83  | -   | -   | -   | -   | -   | -    | -    | 3.60 | 2.03 | 1.95 | 3.29 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 3118 | Fe XIX   | O6C      | 111.000 | 111.700   | 6.89 | 2.31  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.82 | 3.64 | 2.46 | 2.58 | 4.23 | -    | -    | -    | -   | -   | -   |   |
| 525  | Mg VI    | N3A      | 111.140 | 111.560   | 5.71 | 1.53  | -   | -   | -   | -   | -   | -    | -    | 3.30 | 1.74 | 1.65 | 2.99 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1331 | Ca X     | NA6      | 111.660 | 111.040   | 5.83 | 3.36  | -   | -   | -   | -   | -   | -    | -    | -    | 6.33 | 3.40 | 3.65 | 4.21 | 5.68 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5325 | Ni XXIII | C7C      | 111.700 | 111.000   | 7.03 | 4.00  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.39 | 4.03 | 4.69 | 6.27 | 7.72 | -    | -    | -    | -   | -   | -   |   |
| 508  | Mg V     | O1A      | 111.840 | 110.860   | 5.55 | 1.93  | -   | -   | -   | -   | -   | 4.48 | 2.34 | 1.96 | 2.73 | 4.72 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 3775 | Fe XX    | N6D      | 112.070 | 110.630   | 6.95 | 2.83  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.38 | 3.37 | 2.88 | 4.04 | 5.91 | -    | -    | -    | -   | -   | -   |   |
| 1304 | Ca IX    | MG1      | 112.710 | 110.000   | 5.78 | 3.19  | -   | -   | -   | -   | -   | -    | -    | 4.95 | 3.21 | 4.39 | 5.70 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 3116 | Fe XIX   | O6E      | 112.740 | 109.970   | 6.89 | 2.21  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.72 | 3.53 | 2.35 | 2.47 | 4.12 | -    | -    | -    | -   | -   | -   |   |
| 5281 | Ni XXI   | O6D      | 113.430 | 109.300   | 6.88 | 3.19  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.71 | 3.33 | 3.46 | 5.26 | -    | -    | -    | -    | -   | -   | -   |   |
| 3115 | Fe XIX   | O6A      | 114.410 | 108.370   | 6.89 | 1.50  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.01 | 2.82 | 1.64 | 1.76 | 3.41 | -    | -    | -    | -   | -   | -   |   |
| 4246 | Fe XXI   | C7A      | 114.670 | 108.120   | 7.02 | 2.58  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.73 | 2.59 | 3.23 | 4.67 | 6.10 | -    | -   | -   | -   | - |
| 1576 | Fe VIII  | K3B      | 114.710 | 108.080   | 5.71 | 3.39  | -   | -   | -   | -   | -   | -    | -    | 4.60 | 3.49 | 3.44 | 4.07 | 6.10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1575 | Fe VIII  | K3C      | 114.720 | 108.080   | 5.71 | 2.08  | -   | -   | -   | -   | -   | -    | -    | 3.30 | 2.19 | 2.14 | 2.77 | 4.80 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 1574 | Fe VIII  | K3A      | 114.940 | 107.870   | 5.71 | 2.21  | -   | -   | -   | -   | -   | -    | -    | 3.39 | 2.31 | 2.27 | 2.91 | 4.94 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5348 | Ni XXIV  | B10B     | 115.230 | 107.600   | 7.09 | 4.09  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 6.55 | 4.34 | 4.37 | 5.46 | 6.51 | 7.48 | -    | -    | -   | -   | -   |   |
| 371  | Ne VII   | BE6B     | 116.750 | 106.190   | 5.74 | 1.76  | -   | -   | -   | -   | -   | -    | -    | 5.53 | 2.53 | 1.89 | 3.17 | 4.29 | 5.04 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 370  | Ne VII   | BE6C     | 116.870 | 106.090   | 5.74 | 1.76  | -   | -   | -   | -   | -   | -    | -    | 5.53 | 2.53 | 1.90 | 3.17 | 4.29 | 5.04 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |   |
| 5298 | Ni XXII  | N6B      | 116.920 | 106.040   | 6.96 | 2.69  | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.67 | 3.29 | 2.72 | 3.97 | 6.02 | -    | -    | -    | -   | -   | -   |   |
| 1628 | Fe IX    | A3       | 117.850 | 105.210   | 5.89 | 1.89  | -   | -   | -   | -   | -   | -    | -    | 4.63 | 2.6  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |   |

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# line list SPEX version 2.0

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8  | 5.0  | 5.2  | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 395  | Ne VIII  | LI7A     | 120.270 | 103.080   | 5.82 | 1.49  | -   | -   | -   | -   | -    | -    | -    | -    | 3.42 | 1.50 | 1.84 | 2.28 | 2.54 | 2.97 | 3.92 | 5.10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 394  | Ne VIII  | LI7B     | 120.480 | 102.910   | 5.82 | 1.79  | -   | -   | -   | -   | -    | -    | -    | -    | 3.72 | 1.80 | 2.14 | 2.58 | 2.83 | 3.26 | 4.22 | 5.40 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5297 | Ni XXII  | N6C      | 120.720 | 102.700   | 6.97 | 2.97  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.95 | 3.57 | 2.99 | 4.25 | 6.30 | -    | -    | -    | -    | -    | -    | -    |
| 287  | O VIII   | H6       | 121.000 | 102.470   | 6.50 | 2.33  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.28 | 3.60 | 2.44 | 2.39 | 2.65 | 2.93 | 3.19 | 3.43 | 3.66 | 3.88 | 4.08 | 4.27 | 4.44 | 4.56 | 4.64 | 4.66 |
| 4568 | Fe XXII  | B10D     | 121.280 | 102.230   | 7.08 | 3.86  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.85 | 4.02 | 4.13 | 5.14 | 6.20 | 7.29 | -    | -    | -    | -    | -    | -    |
| 4244 | Fe XXI   | C6D      | 121.290 | 102.220   | 7.02 | 1.92  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.08 | 1.93 | 2.57 | 4.01 | 5.44 | -    | -    | -    | -    | -    | -    | -    |
| 5347 | Ni XXIV  | B11      | 121.420 | 102.110   | 7.09 | 2.60  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.06 | 2.85 | 2.88 | 3.97 | 5.02 | 5.99 | -    | -    | -    | -    | -    | -    |
| 5323 | Ni XXIII | C7B      | 121.420 | 102.110   | 7.03 | 3.27  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.66 | 3.30 | 3.96 | 5.53 | 6.98 | -    | -    | -    | -    | -    | -    | -    |
| 3114 | Fe XIX   | O6B      | 122.090 | 101.550   | 6.89 | 1.90  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 5.42 | 3.23 | 2.04 | 2.16 | 3.81 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 4567 | Fe XXII  | B10C     | 123.040 | 100.770   | 7.08 | 2.89  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.88 | 3.05 | 3.17 | 4.17 | 5.23 | 6.33 | -    | -    | -    | -    | -    | -    |
| 1330 | Ca X     | NA4      | 123.120 | 100.700   | 5.83 | 4.89  | -   | -   | -   | -   | -    | -    | -    | -    | 7.93 | 4.94 | 5.18 | 5.76 | 7.28 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5278 | Ni XXI   | O6C      | 123.700 | 100.230   | 6.88 | 3.42  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.94 | 3.56 | 3.69 | 5.48 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5346 | Ni XXIV  | B10A     | 124.170 | 99.850    | 7.09 | 3.34  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.81 | 3.60 | 3.62 | 4.71 | 5.76 | 6.72 | -    | -    | -    | -    | -    | -    |
| 799  | Si VI    | F3C      | 124.660 | 99.460    | 5.68 | 1.90  | -   | -   | -   | -   | -    | -    | 3.02 | 1.99 | 2.14 | 3.48 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1680 | Fe X     | CL3C     | 125.710 | 98.624    | 6.02 | 4.01  | -   | -   | -   | -   | -    | -    | -    | -    | 7.15 | 4.97 | 4.02 | 4.80 | 7.52 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1571 | Fe VIII  | K2B      | 125.810 | 98.549    | 5.73 | 3.77  | -   | -   | -   | -   | -    | -    | -    | 5.10 | 3.91 | 3.81 | 4.42 | 6.44 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1570 | Fe VIII  | K2C      | 125.810 | 98.548    | 5.73 | 3.47  | -   | -   | -   | -   | -    | -    | -    | 4.79 | 3.60 | 3.50 | 4.11 | 6.13 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 506  | Mg V     | O7E,F    | 125.870 | 98.500    | 5.57 | 2.50  | -   | -   | -   | -   | -    | 5.28 | 2.99 | 2.51 | 3.22 | 5.17 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1569 | Fe VIII  | K2A      | 126.040 | 98.371    | 5.72 | 2.60  | -   | -   | -   | -   | -    | -    | -    | 3.89 | 2.72 | 2.64 | 3.25 | 5.28 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 393  | Ne VIII  | LI6B     | 126.180 | 98.260    | 5.82 | 1.22  | -   | -   | -   | -   | -    | -    | -    | -    | 3.22 | 1.23 | 1.53 | 1.93 | 2.16 | 2.57 | 3.50 | 4.66 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 785  | Si V     | NE6      | 126.240 | 98.210    | 5.46 | 2.76  | -   | -   | -   | -   | -    | 6.14 | 3.91 | 2.82 | 2.92 | 3.85 | 5.79 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 340  | Ne VI    | B2       | 126.260 | 98.200    | 5.68 | 1.93  | -   | -   | -   | -   | -    | -    | 3.79 | 2.11 | 2.42 | 4.39 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 392  | Ne VIII  | LI6A     | 126.370 | 98.115    | 5.82 | 1.52  | -   | -   | -   | -   | -    | -    | -    | 3.52 | 1.53 | 1.83 | 2.22 | 2.44 | 2.85 | 3.79 | 4.95 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 4242 | Fe XXI   | C6C      | 126.670 | 97.880    | 7.02 | 2.29  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 3.44 | 2.30 | 2.94 | 4.38 | 5.81 | -    | -    | -    | -    | -    | -    | -    |
| 1679 | Fe X     | CL3B     | 126.720 | 97.838    | 6.00 | 2.90  | -   | -   | -   | -   | -    | -    | -    | -    | 5.69 | 3.66 | 2.90 | 3.90 | 6.84 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1678 | Fe X     | CL2D     | 127.040 | 97.591    | 6.02 | 3.18  | -   | -   | -   | -   | -    | -    | -    | -    | 6.35 | 4.17 | 3.19 | 3.96 | 6.67 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 365  | Ne VII   | BE5A     | 127.160 | 97.502    | 5.75 | 1.16  | -   | -   | -   | -   | -    | -    | 5.06 | 1.98 | 1.27 | 2.47 | 3.53 | 4.23 | 4.91 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 524  | Mg VI    | N1E1     | 127.450 | 97.278    | 5.72 | 1.87  | -   | -   | -   | -   | -    | -    | -    | 3.72 | 2.09 | 1.99 | 3.35 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5320 | Ni XXIII | C7A      | 127.560 | 97.200    | 7.03 | 3.80  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.19 | 3.83 | 4.49 | 6.07 | 7.52 | -    | -    | -    | -    | -    | -    | -    |
| 784  | Si V     | NE4      | 127.630 | 97.143    | 5.47 | 2.04  | -   | -   | -   | -   | -    | 5.47 | 3.21 | 2.10 | 2.19 | 3.11 | 5.05 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1677 | Fe X     | CL3A     | 127.660 | 97.122    | 6.01 | 2.62  | -   | -   | -   | -   | -    | -    | -    | -    | 5.49 | 3.47 | 2.62 | 3.46 | 6.21 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1676 | Fe X     | CL2F     | 128.100 | 96.788    | 6.02 | 2.87  | -   | -   | -   | -   | -    | -    | -    | -    | 5.99 | 3.83 | 2.88 | 3.66 | 6.36 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 783  | Si V     | NE5      | 128.570 | 96.437    | 5.47 | 1.66  | -   | -   | -   | -   | 5.11 | 2.84 | 1.72 | 1.81 | 2.72 | 4.66 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1675 | Fe X     | CL2C     | 128.990 | 96.122    | 6.02 | 2.03  | -   | -   | -   | -   | -    | -    | -    | -    | 5.02 | 2.95 | 2.04 | 2.84 | 5.56 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5277 | Ni XXI   | O6A      | 129.350 | 95.850    | 6.88 | 2.61  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 4.13 | 2.74 | 2.87 | 4.67 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 523  | Mg VI    | N1       | 129.850 | 95.483    | 5.73 | 1.18  | -   | -   | -   | -   | -    | -    | 3.13 | 1.44 | 1.27 | 2.56 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1674 | Fe X     | CL2B     | 130.000 | 95.374    | 5.99 | 2.84  | -   | -   | -   | -   | -    | -    | -    | -    | 5.59 | 3.57 | 2.84 | 3.89 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1673 | Fe X     | CL2E     | 130.050 | 95.338    | 6.02 | 2.92  | -   | -   | -   | -   | -    | -    | -    | -    | 5.85 | 3.80 | 2.93 | 3.74 | 6.46 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1135 | S XIV    | LI9      | 130.510 | 95.000    | 6.49 | 3.66  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.47 | 3.82 | 3.75 | 3.98 | 4.20 | 4.63 | 5.42 | 6.39 | 7.33 | -    | -    | -    | -    | -    | -    |
| 5263 | Ni XX    | F4B      | 131.210 | 94.490    | 6.78 | 3.10  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 5.31 | 3.54 | 3.11 | 3.91 | 6.22 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1672 | Fe X     | CL2A     | 131.880 | 94.012    | 6.02 | 2.16  | -   | -   | -   | -   | -    | -    | -    | -    | 5.13 | 3.06 | 2.17 | 2.98 | 5.71 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 2499 | Fe XVIII | F4A      | 132.010 | 93.923    | 6.80 | 1.50  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 3.08 | 1.95 | 1.50 | 2.19 | 4.30 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 3771 | Fe XX    | N6E      | 132.210 | 93.780    | 6.96 | 2.67  | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.23 | 3.21 | 2.71 | 3.87 | 5.74 | -    | -    | -    | -    | -    | -    | -    | -    |
| 1568 | Fe VIII  | K1B      | 132.420 | 93.630    | 5.73 | 4.06  | -   | -   | -   | -   | -    | -    | 5.46 | 4.22 | 4.09 | 4.68 | 6.69 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1567 | Fe VIII  | K1C      | 132.440 | 93.616    | 5.73 | 2.75  | -   | -   | -   | -   | -    | -    | -    | 4.15 | 2.91 | 2.78 | 3.37 | 5.39 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 1566 | Fe VIII  | K1A      | 132.650 | 93.469    | 5.73 | 2.88  | -   | -   | -   | -   | -    | -    | -    | 4.24 | 3.03 | 2.92 | 3.52 | 5.54 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5345 | Ni XXIV  | B10C     | 132.890 |           |      |       |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |







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| Nr   | ion      | Transit. | E(eV)   | lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0 |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|---|---|
| 1983 | Fe XV    | MG4C     | 187.180 | 66.238    | 6.33 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.95 | 3.45 | 4.25 | 5.33 | 7.31 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 1796 | Fe XII   | PlF      | 187.720 | 66.047    | 6.15 | 2.74  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.47 | 3.45 | 2.80 | 4.47 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 1795 | Fe XII   | PlA      | 188.130 | 65.905    | 6.15 | 2.26  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.88 | 2.94 | 2.31 | 3.96 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 675  | Mg X     | LI7A     | 188.310 | 65.840    | 6.07 | 1.96  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.94 | 2.12 | 2.16 | 2.57 | 2.84 | 3.23 | 4.11 | 5.24 | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 674  | Mg X     | LI7B     | 188.790 | 65.672    | 6.07 | 2.26  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.24 | 2.42 | 2.46 | 2.87 | 3.13 | 3.52 | 4.40 | 5.53 | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 1982 | Fe XV    | MG4B     | 188.970 | 65.612    | 6.33 | 3.57  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.18 | 3.69 | 4.49 | 5.57 | 7.54 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 1981 | Fe XV    | MG4A     | 189.670 | 65.370    | 6.33 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.66 | 4.17 | 4.97 | 6.05 | 8.02 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 421  | Ne X     | H6       | 190.160 | 65.200    | 6.78 | 2.96  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.67 | 3.27 | 2.97 | 3.15 | 3.41 | 3.67 | 3.91 | 4.13 | 4.35 | 4.55 | 4.74 | 4.90 | 5.02 | 5.10 | -   | - |   |
| 1661 | Fe X     | CL0B     | 193.060 | 64.220    | 6.02 | 3.04  | -   | -   | -   | -   | -   | -   | -   | -    | 6.45 | 4.08 | 3.05 | 3.83 | 6.57 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   |   |   |
| 1980 | Fe XV    | MG17     | 193.850 | 63.960    | 6.34 | 2.96  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.66 | 3.03 | 3.71 | 4.69 | 6.58 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 2049 | Fe XVI   | NA8A     | 194.580 | 63.719    | 6.45 | 1.74  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.19 | 1.76 | 1.87 | 2.41 | 3.95 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5026 | Ni XI    | A1B      | 195.370 | 63.461    | 6.20 | 2.94  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.56 | 3.63 | 2.94 | 4.43 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 673  | Mg X     | LI6C     | 195.820 | 63.314    | 6.08 | 2.64  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.74 | 2.84 | 2.77 | 3.09 | 3.30 | 3.67 | 4.52 | 5.60 | 6.63 | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1021 | S VIII   | F3C      | 195.860 | 63.304    | 5.92 | 2.26  | -   | -   | -   | -   | -   | -   | -   | -    | 4.50 | 2.59 | 2.38 | 3.60 | 6.10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 672  | Mg X     | LI6B     | 195.890 | 63.294    | 6.08 | 1.68  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.75 | 1.87 | 1.85 | 2.22 | 2.46 | 2.83 | 3.68 | 4.79 | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 671  | Mg X     | LI6A     | 196.320 | 63.153    | 6.08 | 1.98  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.05 | 2.17 | 2.14 | 2.51 | 2.74 | 3.11 | 3.96 | 5.07 | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 2048 | Fe XVI   | NA8B     | 197.180 | 62.879    | 6.45 | 2.05  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.50 | 2.07 | 2.18 | 2.72 | 4.26 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1660 | Fe X     | CL0A     | 197.430 | 62.800    | 6.02 | 3.10  | -   | -   | -   | -   | -   | -   | -   | -    | 6.54 | 4.16 | 3.12 | 3.88 | 6.62 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 584  | Mg IX    | BE5A     | 197.570 | 62.755    | 6.00 | 1.50  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.11 | 1.50 | 2.38 | 3.39 | 4.10 | 4.83 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5025 | Ni XI    | A1A      | 197.650 | 62.730    | 6.20 | 2.65  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.27 | 3.34 | 2.65 | 4.14 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1871 | Fe XIII  | SI8B     | 197.750 | 62.699    | 6.22 | 1.25  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 2.81 | 1.26 | 2.22 | 4.11 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1870 | Fe XIII  | SI8A     | 198.840 | 62.354    | 6.22 | 1.21  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 2.73 | 1.22 | 2.20 | 4.10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1869 | Fe XIII  | SI8C     | 199.650 | 62.100    | 6.22 | 1.50  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.06 | 1.51 | 2.47 | 4.35 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5067 | Ni XIV   | P2A      | 199.970 | 62.000    | 6.34 | 2.87  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 3.78 | 3.14 | 6.10 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 832  | Si VIII  | N1E1     | 200.260 | 61.912    | 5.96 | 1.92  | -   | -   | -   | -   | -   | -   | -   | -    | 4.93 | 2.44 | 1.96 | 3.09 | 5.90 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 850  | Si IX    | C5       | 200.490 | 61.841    | 6.07 | 1.34  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.10 | 1.46 | 1.75 | 3.91 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1020 | S VIII   | F3A      | 201.270 | 61.600    | 5.93 | 2.30  | -   | -   | -   | -   | -   | -   | -   | -    | 4.57 | 2.64 | 2.41 | 3.62 | 6.12 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1005 | S VII    | NE6      | 201.440 | 61.550    | 5.79 | 2.48  | -   | -   | -   | -   | -   | -   | -   | 4.34 | 2.99 | 2.48 | 3.27 | 5.22 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 830  | Si VIII  | N1       | 203.090 | 61.050    | 5.96 | 1.11  | -   | -   | -   | -   | -   | -   | -   | -    | 4.24 | 1.68 | 1.14 | 2.20 | 4.93 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5112 | Ni XVI   | AL8      | 203.590 | 60.900    | 6.39 | 3.86  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.21 | 3.87 | 5.52 | 7.54 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 384  | Ne VIII  | LI1      | 203.890 | 60.810    | 5.85 | 2.63  | -   | -   | -   | -   | -   | -   | -   | -    | 4.93 | 2.68 | 2.82 | 3.12 | 3.29 | 3.66 | 4.55 | 5.67 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1004 | S VII    | NE4      | 203.900 | 60.807    | 5.79 | 1.75  | -   | -   | -   | -   | -   | -   | -   | 3.64 | 2.28 | 1.76 | 2.53 | 4.48 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 810  | Si VII   | O7       | 203.920 | 60.800    | 5.85 | 2.11  | -   | -   | -   | -   | -   | -   | -   | -    | 3.39 | 2.15 | 2.52 | 4.24 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1003 | S VII    | NE5      | 204.560 | 60.610    | 5.79 | 1.36  | -   | -   | -   | -   | -   | -   | -   | 3.26 | 1.89 | 1.36 | 2.14 | 4.08 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5037 | Ni XII   | CL1B     | 204.590 | 60.600    | 6.26 | 3.28  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.95 | 3.40 | 4.19 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5085 | Ni XV    | SI7A     | 205.920 | 60.210    | 6.37 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.93 | 3.46 | 5.76 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5188 | Ni XVIII | NA10     | 206.740 | 59.970    | 6.47 | 3.29  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 3.50 | 3.47 | 4.19 | 5.88 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1929 | Fe XIV   | AL12A    | 208.100 | 59.579    | 6.27 | 2.51  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.17 | 2.72 | 2.98 | 4.29 | 5.70 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1979 | Fe XV    | MG3      | 208.710 | 59.404    | 6.34 | 1.86  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 2.56 | 1.94 | 2.63 | 3.62 | 5.52 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 554  | Mg VIII  | B2       | 209.790 | 59.100    | 5.95 | 1.94  | -   | -   | -   | -   | -   | -   | -   | -    | 5.38 | 2.62 | 2.05 | 3.72 | 5.35 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1928 | Fe XIV   | AL12B    | 210.270 | 58.963    | 6.27 | 2.04  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.64 | 2.24 | 2.51 | 3.82 | 5.24 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 583  | Mg IX    | BE3B     | 213.360 | 58.110    | 6.00 | 2.11  | -   | -   | -   | -   | -   | -   | -   | -    | 3.70 | 2.11 | 3.03 | 4.10 | 4.87 | 5.66 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 670  | Mg X     | LI5B     | 214.060 | 57.920    | 6.08 | 2.16  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.18 | 2.33 | 2.33 | 2.71 | 2.94 | 3.29 | 4.11 | 5.17 | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 669  | Mg X     | LI5A     | 214.210 | 57.880    | 6.07 | 1.86  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.88 | 2.03 | 2.04 | 2.43 | 2.66 | 3.01 | 3.83 | 4.89 | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5145 | Ni XVII  | MG5      | 215.330 | 57.579    | 6.41 | 3.14  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.49 | 3.16 | 4.05 | 5.49 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1515 | Ca XVIII | LI9      | 217.520 | 57.000    | 6.79 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.33 | 4.39 | 4.53 | 4.75 | 5.07 | 5.64 | 6.45 | 7.30 | 8.09 | -    | -    | -    | -    | -   | - |   |
| 1978 | Fe XV    | MG2A     | 220.610 | 56.200    | 6.34 | 1.85  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 2.55 | 1.93 | 2.62 | 3.60 | 5.51 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5051 | Ni XIII  | S1       | 221.400 | 56.000    | 6.31 | 3.42  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.31 | 3.85 | 3.95 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1977 | Fe XV    | MG2B     | 222.220 | 55.793    | 6.34 | 1.99  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 2.68 | 2.07 | 2.76 | 3.74 | 5.64 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 1976 | Fe XV    | MG2C     | 222.850 | 55.635    | 6.34 | 2.23  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 2.93 | 2.31 | 3.00 | 3.98 | 5.89 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - | - |
| 849  | Si IX    | C4       | 223.980 | 55.356    | 6.08 | 1.05  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 2.88 | 1.18 | 1.44 | 3.57 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 848  | Si IX    | C3       | 224.320 | 55.272    | 6.08 | 1.84  | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.67 | 1.97 | 2.23 | 4.36 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | - |   |
| 5144 | Ni XVII  | MG6      | 224.410 | 55.250    | 6.42 | 3.40  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.79 | 3.42 | 4.28 | 5.71 | -    | -    | -    | -    |      |      |      |      |      |      |     |   |   |

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| Nr   | ion | Transit. | E(eV)  | lambda(A) | Tmax   | -Qmax | 4.0  | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8 | 9.0 |  |  |  |  |
|------|-----|----------|--------|-----------|--------|-------|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|--|--|--|--|
| 1514 | Ca  | XVIII    | LI8    | 225.430   | 55.000 | 6.79  | 4.63 |     |     |     |     |     |     |      |      |      |      |      |      |      | 5.55 | 4.63 | 4.80 | 5.04 | 5.37 | 5.93 | 6.72 | 7.55 | 8.33 |      |     |     |  |  |  |  |
| 1002 | S   | VII      | NE2    | 226.250   | 54.800 | 5.80  | 3.49 |     |     |     |     |     |     | 5.59 | 4.09 | 3.49 | 4.20 | 6.10 |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2047 | Fe  | XVI      | NA7C   | 226.380   | 54.769 | 6.46  | 3.23 |     |     |     |     |     |     |      |      |      |      |      | 4.76 | 3.27 | 3.33 | 3.82 | 5.30 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2046 | Fe  | XVI      | NA7A   | 226.550   | 54.728 | 6.46  | 2.10 |     |     |     |     |     |     |      |      |      |      |      | 3.62 | 2.13 | 2.19 | 2.69 | 4.18 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1035 | S   | IX       | O5A    | 228.840   | 54.180 | 6.05  | 2.68 |     |     |     |     |     |     |      |      |      |      |      | 4.18 | 2.73 | 3.07 | 4.92 |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2045 | Fe  | XVI      | NA7B   | 229.000   | 54.142 | 6.46  | 2.35 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1018 | S   | VIII     | F2F    | 229.100   | 54.118 | 5.93  | 2.04 |     |     |     |     |     |     |      | 4.47 | 2.43 | 2.13 | 3.29 | 5.76 |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5065 | Ni  | XIV      | P1     | 233.930   | 53.000 | 6.34  | 3.10 |     |     |     |     |     |     |      |      |      |      |      | 4.03 | 3.36 | 6.30 |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 695  | Mg  | XI       | HE8    | 233.930   | 53.000 | 6.78  | 3.54 |     |     |     |     |     |     |      |      |      |      |      | 5.93 | 4.56 | 3.79 | 3.54 | 3.92 | 4.59 | 5.23 | 5.77 | 6.24 | 6.65 | 7.04 | 7.40 |     |     |  |  |  |  |
| 1975 | Fe  | XV       | MG1    | 234.330   | 52.911 | 6.34  | 1.38 |     |     |     |     |     |     |      |      |      |      |      | 2.09 | 1.45 | 2.09 | 3.02 | 4.86 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1017 | S   | VIII     | F2D    | 234.580   | 52.854 | 5.93  | 1.90 |     |     |     |     |     |     |      | 4.36 | 2.30 | 1.99 | 3.14 | 5.60 |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 847  | Si  | IX       | C1     | 234.650   | 52.838 | 6.08  | 2.10 |     |     |     |     |     |     |      |      |      |      |      | 3.96 | 2.24 | 2.48 | 4.60 |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5187 | Ni  | XVIII    | NA9A   | 235.170   | 52.720 | 6.46  | 3.24 |     |     |     |     |     |     |      |      |      |      |      |      | 3.43 | 3.47 | 4.28 | 6.05 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5186 | Ni  | XVIII    | NA9B   | 235.640   | 52.615 | 6.46  | 3.26 |     |     |     |     |     |     |      |      |      |      |      |      |      | 3.44 | 3.48 | 4.29 | 6.05 |      |      |      |      |      |      |     |     |  |  |  |  |
| 902  | Si  | XI       | BE9    | 237.060   | 52.300 | 6.22  | 1.66 |     |     |     |     |     |     |      |      |      |      |      |      | 3.36 | 1.67 | 2.39 | 3.37 | 4.11 | 4.91 |      |      |      |      |      |     |     |  |  |  |  |
| 5141 | Ni  | XVII     | MG4    | 237.410   | 52.224 | 6.41  | 3.96 |     |     |     |     |     |     |      |      |      |      |      |      | 7.30 | 3.97 | 4.87 | 6.31 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 999  | S   | VII      | NE1B   | 237.990   | 52.097 | 5.81  | 2.40 |     |     |     |     |     |     |      | 4.69 | 3.09 | 2.40 | 3.07 | 4.93 |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 826  | Si  | VIII     | N7     | 238.430   | 52.000 | 5.97  | 1.49 |     |     |     |     |     |     |      |      |      |      |      | 4.83 | 2.14 | 1.50 | 2.50 | 5.20 |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 998  | S   | VII      | NE1A   | 239.320   | 51.807 | 5.81  | 2.53 |     |     |     |     |     |     |      | 4.84 | 3.23 | 2.54 | 3.20 | 5.06 |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5185 | Ni  | XVIII    | NA8A   | 242.910   | 51.042 | 6.46  | 2.80 |     |     |     |     |     |     |      |      |      |      |      |      |      | 2.97 | 3.04 | 3.86 | 5.63 |      |      |      |      |      |      |     |     |  |  |  |  |
| 694  | Mg  | XI       | HE7    | 243.110   | 51.000 | 6.77  | 3.34 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 873  | Si  | X        | B6C    | 244.590   | 50.690 | 6.16  | 1.35 |     |     |     |     |     |     |      |      |      |      |      |      | 5.06 | 2.06 |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2044 | Fe  | XVI      | NA6B   | 245.250   | 50.555 | 6.46  | 2.49 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 872  | Si  | X        | B6A    | 245.370   | 50.530 | 6.16  | 1.35 |     |     |     |     |     |     |      |      |      |      |      |      | 5.07 | 2.07 |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2043 | Fe  | XVI      | NA6A   | 246.240   | 50.350 | 6.45  | 2.23 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5184 | Ni  | XVIII    | NA8B   | 246.720   | 50.253 | 6.46  | 3.20 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5084 | Ni  | XV       | SI8    | 247.180   | 50.160 | 6.37  | 2.70 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 997  | S   | VII      | NE3A,B | 247.970   | 50.000 | 5.82  | 2.31 |     |     |     |     |     |     |      | 4.77 | 3.08 | 2.32 | 2.92 | 4.74 |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 901  | Si  | XI       | BE8    | 251.900   | 49.220 | 6.22  | 1.50 |     |     |     |     |     |     |      |      |      |      |      |      |      | 3.23 | 1.51 | 2.22 | 3.18 | 3.92 | 4.72 |      |      |      |      |     |     |  |  |  |  |
| 1179 | Ar  | IX       | NE8    | 252.100   | 49.180 | 5.97  | 1.86 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2042 | Fe  | XVI      | NA5+   | 253.260   | 48.955 | 6.51  | 3.58 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1178 | Ar  | IX       | NE7    | 254.430   | 48.730 | 5.98  | 2.24 |     |     |     |     |     |     |      |      |      |      |      |      | 3.67 | 2.59 | 2.25 | 3.08 | 5.13 |      |      |      |      |      |      |     |     |  |  |  |  |
| 579  | Mg  | IX       | BE2    | 256.480   | 48.340 | 6.01  | 2.46 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 578  | Mg  | IX       | LI4*   | 258.860   | 47.896 | 6.06  | 3.43 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 665  | Mg  | X        | LI4A   | 258.860   | 47.896 | 6.09  | 2.86 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1050 | S   | X        | N3B    | 259.420   | 47.793 | 6.18  | 2.22 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 664  | Mg  | X        | LI4B   | 259.440   | 47.790 | 6.08  | 3.06 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5108 | Ni  | XVI      | AL12A  | 259.530   | 47.772 | 6.39  | 3.16 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1049 | S   | X        | N3A    | 260.180   | 47.654 | 6.18  | 1.92 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1032 | S   | IX       | O1,2   | 261.020   | 47.500 | 6.06  | 1.53 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 663  | Mg  | X        | LI3    | 262.230   | 47.280 | 6.09  | 2.32 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5107 | Ni  | XVI      | AL12B  | 262.770   | 47.184 | 6.39  | 3.19 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 2041 | Fe  | XVI      | NA5    | 265.520   | 46.694 | 6.48  | 2.58 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 900  | Si  | XI       | BE6B   | 267.150   | 46.410 | 6.22  | 2.00 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 899  | Si  | XI       | BE6C   | 267.780   | 46.300 | 6.22  | 2.00 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1015 | S   | VIII     | F1B    | 269.530   | 46.000 | 5.94  | 2.28 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 930  | Si  | XII      | LI7A   | 271.420   | 45.680 | 6.29  | 1.95 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 929  | Si  | XII      | LI7B   | 272.370   | 45.520 | 6.29  | 2.26 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 703  | Mg  | XII      | H6     | 272.670   | 45.470 | 7.01  | 3.37 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 5138 | Ni  | XVII     | MG2    | 273.200   | 45.382 | 6.42  | 3.62 |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |
| 1014 | S   | VIII     | F5     |           |        |       |      |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |  |  |  |  |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2  | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|---|---|
| 927  | Si XII   | LI6B     | 280.730 | 44.165    | 6.30 | 1.65  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.84 | 1.92 | 1.77 | 2.10 | 2.34 | 2.74 | 3.56 | 4.60 | 5.61 | -    | -    | -    | -    | -   | -   | -   |   |   |
| 662  | Mg X     | LI2      | 281.460 | 44.050    | 6.09 | 2.07  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.34 | 2.30 | 2.19 | 2.52 | 2.72 | 3.06 | 3.89 | 4.97 | 6.00 | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 926  | Si XII   | LI6A     | 281.650 | 44.020    | 6.30 | 1.95  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.14 | 2.22 | 2.06 | 2.38 | 2.62 | 3.02 | 3.83 | 4.86 | 5.86 | -    | -    | -    | -    | -   | -   | -   | - |   |
| 1188 | Ar X     | F3C      | 282.300 | 43.920    | 6.13 | 3.04  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.27 | 3.41 | 3.14 | 4.40 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 5182 | Ni XVIII | NA7B     | 282.980 | 43.814    | 6.46 | 3.06  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.24 | 3.29 | 4.10 | 5.87 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 893  | Si XI    | BE5A     | 283.460 | 43.740    | 6.22 | 1.51  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.28 | 1.53 | 2.18 | 3.07 | 3.74 | 4.47 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 1048 | S X      | N1E1     | 288.320 | 43.002    | 6.17 | 2.20  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.71 | 2.84 | 2.22 | 3.41 | 6.17 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 1187 | Ar X     | F3A      | 288.740 | 42.940    | 6.13 | 3.06  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.32 | 3.44 | 3.17 | 4.41 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 5135 | Ni XVII  | MG1      | 289.410 | 42.840    | 6.42 | 3.24  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.69 | 3.27 | 4.07 | 5.43 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 1047 | S X      | N1       | 291.520 | 42.530    | 6.18 | 1.38  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.00 | 2.07 | 1.39 | 2.51 | 5.19 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 39   | C III    | BE S2    | 291.660 | 42.510    | 5.86 | 6.28  | -   | -   | -   | -   | -   | -   | 8.31 | 7.17 | 6.63 | 6.32 | 6.45 | 7.40 | 8.69 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 2040 | Fe XVI   | NA4A     | 293.110 | 42.300    | 6.47 | 2.69  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.29 | 2.74 | 2.78 | 3.27 | 4.77 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1175 | Ar IX    | NE4      | 295.060 | 42.020    | 6.00 | 2.40  | -   | -   | -   | -   | -   | -   | -    | 4.19 | 2.90 | 2.40 | 3.10 | 5.05 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 2039 | Fe XVI   | NA4B     | 295.830 | 41.910    | 6.47 | 2.98  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.58 | 3.03 | 3.07 | 3.56 | 5.07 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 38   | C III    | BE S4    | 298.400 | 41.550    | 5.92 | 6.36  | -   | -   | -   | -   | -   | -   | -    | 8.29 | 7.19 | 6.52 | 6.43 | 7.23 | 8.44 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 37   | C III    | BE S3    | 298.400 | 41.550    | 5.91 | 6.39  | -   | -   | -   | -   | -   | -   | 9.75 | 7.99 | 7.06 | 6.50 | 6.49 | 7.33 | 8.57 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 56   | C IV     | LI S2    | 298.400 | 41.550    | 5.86 | 3.09  | -   | -   | -   | -   | -   | -   | 4.99 | 3.74 | 3.13 | 3.31 | 4.26 | 5.45 | 6.61 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 1174 | Ar IX    | NE5      | 298.900 | 41.480    | 6.00 | 2.02  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.83 | 2.53 | 2.02 | 2.72 | 4.66 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 80   | C V      | HE6      | 298.970 | 41.470    | 5.97 | 1.25  | -   | -   | -   | -   | -   | -   | 5.03 | 2.88 | 1.60 | 1.25 | 1.79 | 2.64 | 3.42 | 4.12 | 4.73 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 5181 | Ni XVIII | NA6      | 300.930 | 41.200    | 6.47 | 2.67  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 2.87 | 2.85 | 3.58 | 5.27 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 661  | Mg X     | LI1      | 302.400 | 41.000    | 6.10 | 2.92  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.26 | 3.17 | 3.02 | 3.31 | 3.50 | 3.84 | 4.65 | 5.73 | 6.76 | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 925  | Si XII   | LI5B     | 302.760 | 40.951    | 6.29 | 2.09  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.24 | 2.35 | 2.21 | 2.55 | 2.79 | 3.17 | 3.94 | 4.94 | 5.89 | -    | -    | -    | -    | -   | -   | -   | - |   |
| 924  | Si XII   | LI5A     | 303.070 | 40.910    | 6.29 | 1.80  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.94 | 2.05 | 1.92 | 2.27 | 2.51 | 2.89 | 3.67 | 4.66 | 5.62 | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 79   | C V      | HE5      | 304.410 | 40.730    | 5.97 | 2.31  | -   | -   | -   | -   | -   | -   | 6.03 | 3.89 | 2.63 | 2.32 | 2.87 | 3.74 | 4.53 | 5.23 | 5.85 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 55   | C IV     | LI S3    | 307.500 | 40.320    | 5.89 | 3.08  | -   | -   | -   | -   | -   | -   | 5.72 | 4.06 | 3.18 | 3.21 | 4.07 | 5.22 | 6.29 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 54   | C IV     | LI S4    | 307.880 | 40.270    | 5.91 | 3.07  | -   | -   | -   | -   | -   | -   | 6.05 | 4.20 | 3.21 | 3.16 | 3.98 | 5.10 | 6.15 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - |   |
| 78   | C V      | HE4      | 307.880 | 40.270    | 5.98 | 1.21  | -   | -   | -   | -   | -   | -   | 5.13 | 2.92 | 1.59 | 1.21 | 1.71 | 2.51 | 3.25 | 3.91 | 4.51 | 5.07 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 2038 | Fe XVI   | NA3C     | 308.720 | 40.161    | 6.49 | 3.67  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.30 | 3.73 | 3.74 | 4.20 | 5.66 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 2037 | Fe XVI   | NA3A     | 308.780 | 40.153    | 6.49 | 2.71  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.34 | 2.77 | 2.77 | 3.23 | 4.70 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 951  | Si XIII  | HE9      | 309.960 | 40.000    | 6.94 | 3.61  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.36 | 4.27 | 3.73 | 3.64 | 4.06 | 4.74 | 5.38 | 5.94 | 6.42 | 6.85 | 7.24 | 7.60 | -    | -   | -   | -   | - |   |
| 2036 | Fe XVI   | NA3B     | 311.310 | 39.827    | 6.49 | 2.95  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.59 | 3.01 | 3.02 | 3.48 | 4.95 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1029 | S IX     | O7       | 314.200 | 39.460    | 6.07 | 2.38  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.14 | 2.48 | 2.68 | 4.45 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 867  | Si X     | B2       | 314.680 | 39.400    | 6.16 | 1.92  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.91 | 2.73 | 1.97 | 3.37 | 4.87 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1065 | S XI     | C4       | 315.480 | 39.300    | 6.28 | 1.43  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.33 | 1.57 | 1.92 | 4.01 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1064 | S XI     | C3       | 315.960 | 39.240    | 6.28 | 2.22  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.12 | 2.36 | 2.71 | 4.80 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1199 | Ar XI    | O5A      | 321.040 | 38.620    | 6.24 | 3.48  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.92 | 3.51 | 3.95 | 6.05 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1185 | Ar X     | F2F      | 324.310 | 38.230    | 6.14 | 2.77  | -   | -   | -   | -   | -   | -   | -    | -    | 5.15 | 3.18 | 2.86 | 4.07 | 6.74 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 950  | Si XIII  | HE8      | 326.270 | 38.000    | 6.97 | 3.46  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.42 | 4.27 | 3.64 | 3.46 | 3.80 | 4.40 | 4.97 | 5.48 | 5.92 | 6.32 | 6.69 | 7.04 | 7.35 | -   | -   | -   | - | - |
| 1063 | S XI     | C1       | 328.170 | 37.780    | 6.28 | 2.46  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.39 | 2.61 | 2.95 | 5.03 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1112 | S XIII   | BE9      | 329.750 | 37.600    | 6.39 | 2.06  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.49 | 2.06 | 2.88 | 3.72 | 4.34 | 5.07 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1184 | Ar X     | F2D      | 331.240 | 37.430    | 6.14 | 2.55  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.95 | 2.97 | 2.64 | 3.84 | 6.51 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 890  | Si XI    | BE3B     | 332.040 | 37.340    | 6.22 | 2.22  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.03 | 2.24 | 2.90 | 3.83 | 4.54 | 5.32 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 5180 | Ni XVIII | NA5      | 334.820 | 37.030    | 6.47 | 3.44  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 3.64 | 3.64 | 4.41 | 6.16 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1043 | S X      | N7       | 336.000 | 36.900    | 6.19 | 1.64  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.43 | 2.40 | 1.64 | 2.72 | 5.37 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 2035 | Fe XVI   | NA2      | 337.230 | 36.766    | 6.47 | 2.75  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.24 | 2.79 | 2.83 | 3.28 | 4.70 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1086 | S XII    | B6C      | 339.100 | 36.563    | 6.34 | 1.62  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.21 | 2.27 | 1.76 | 3.21 | 4.50 | 5.42 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1085 | S XII    | B6A      | 340.630 | 36.398    | 6.34 | 1.62  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.22 | 2.27 | 1.77 | 3.21 | 4.50 | 5.43 | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 949  | Si XIII  | HE7      | 344.400 | 36.000    | 6.96 | 3.32  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.39 | 4.16 | 3.49 | 3.33 | 3.74 | 4.46 | 5.21 | 5.89 | 6.48 | 6.97 | -    | -    | -   | -   | -   | - | - |
| 1111 | S XIII   | BE8      | 347.640 | 35.665    | 6.39 | 1.84  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.29 | 1.84 | 2.64 | 3.48 | 4.10 | 4.83 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1110 | S XIII   | BE7      | 348.130 | 35.614    | 6.39 | 1.84  | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.29 | 1.84 | 2.64 | 3.48 | 4.10 | 4.83 | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 1353 | Ca XI    | NE8      | 348.510 | 35.576    | 6.14 | 1.93  | -   | -   | -   | -   | -   | -   | -    | -    | 3.18 | 2.14 | 1.97 | 2.95 | 5.16 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   | - | - |
| 889  | Si XI    | BE3A     | 350.140 | 35.410    | 6.22 | 2.27  | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.   |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |   |   |



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| Nr   | ion     | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4  | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |      |      |      |   |
|------|---------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| 1241 | Ar XV   | BE8      | 458.860 | 27.020    | 6.55 | 2.56  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 3.46 | 2.63 | 3.47 | 4.26 | 4.97 | 5.82 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |   |
| 87   | C VI    | H3       | 459.370 | 26.990    | 6.16 | 2.59  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.82 | 2.94 | 2.60 | 2.82 | 3.10 | 3.36 | 3.60 | 3.82 | 4.03 | 4.23 | 4.42 | 4.60 | 4.75 | 4.87 | 4.94 | 4.97 | 4.97 |      |   |
| 1344 | Ca XI   | NE3A,B   | 459.880 | 26.960    | 6.19 | 2.74  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.58 | 3.20 | 2.75 | 3.49 | 5.52 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 5392 | Ni XXVI | LI8      | 466.110 | 26.600    | 7.30 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 6.19 | 4.70 | 4.67 | 4.87 | 5.15 | 5.55 | 6.08 | 6.69 | 7.30 | 7.88 | 8.42 | -    | -    | -    |      |   |
| 1343 | Ca XI   | NE2      | 467.870 | 26.500    | 6.18 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.81 | 4.49 | 4.10 | 4.91 | 6.98 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 1101 | S XIII  | BE3      | 469.640 | 26.400    | 6.39 | 2.92  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 4.43 | 2.92 | 3.67 | 4.46 | 5.06 | 5.76 | 6.77 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 86   | C VI    | H4       | 469.640 | 26.400    | 6.17 | 2.98  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.26 | 3.35 | 2.99 | 3.20 | 3.46 | 3.71 | 3.95 | 4.17 | 4.37 | 4.57 | 4.76 | 4.93 | 5.08 | 5.20 | 5.28 | 5.32 | 5.33 | -    |   |
| 1394 | Ca XIV  | N3       | 469.640 | 26.400    | 6.50 | 2.83  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.19 | 3.07 | 3.05 | 4.99 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1378 | Ca XIII | OL,2     | 475.040 | 26.100    | 6.41 | 2.41  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.47 | 2.41 | 3.15 | 5.65 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 85   | C VI    | H5       | 476.860 | 26.000    | 6.17 | 3.31  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.62 | 3.69 | 3.31 | 3.51 | 3.77 | 4.02 | 4.24 | 4.46 | 4.66 | 4.85 | 5.04 | 5.21 | 5.36 | 5.48 | 5.56 | 5.61 | 5.62 | -    |   |
| 1359 | Ca XII  | FLB      | 476.860 | 26.000    | 6.31 | 2.86  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.82 | 3.13 | 3.03 | 4.46 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1240 | Ar XV   | BE6B     | 478.330 | 25.920    | 6.55 | 3.14  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.03 | 3.21 | 4.04 | 4.81 | 5.47 | 6.27 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1239 | Ar XV   | BE6C     | 480.370 | 25.810    | 6.55 | 3.18  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.07 | 3.25 | 4.08 | 4.84 | 5.50 | 6.29 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1250 | Ar XVI  | LI7A     | 484.220 | 25.605    | 6.63 | 2.96  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.69 | 2.98 | 3.17 | 3.48 | 3.80 | 4.35 | 5.18 | 6.13 | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1161 | S XVI   | H6       | 485.450 | 25.540    | 7.41 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 6.66 | 4.88 | 3.92 | 3.65 | 3.76 | 3.96 | 4.18 | 4.40 | 4.61 | 4.82 | 5.00 | 5.17 | -    | -    | -    | - |
| 1341 | Ca XI   | NE1A,B   | 486.210 | 25.500    | 6.19 | 2.76  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.63 | 3.21 | 2.76 | 3.52 | 5.57 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1249 | Ar XVI  | LI7B     | 487.930 | 25.410    | 6.63 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.00 | 3.28 | 3.47 | 3.77 | 4.09 | 4.63 | 5.46 | 6.39 | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1248 | Ar XVI  | LI6B     | 496.160 | 24.989    | 6.64 | 2.97  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.78 | 3.00 | 3.13 | 3.38 | 3.67 | 4.18 | 4.98 | 5.89 | 6.75 | -    | -    | -    | -    | -    | -    | -    | - |
| 163  | N VI    | HE S2    | 497.930 | 24.900    | 6.23 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.90 | 4.47 | 3.61 | 3.92 | 4.59 | 5.25 | 5.86 | 6.43 | 6.97 | 7.50 | -    | -    | -    | -    | -    | -    | - |
| 164  | N VI    | HE3      | 497.930 | 24.900    | 6.18 | 2.56  | -   | -   | -   | -   | -   | -   | -   | -    | 6.28 | 4.18 | 2.93 | 2.57 | 3.04 | 3.78 | 3.47 | 5.10 | 5.67 | 6.21 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1247 | Ar XVI  | LI6A     | 499.130 | 24.840    | 6.64 | 3.14  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.96 | 3.17 | 3.29 | 3.54 | 3.82 | 4.32 | 5.12 | 6.01 | 6.85 | -    | -    | -    | -    | -    | -    | -    | - |
| 177  | N VII   | H1B      | 500.240 | 24.785    | 6.32 | 1.95  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.49 | 2.12 | 2.00 | 2.29 | 2.59 | 2.85 | 3.08 | 3.29 | 3.49 | 3.69 | 3.87 | 4.03 | 4.17 | 4.27 | 4.33 | 4.34 | - |
| 162  | N VI    | HE S4    | 500.340 | 24.780    | 6.26 | 3.37  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.29 | 4.50 | 3.42 | 3.58 | 4.17 | 4.77 | 5.34 | 5.88 | 6.41 | 6.93 | -    | -    | -    | -    | -    | -    | - |
| 161  | N VI    | HE S3    | 500.340 | 24.780    | 6.25 | 3.51  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.23 | 4.56 | 3.55 | 3.76 | 4.37 | 4.99 | 5.58 | 6.13 | 6.66 | 7.18 | -    | -    | -    | -    | -    | -    | - |
| 176  | N VII   | H1A      | 500.360 | 24.779    | 6.32 | 1.66  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.20 | 1.83 | 1.72 | 2.02 | 2.33 | 2.61 | 2.85 | 3.08 | 3.30 | 3.50 | 3.70 | 3.87 | 4.01 | 4.10 | 4.13 | 4.11 | - |
| 1234 | Ar XV   | BE5A     | 501.350 | 24.730    | 6.56 | 2.70  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.64 | 2.75 | 3.52 | 4.24 | 4.88 | 5.66 | 6.68 | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1125 | S XIV   | LI4      | 506.060 | 24.500    | 6.48 | 2.75  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.44 | 2.88 | 2.87 | 3.16 | 3.43 | 3.89 | 4.71 | 5.71 | 6.67 | -    | -    | -    | -    | -    | -    | -    | - |
| 1124 | S XIV   | LI3      | 512.330 | 24.200    | 6.50 | 1.62  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.52 | 1.80 | 1.70 | 1.92 | 2.13 | 2.56 | 3.36 | 4.34 | 5.29 | -    | -    | -    | -    | -    | -    | -    | - |
| 1393 | Ca XIV  | N1       | 514.240 | 24.110    | 6.50 | 2.25  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.66 | 2.50 | 2.46 | 4.38 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 160  | N VI    | HE2      | 521.600 | 23.770    | 6.19 | 3.04  | -   | -   | -   | -   | -   | -   | -   | -    | 6.96 | 4.77 | 3.45 | 3.05 | 3.49 | 4.22 | 4.90 | 5.52 | 6.09 | 6.62 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1246 | Ar XVI  | LI5      | 527.140 | 23.520    | 6.63 | 2.69  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.46 | 2.71 | 2.87 | 3.15 | 3.43 | 3.92 | 4.70 | 5.57 | 6.41 | -    | -    | -    | -    | -    | -    | -    | - |
| 159  | N VI    | HE1      | 532.120 | 23.300    | 6.19 | 3.40  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.17 | 3.82 | 3.40 | 3.84 | 4.56 | 5.24 | 5.85 | 6.42 | 6.95 | -    | -    | -    | -    | -    | -    | -    | - |
| 1098 | S XIII  | BE2      | 536.730 | 23.100    | 6.40 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.35 | 2.73 | 3.39 | 4.10 | 4.61 | 5.24 | 6.17 | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1123 | S XIV   | LI2      | 537.890 | 23.050    | 6.49 | 2.42  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.22 | 2.57 | 2.52 | 2.77 | 3.01 | 3.44 | 4.22 | 5.17 | 6.08 | -    | -    | -    | -    | -    | -    | -    | - |
| 206  | O IV    | B S      | 542.360 | 22.860    | 5.65 | 6.93  | -   | -   | -   | -   | -   | -   | -   | 8.24 | 6.95 | 7.04 | 7.34 | 7.67 | 8.48 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1412 | Ca XV   | C4       | 544.990 | 22.750    | 6.58 | 2.19  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.08 | 2.20 | 3.49 | 5.33 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 220  | O V     | BE S2    | 550.550 | 22.520    | 6.19 | 4.83  | -   | -   | -   | -   | -   | -   | -   | 8.33 | 5.99 | 5.30 | 4.99 | 4.83 | 5.24 | 6.40 | 7.73 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 1458 | Ca XVII | BE9      | 555.980 | 22.300    | 6.69 | 2.88  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.94 | 3.18 | 3.12 | 3.94 | 4.67 | 5.40 | 6.30 | -    | -    | -    | -    | -    | -    | -    | -    | -    | - |
| 276  | O VII   | HE6      | 561.010 | 22.100    | 6.32 | 0.79  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.44 | 1.85 | 0.96 | 0.86 | 1.50 | 2.27 | 2.96 | 3.57 | 4.13 | 4.64 | -    | -    | -    | -    | -    | -    | - |
| 275  | O VII   | HE5      | 568.740 | 21.800    | 6.32 | 1.38  | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.94 | 2.38 | 1.52 | 1.46 | 2.13 | 2.92 | 3.62 | 4.24 | 4.81 | 5.33 | -    | -    | -    | -    | -    | -    | - |
| 247  | O VI    | LI S2    | 569     |           |      |       |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1357 | Ca XII   | F5       | 619.920 | 20.000    | 6.32 | 2.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.02 | 3.13 | 2.92 | 4.26 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 174  | N VII    | H3       | 626.180 | 19.800    | 6.35 | 3.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.92 | 3.35 | 3.11 | 3.33 | 3.59 | 3.84 | 4.07 | 4.29 | 4.50 | 4.70 | 4.88 | 5.05 | 5.19 | 5.30 | 5.35 | 5.37 |      |
| 1512 | Ca XVIII | LI6B     | 626.560 | 19.788    | 6.79 | 2.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.83 | 2.97 | 3.17 | 3.42 | 3.76 | 4.35 | 5.16 | 6.00 | 6.79 | -    | -    | -    | -    |      |
| 1511 | Ca XVIII | LI6A     | 631.280 | 19.640    | 6.79 | 3.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.00 | 3.14 | 3.33 | 3.57 | 3.91 | 4.48 | 5.28 | 6.11 | 6.88 | -    | -    | -    | -    |      |
| 1451 | Ca XVII  | BE5A     | 633.740 | 19.564    | 6.70 | 2.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.03 | 3.21 | 3.08 | 3.82 | 4.47 | 5.11 | 5.94 | -    | -    | -    | -    | -    | -    |      |
| 173  | N VII    | H4       | 639.090 | 19.400    | 6.35 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.34 | 3.75 | 3.49 | 3.69 | 3.95 | 4.19 | 4.42 | 4.64 | 4.84 | 5.03 | 5.22 | 5.38 | 5.52 | 5.63 | 5.70 | 5.72 |      |
| 1391 | Ca XIV   | N7       | 645.750 | 19.200    | 6.51 | 2.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.08 | 2.82 | 2.71 | 4.59 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 273  | O VII    | HE S2    | 649.130 | 19.100    | 6.39 | 2.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.99 | 3.06 | 2.47 | 2.88 | 3.53 | 4.16 | 4.75 | 5.31 | 5.84 | 6.36 | -    | -    | -    | -    | -    | -    |      |
| 172  | N VII    | H5       | 649.130 | 19.100    | 6.36 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.70 | 4.08 | 3.81 | 4.01 | 4.26 | 4.49 | 4.72 | 4.93 | 5.13 | 5.32 | 5.50 | 5.66 | 5.80 | 5.91 | 5.98 | 6.01 |      |
| 286  | O VIII   | HLB      | 653.340 | 18.977    | 6.49 | 0.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.65 | 2.13 | 1.06 | 1.07 | 1.34 | 1.62 | 1.87 | 2.09 | 2.29 | 2.49 | 2.68 | 2.86 | 3.01 | 3.14 | 3.22 | 3.25 |      |
| 285  | O VIII   | HLA      | 653.550 | 18.971    | 6.48 | 0.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.35 | 1.83 | 0.77 | 0.79 | 1.08 | 1.37 | 1.63 | 1.87 | 2.09 | 2.30 | 2.50 | 2.69 | 2.85 | 2.97 | 3.03 | 3.04 |      |
| 271  | O VII    | HE S3    | 653.680 | 18.967    | 6.41 | 2.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.22 | 3.09 | 2.38 | 2.71 | 3.31 | 3.91 | 4.48 | 5.02 | 5.55 | 6.06 | -    | -    | -    | -    | -    | -    |      |
| 272  | O VII    | HE S4    | 653.680 | 18.967    | 6.42 | 2.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.24 | 3.01 | 2.23 | 2.52 | 3.10 | 3.68 | 4.24 | 4.78 | 5.30 | 5.81 | -    | -    | -    | -    | -    | -    |      |
| 4921 | Fe XXIV  | LI08029  | 653.890 | 18.961    | 7.27 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.73 | 4.60 | 4.62 | 4.85 | 5.21 | 5.78 | 6.59 | 7.57 | -    | -    | -    |      |
| 4920 | Fe XXIV  | LI07028  | 655.270 | 18.921    | 7.27 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.87 | 4.75 | 4.77 | 5.00 | 5.36 | 5.93 | 6.74 | 7.72 | -    | -    | -    |      |
| 4919 | Fe XXIV  | LI06023  | 657.290 | 18.863    | 7.27 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.04 | 4.92 | 4.94 | 5.17 | 5.52 | 6.10 | 6.91 | 7.89 | -    | -    | -    |      |
| 1510 | Ca XVIII | LI5      | 659.490 | 18.800    | 6.78 | 2.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.51 | 2.69 | 2.92 | 3.18 | 3.52 | 4.08 | 4.86 | 5.68 | 6.45 | -    | -    | -    | -    |      |
| 4918 | Fe XXIV  | LI06027  | 660.300 | 18.777    | 7.27 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.97 | 4.85 | 4.87 | 5.10 | 5.45 | 6.03 | 6.84 | 7.82 | -    | -    | -    |      |
| 4917 | Fe XXIV  | LI05023  | 661.990 | 18.729    | 7.27 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.37 | 5.25 | 5.27 | 5.49 | 5.85 | 6.43 | 7.23 | 8.22 | -    | -    | -    |      |
| 4916 | Fe XXIV  | LI05026  | 664.830 | 18.649    | 7.27 | 5.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.23 | 5.11 | 5.13 | 5.36 | 5.71 | 6.29 | 7.10 | 8.08 | -    | -    | -    |      |
| 270  | O VII    | HE3      | 665.580 | 18.628    | 6.34 | 1.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.43 | 2.71 | 1.72 | 1.56 | 2.18 | 2.94 | 3.64 | 4.26 | 4.82 | 5.34 | -    | -    | -    | -    | -    | -    |      |
| 2497 | Fe XVIII | F03011   | 666.400 | 18.605    | 6.84 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.50 | 4.84 | 4.04 | 4.49 | 6.43 | -    | -    | -    | -    | -    | -    |      |
| 1539 | Ca XIX   | HE9      | 670.190 | 18.500    | 7.36 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.09 | 5.17 | 4.76 | 4.66 | 4.88 | 5.33 | 5.84 | 6.31 | 6.74 | 7.13 | 7.50 | 7.83 |
| 2496 | Fe XVIII | F03013   | 670.220 | 18.499    | 6.84 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.09 | 5.43 | 4.62 | 5.07 | 7.01 | -    | -    | -    | -    | -    | -    |      |
| 2495 | Fe XVIII | F03016   | 677.180 | 18.309    | 6.84 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.52 | 5.86 | 5.05 | 5.49 | 7.43 | -    | -    | -    | -    | -    | -    |      |
| 4915 | Fe XXIV  | LI04024  | 677.180 | 18.309    | 7.28 | 5.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.24 | 5.11 | 5.13 | 5.36 | 5.72 | 6.29 | 7.10 | 8.08 | -    | -    | -    |
| 2494 | Fe XVIII | F03018   | 677.580 | 18.298    | 6.84 | 4.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.63 | 4.97 | 4.16 | 4.60 | 6.54 | -    | -    | -    | -    | -    | -    |      |
| 2493 | Fe XVIII | F03019   | 677.690 | 18.295    | 6.84 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.83 | 5.17 | 4.36 | 4.81 | 6.74 | -    | -    | -    | -    | -    | -    |      |
| 4914 | Fe XXIV  | LI04025  | 677.770 | 18.293    | 7.28 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.98 | 4.85 | 4.87 | 5.10 | 5.46 | 6.03 | 6.84 | 7.82 | -    | -    | -    |      |
| 2492 | Fe XVIII | F03020   | 679.590 | 18.244    | 6.84 | 3.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.47 | 4.81 | 4.00 | 4.44 | 6.38 | -    | -    | -    | -    | -    | -    |      |
| 2491 | Fe XVIII | F03022   | 682.020 | 18.179    | 6.85 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.24 | 4.57 | 3.76 | 4.20 | 6.14 | -    | -    | -    | -    | -    | -    |      |
| 2490 | Fe XVIII | F03024   | 684.730 | 18.107    | 6.85 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.07 | 5.40 | 4.59 | 5.03 | 6.97 | -    | -    | -    | -    | -    | -    |      |
| 1538 | Ca XIX   | HE8      | 688.800 | 18.000    | 7.42 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.08 | 5.12 | 4.65 | 4.47 | 4.59 | 4.96 | 5.40 | 5.82 | 6.22 | 6.60 | 6.95 | 7.28 |
| 3111 | Fe XIX   | O09018   | 690.870 | 17.946    | 6.92 | 4.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.67 | 5.10 | 4.97 | 6.44 | 8.59 | -    | -    | -    | -    | -    | -    |      |
| 2489 | Fe XVIII | F03027   | 693.700 | 17.873    | 6.85 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.29 | 4.61 | 3.80 | 4.24 | 6.18 | -    | -    | -    | -    | -    | -    |      |
| 3110 | Fe XIX   | O09022   | 697.250 | 17.782    | 6.92 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.79 | 5.23 | 5.10 | 6.57 | 8.71 | -    | -    | -    | -    | -    | -    |      |
| 269  | O VII    | HE2      | 697.720 | 17.770    | 6.34 | 1.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.07 | 3.27 | 2.22 | 2.03 | 2.62 | 3.38 | 4.06 | 4.67 | 5.23 | 5.75 | -    | -    | -    | -    | -    | -    |      |
| 3109 | Fe XIX   | O09023   | 699.920 | 17.714    | 6.92 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.12 | 4.55 | 4.42 | 5.89 | 8.03 | -    | -    | -    | -    | -    | -    |      |
| 3108 | Fe XIX   | O09024   | 700.950 | 17.688    | 6.92 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.72 | 5.15 | 5.02 | 6.48 | 8.63 | -    | -    | -    | -    | -    | -    |      |
| 2488 | Fe XVIII | F03029   | 703.420 | 17.626    | 6.85 | 1.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.49 | 2.81 | 1.99 | 2.43 | 4.37 | -    | -    | -    | -    | -    | -    |      |
| 2487 | Fe XVIII | F03030   | 703.820 | 17.616    | 6.85 | 3.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.33 | 4.64 | 3.82 | 4.26 | 6.19 | -    | -    | -    | -    | -    | -    |      |
| 3107 | Fe XIX   | O09027   | 706.830 | 17.541    | 6.92 | 4.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.76 | 5.20 | 5.06 | 6.53 | 8.67 | -    | -    | -    | -    | -    | -    |      |
| 3106 | Fe XIX   | O09028   | 709.740 | 17.469    | 6.92 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.09 | 4.52 | 4.38 | 5.85 | 7.99 | -    | -    | -    | -    | -    | -    |      |
| 2486 | Fe XVIII | F03036   | 711.900 | 17.416    | 6.85 | 3.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.13 | 4.44 | 3.62 | 4.05 | 5.98 | -    | -    | -    | -    | -    | -    |      |
| 268  | O VII    | HE1      | 713.370 | 17.380    | 6.34 | 2.34  |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |



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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1537 | Ca XIX   | HE7      | 729.320 | 17.000    | 7.38 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.05 | 5.04 | 4.55 | 4.40 | 4.63 | 5.16 | 5.77 | 6.35 | 6.85 | 7.29 | 7.68 | 8.03 |
| 3098 | Fe XIX   | O07022   | 734.030 | 16.891    | 6.92 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.13 | 4.57 | 4.43 | 5.90 | 8.05 | -    | -    | -    | -    | -    | -    | -    |
| 3097 | Fe XIX   | O09047   | 734.110 | 16.889    | 6.92 | 4.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.90 | 4.32 | 4.17 | 5.64 | 7.78 | -    | -    | -    | -    | -    | -    | -    |
| 3096 | Fe XIX   | O06017   | 734.720 | 16.875    | 6.92 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.85 | 4.29 | 4.16 | 5.63 | 7.78 | -    | -    | -    | -    | -    | -    | -    |
| 3095 | Fe XIX   | O06018   | 735.290 | 16.862    | 6.92 | 5.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.99 | 5.43 | 5.29 | 6.76 | 8.91 | -    | -    | -    | -    | -    | -    | -    |
| 3094 | Fe XIX   | O07023   | 736.690 | 16.830    | 6.92 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.19 | 4.62 | 4.49 | 5.95 | 8.10 | -    | -    | -    | -    | -    | -    | -    |
| 3093 | Fe XIX   | O09051   | 737.690 | 16.807    | 6.92 | 5.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.02 | 5.43 | 5.29 | 6.75 | 8.89 | -    | -    | -    | -    | -    | -    | -    |
| 3091 | Fe XIX   | O06019   | 737.740 | 16.806    | 6.92 | 3.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.36 | 3.80 | 3.67 | 5.14 | 7.28 | -    | -    | -    | -    | -    | -    | -    |
| 3092 | Fe XIX   | O07024   | 737.740 | 16.806    | 6.92 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.20 | 4.63 | 4.50 | 5.97 | 8.11 | -    | -    | -    | -    | -    | -    | -    |
| 3090 | Fe XIX   | O09054   | 738.440 | 16.790    | 6.92 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.22 | 4.64 | 4.49 | 5.96 | 8.10 | -    | -    | -    | -    | -    | -    | -    |
| 2179 | Fe XVII  | NE01005  | 738.880 | 16.780    | 6.71 | 0.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.89 | 1.60 | 1.06 | 1.06 | 2.12 | 4.56 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 3089 | Fe XIX   | O06022   | 741.670 | 16.717    | 6.92 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.05 | 4.49 | 4.35 | 5.82 | 7.97 | -    | -    | -    | -    | -    | -    | -    |
| 3088 | Fe XIX   | O09055   | 741.980 | 16.710    | 6.92 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.23 | 4.64 | 4.50 | 5.96 | 8.10 | -    | -    | -    | -    | -    | -    | -    |
| 3769 | Fe XX    | N13021   | 743.220 | 16.682    | 6.98 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.99 | 5.57 | 4.81 | 5.78 | 7.51 | -    | -    | -    | -    | -    | -    | -    |
| 3087 | Fe XIX   | O07027   | 743.620 | 16.673    | 6.92 | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.15 | 4.58 | 4.44 | 5.91 | 8.05 | -    | -    | -    | -    | -    | -    | -    |
| 3086 | Fe XIX   | O06023   | 744.340 | 16.657    | 6.92 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.69 | 4.12 | 3.98 | 5.45 | 7.60 | -    | -    | -    | -    | -    | -    | -    |
| 3085 | Fe XIX   | O07029   | 748.790 | 16.558    | 6.92 | 4.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.34 | 4.77 | 4.63 | 6.10 | 8.24 | -    | -    | -    | -    | -    | -    | -    |
| 3084 | Fe XIX   | O07031   | 750.740 | 16.515    | 6.92 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.95 | 5.38 | 5.24 | 6.71 | 8.85 | -    | -    | -    | -    | -    | -    | -    |
| 3083 | Fe XIX   | O06027   | 751.240 | 16.504    | 6.92 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.76 | 4.20 | 4.06 | 5.53 | 7.67 | -    | -    | -    | -    | -    | -    | -    |
| 3082 | Fe XIX   | O08036   | 753.520 | 16.454    | 6.92 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.57 | 4.99 | 4.85 | 6.31 | 8.46 | -    | -    | -    | -    | -    | -    | -    |
| 3081 | Fe XIX   | O06028   | 754.120 | 16.441    | 6.92 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.95 | 5.38 | 5.24 | 6.71 | 8.85 | -    | -    | -    | -    | -    | -    | -    |
| 3080 | Fe XIX   | O09066   | 754.440 | 16.434    | 6.92 | 5.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.92 | 5.33 | 5.18 | 6.64 | 8.78 | -    | -    | -    | -    | -    | -    | -    |
| 3768 | Fe XX    | N13026   | 754.620 | 16.430    | 6.98 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.70 | 5.28 | 4.51 | 5.49 | 7.22 | -    | -    | -    | -    | -    | -    | -    |
| 3079 | Fe XIX   | O08038   | 756.230 | 16.395    | 6.92 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.26 | 4.69 | 4.54 | 6.01 | 8.15 | -    | -    | -    | -    | -    | -    | -    |
| 3078 | Fe XIX   | O07035   | 756.320 | 16.393    | 6.92 | 3.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.43 | 3.85 | 3.71 | 5.18 | 7.32 | -    | -    | -    | -    | -    | -    | -    |
| 3077 | Fe XIX   | O06029   | 756.420 | 16.391    | 6.92 | 3.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.34 | 3.77 | 3.63 | 5.10 | 7.24 | -    | -    | -    | -    | -    | -    | -    |
| 3076 | Fe XIX   | O06030   | 756.920 | 16.380    | 6.92 | 3.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.49 | 3.92 | 3.78 | 5.25 | 7.39 | -    | -    | -    | -    | -    | -    | -    |
| 3767 | Fe XX    | N13028   | 757.340 | 16.371    | 6.98 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.29 | 5.86 | 5.10 | 6.07 | 7.80 | -    | -    | -    | -    | -    | -    | -    |
| 3075 | Fe XIX   | O06031   | 758.360 | 16.349    | 6.92 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.91 | 4.33 | 4.19 | 5.66 | 7.80 | -    | -    | -    | -    | -    | -    | -    |
| 3074 | Fe XIX   | O06032   | 758.730 | 16.341    | 6.92 | 3.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.04 | 3.47 | 3.33 | 4.80 | 6.94 | -    | -    | -    | -    | -    | -    | -    |
| 2178 | Fe XVII  | NE01007  | 758.780 | 16.340    | 6.71 | 2.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.57 | 3.26 | 2.71 | 2.71 | 3.76 | 6.20 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 3073 | Fe XIX   | O07036   | 758.920 | 16.337    | 6.92 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.43 | 4.85 | 4.71 | 6.18 | 8.32 | -    | -    | -    | -    | -    | -    | -    |
| 3072 | Fe XIX   | O08040   | 759.890 | 16.316    | 6.92 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.76 | 5.18 | 5.04 | 6.50 | 8.64 | -    | -    | -    | -    | -    | -    | -    |
| 2484 | Fe XVII  | F03062   | 760.170 | 16.310    | 6.85 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.33 | 3.61 | 2.77 | 3.19 | 5.11 | -    | -    | -    | -    | -    | -    | -    |
| 1429 | Ca XVI   | B2       | 760.640 | 16.300    | 6.64 | 3.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.03 | 3.16 | 3.75 | 5.05 | 6.14 | -    | -    | -    | -    | -    | -    | -    |
| 2483 | Fe XVIII | F02005   | 761.200 | 16.288    | 6.84 | 3.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.02 | 4.38 | 3.59 | 4.04 | 5.99 | -    | -    | -    | -    | -    | -    | -    |
| 3070 | Fe XIX   | O06033   | 761.390 | 16.284    | 6.92 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.92 | 4.34 | 4.20 | 5.67 | 7.81 | -    | -    | -    | -    | -    | -    | -    |
| 3071 | Fe XIX   | O07037   | 761.480 | 16.282    | 6.92 | 2.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.39 | 2.81 | 2.67 | 4.13 | 6.28 | -    | -    | -    | -    | -    | -    | -    |
| 3069 | Fe XIX   | O07038   | 761.570 | 16.280    | 6.92 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.81 | 5.24 | 5.09 | 6.56 | 8.70 | -    | -    | -    | -    | -    | -    | -    |
| 3766 | Fe XX    | N11021   | 761.760 | 16.276    | 6.98 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.26 | 4.84 | 4.08 | 5.05 | 6.78 | -    | -    | -    | -    | -    | -    | -    |
| 2177 | Fe XVII  | NE01010  | 763.450 | 16.240    | 6.71 | 2.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.74 | 3.43 | 2.88 | 2.87 | 3.93 | 6.36 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 2482 | Fe XVIII | F03063   | 764.110 | 16.226    | 6.85 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.12 | 5.39 | 4.55 | 4.96 | 6.89 | -    | -    | -    | -    | -    | -    | -    |
| 1449 | Ca XVII  | BE3      | 765.330 | 16.200    | 6.69 | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.78 | 3.96 | 3.85 | 4.63 | 5.32 | 6.01 | 6.88 | -    | -    | -    | -    | -    |
| 3068 | Fe XIX   | O07041   | 765.380 | 16.199    | 6.92 | 3.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.68 | 4.10 | 3.96 | 5.42 | 7.56 | -    | -    | -    | -    | -    | -    | -    |
| 3067 | Fe XIX   | O08048   | 765.760 | 16.191    | 6.92 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.49 | 4.91 | 4.77 | 6.23 | 8.37 | -    | -    | -    | -    | -    | -    | -    |
| 3765 | Fe XX    | N12026   | 766.330 | 16.179    | 6.98 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.87 | 5.45 | 4.68 | 5.65 | 7.38 | -    | -    | -    | -    | -    | -    | -    |
| 3066 | Fe XIX   | O06036   | 766.570 | 16.174    | 6.92 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.59 | 4.01 | 3.87 | 5.33 | 7.47 | -    | -    | -    | -    | -    | -    | -    |
| 2481 | Fe XVIII | F03064   | 766.990 | 16.165    | 6.85 | 2.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.77 | 3.04 | 2.19 | 2.61 | 4.54 | -    | -    | -    | -    | -    | -    | -    |
| 2480 | Fe XVIII | F02006   | 767.180 | 16.161    | 6.84 | 3.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.46 | 4.82 | 4.03 | 4.48 | 6.42 | -    | -    | -    | -    | -    | -    | -    |
| 3764 | Fe XX    | N13034   | 767.280 | 16.159    | 6.98 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.89 | 5.46 | 4.69 | 5.66 | 7.39 | -    | -    | -    | -    | -    | -    | -    |
| 3064 | Fe XIX   | O08051   | 769.090 | 16.121    | 6.92 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.29 | 4.71 | 4.56 | 6.03 | 8.17 | -    | -    | -    | -    | -    | -    | -    |
| 3063 | Fe XIX   | O06038   | 769.230 | 16.118    | 6.92 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.88 | 5.31 | 5.16 | 6.63 | 8.77 | -    | -    | -    | -    | -    | -    | -    |
| 2479 | Fe XVIII | F02007   | 769.510 | 16.112    | 6.84 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.74 | 4.09 | 3.30 | 3.75 | 5.69 | -    | -    | -    | -    | -    | -    | -    |
| 3065 | Fe XIX   | O06037   | 769.800 | 16.106    | 6.92 | 2.00  | -   | -   | -   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |      |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 3762 | Fe XX    | N13036   | 770.380 | 16.094    | 6.98 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.91 | 5.48 | 4.71 | 5.67 | 7.40 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3062 | Fe XIX   | O07047   | 770.900 | 16.083    | 6.92 | 3.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.91 | 3.33 | 3.18 | 4.65 | 6.79 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2478 | Fe XVIII | F01004   | 771.140 | 16.078    | 6.84 | 1.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.70 | 2.17 | 1.44 | 1.92 | 3.87 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3061 | Fe XIX   | O07048   | 771.190 | 16.077    | 6.92 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.13 | 4.55 | 4.40 | 5.86 | 8.00 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3761 | Fe XX    | N12030   | 771.570 | 16.069    | 6.98 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.95 | 5.52 | 4.75 | 5.73 | 7.46 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2477 | Fe XVIII | F03065   | 772.050 | 16.059    | 6.85 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.26 | 5.53 | 4.68 | 5.10 | 7.02 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3060 | Fe XIX   | O06039   | 772.440 | 16.051    | 6.92 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.12 | 4.54 | 4.40 | 5.87 | 8.01 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3059 | Fe XIX   | O06040   | 772.870 | 16.042    | 6.92 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.20 | 4.62 | 4.47 | 5.94 | 8.08 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3058 | Fe XIX   | O06041   | 773.020 | 16.039    | 6.92 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.09 | 4.52 | 4.37 | 5.84 | 7.98 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3760 | Fe XX    | N11026   | 773.110 | 16.037    | 6.98 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.73 | 5.31 | 4.54 | 5.51 | 7.24 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2174 | Fe XVII  | NE01014  | 773.930 | 16.020    | 6.71 | 2.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.63 | 3.31 | 2.75 | 2.74 | 3.79 | 6.23 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2476 | Fe XVIII | F02008   | 774.030 | 16.018    | 6.84 | 2.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.26 | 3.61 | 2.81 | 3.26 | 5.21 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 284  | O VIII   | H2       | 774.760 | 16.003    | 6.50 | 1.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.42 | 2.75 | 1.59 | 1.53 | 1.79 | 2.06 | 2.32 | 2.56 | 2.78 | 2.99 | 3.19 | 3.38 | 3.54 | 3.66 | 3.74 | 3.77 |
| 2475 | Fe XVIII | F01005   | 774.800 | 16.002    | 6.84 | 1.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.02 | 2.55 | 1.86 | 2.36 | 4.33 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3759 | Fe XX    | N11028   | 775.870 | 15.980    | 6.98 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.29 | 5.86 | 5.10 | 6.07 | 7.80 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3758 | Fe XX    | N12033   | 775.920 | 15.979    | 6.98 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.30 | 5.87 | 5.10 | 6.07 | 7.80 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3057 | Fe XIX   | O07055   | 778.750 | 15.921    | 6.92 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.80 | 5.21 | 5.06 | 6.53 | 8.66 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3056 | Fe XIX   | O06048   | 778.800 | 15.920    | 6.92 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.73 | 5.15 | 5.00 | 6.47 | 8.61 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3055 | Fe XIX   | O06049   | 778.940 | 15.917    | 6.92 | 3.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.54 | 3.95 | 3.81 | 5.27 | 7.41 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3757 | Fe XX    | N12034   | 778.990 | 15.916    | 6.98 | 3.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.52 | 4.09 | 3.32 | 4.29 | 6.02 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2474 | Fe XVIII | F01006   | 779.730 | 15.901    | 6.84 | 2.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.70 | 3.23 | 2.53 | 3.03 | 5.00 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3756 | Fe XX    | N09021   | 780.660 | 15.882    | 6.98 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.40 | 4.98 | 4.22 | 5.19 | 6.92 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2473 | Fe XVIII | F02010   | 781.050 | 15.874    | 6.84 | 2.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.96 | 3.31 | 2.51 | 2.96 | 4.90 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3755 | Fe XX    | N12036   | 782.090 | 15.853    | 6.98 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.61 | 5.18 | 4.41 | 5.37 | 7.10 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3054 | Fe XIX   | O06051   | 782.090 | 15.853    | 6.92 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.53 | 4.95 | 4.80 | 6.26 | 8.40 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3053 | Fe XIX   | O06054   | 782.830 | 15.838    | 6.92 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.44 | 4.86 | 4.71 | 6.18 | 8.32 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2472 | Fe XVIII | F01007   | 783.170 | 15.831    | 6.84 | 2.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.25 | 2.78 | 2.08 | 2.58 | 4.55 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3754 | Fe XX    | N09022   | 786.100 | 15.772    | 6.98 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.52 | 5.10 | 4.33 | 5.31 | 7.04 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3052 | Fe XIX   | O06055   | 786.350 | 15.767    | 6.92 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.37 | 4.79 | 4.64 | 6.10 | 8.24 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2471 | Fe XVIII | F01008   | 786.450 | 15.765    | 6.84 | 2.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.91 | 3.44 | 2.74 | 3.24 | 5.20 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2470 | Fe XVIII | F02011   | 788.100 | 15.732    | 6.84 | 5.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.53 | 5.87 | 5.07 | 5.52 | 7.46 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3753 | Fe XX    | N11036   | 788.850 | 15.717    | 6.98 | 4.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.36 | 4.93 | 4.16 | 5.12 | 6.85 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3752 | Fe XX    | N12038   | 788.900 | 15.716    | 6.98 | 4.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.17 | 5.74 | 4.96 | 5.93 | 7.66 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3751 | Fe XX    | N10026   | 790.060 | 15.693    | 6.98 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.60 | 5.17 | 4.40 | 5.38 | 7.11 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3750 | Fe XX    | N13049   | 790.310 | 15.688    | 6.98 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.27 | 4.83 | 4.05 | 5.02 | 6.74 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3749 | Fe XX    | N10027   | 791.170 | 15.671    | 6.98 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.06 | 5.63 | 4.86 | 5.84 | 7.57 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3748 | Fe XX    | N09026   | 792.080 | 15.653    | 6.98 | 5.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.29 | 5.86 | 5.09 | 6.07 | 7.80 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2468 | Fe XVIII | F02015   | 792.890 | 15.637    | 6.84 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.80 | 5.14 | 4.33 | 4.78 | 6.72 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3747 | Fe XX    | N13054   | 793.040 | 15.634    | 6.98 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.65 | 5.21 | 4.43 | 5.39 | 7.12 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2467 | Fe XVIII | F01010   | 793.190 | 15.631    | 6.84 | 4.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.38 | 4.90 | 4.20 | 4.70 | 6.67 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3746 | Fe XX    | N09027   | 793.190 | 15.631    | 6.98 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.71 | 5.28 | 4.52 | 5.49 | 7.22 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2469 | Fe XVIII | F01009   | 793.350 | 15.628    | 6.84 | 1.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.04 | 2.57 | 1.87 | 2.37 | 4.34 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3745 | Fe XX    | N12043   | 794.110 | 15.613    | 6.98 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.73 | 5.30 | 4.52 | 5.49 | 7.21 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1546 | Ca XX    | H6       | 794.770 | 15.600    | 7.74 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.02 | 6.19 | 5.06 | 4.54 | 4.47 | 4.60 | 4.78 | 4.99 | 5.19 | 5.38 | 5.56 | -    | -    |
| 3744 | Fe XX    | N09028   | 794.770 | 15.600    | 6.98 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.80 | 5.37 | 4.60 | 5.58 | 7.31 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3743 | Fe XX    | N10030   | 795.330 | 15.589    | 6.98 | 4.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.12 | 5.69 | 4.92 | 5.89 | 7.62 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3742 | Fe XX    | N09029   | 795.890 | 15.578    | 6.98 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.01 | 5.59 | 4.82 | 5.79 | 7.52 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3741 | Fe XX    | N10031   | 796.760 | 15.561    | 6.98 | 3.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.42 | 3.99 | 3.22 | 4.19 | 5.92 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3740 | Fe XX    | N13057   | 796.870 | 15.559    | 6.98 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.17 | 5.73 | 4.95 | 5.91 | 7.64 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3739 | Fe XX    | N09030   | 797.330 | 15.550    | 6.98 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.75 | 5.32 | 4.55 | 5.52 | 7.25 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3738 | Fe XX    | N11041   | 798.460 | 15.528    | 6.98 | 5.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.28 | 5.84 | 5.07 | 6.04 | 7.76 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2465 | Fe XVIII | F02018   | 799.280 | 15.512    | 6.84 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.81 | 5.14 | 4.34 | 4.78 | 6.72 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3051 | Fe XIX   | O04011   | 799.430 | 15.509    | 6.92 | 5.06  | -   |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |



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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| 3037 | Fe XIX   | O07091   | 815.850 | 15.197    | 6.92 | 3.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.96 | 3.36 | 3.20 | 4.66 | 6.79 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2447 | Fe XVIII | F01021   | 815.850 | 15.197    | 6.84 | 3.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.71 | 4.23 | 3.53 | 4.02 | 5.98 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3036 | Fe XIX   | O03012   | 816.650 | 15.182    | 6.92 | 3.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.92 | 3.36 | 3.24 | 4.71 | 6.86 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2446 | Fe XVIII | F02028   | 816.920 | 15.177    | 6.85 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.59 | 4.90 | 4.09 | 4.53 | 6.46 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 283  | O VIII   | H3       | 817.030 | 15.175    | 6.51 | 2.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.44 | 2.22 | 2.13 | 2.36 | 2.61 | 2.86 | 3.08 | 3.30 | 3.50 | 3.69 | 3.87 | 4.03 | 4.16 | 4.24 | 4.28 |   |
| 3715 | Fe XX    | N09041   | 817.410 | 15.168    | 6.98 | 3.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.19 | 4.75 | 3.98 | 4.94 | 6.67 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3713 | Fe XX    | N10043   | 817.890 | 15.159    | 6.98 | 3.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.08 | 4.64 | 3.87 | 4.83 | 6.56 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3035 | Fe XIX   | O02012   | 818.320 | 15.151    | 6.91 | 3.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.99 | 3.44 | 3.31 | 4.79 | 6.94 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2445 | Fe XVIII | F01023   | 818.320 | 15.151    | 6.84 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.67 | 5.19 | 4.49 | 4.98 | 6.94 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3714 | Fe XX    | N07025   | 818.590 | 15.146    | 6.98 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.69 | 4.26 | 3.50 | 4.47 | 6.20 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3707 | Fe XX    | N06022   | 818.590 | 15.146    | 6.98 | 2.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.13 | 3.71 | 2.95 | 3.92 | 5.65 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3034 | Fe XIX   | O04013   | 818.970 | 15.139    | 6.92 | 3.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.42 | 3.86 | 3.72 | 5.19 | 7.33 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2444 | Fe XVIII | F01024   | 819.030 | 15.138    | 6.84 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.24 | 4.76 | 4.05 | 4.55 | 6.51 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3033 | Fe XIX   | O04014   | 819.240 | 15.134    | 6.92 | 3.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.80 | 4.24 | 4.10 | 5.57 | 7.71 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3032 | Fe XIX   | O09114   | 819.410 | 15.131    | 6.92 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.78 | 4.16 | 4.00 | 5.44 | 7.57 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3712 | Fe XX    | N09043   | 819.890 | 15.122    | 6.98 | 4.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.98 | 5.55 | 4.77 | 5.74 | 7.46 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3031 | Fe XIX   | O01011   | 820.330 | 15.114    | 6.91 | 2.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.69 | 2.25 | 2.18 | 3.69 | 5.85 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3711 | Fe XX    | N09044   | 820.650 | 15.108    | 6.98 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.96 | 5.53 | 4.75 | 5.72 | 7.44 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3030 | Fe XIX   | O06088   | 820.980 | 15.102    | 6.92 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.56 | 4.96 | 4.81 | 6.26 | 8.40 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3710 | Fe XX    | N08028   | 821.360 | 15.095    | 6.98 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.63 | 5.20 | 4.43 | 5.40 | 7.13 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3709 | Fe XX    | N07026   | 821.410 | 15.094    | 6.98 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.93 | 5.50 | 4.73 | 5.70 | 7.44 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3029 | Fe XIX   | O09117   | 822.070 | 15.082    | 6.92 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.73 | 5.11 | 4.94 | 6.39 | 8.52 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 4239 | Fe XXI   | C15028   | 822.180 | 15.080    | 7.04 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.88 | 4.46 | 4.90 | 6.20 | 7.52 | -    | -    | -    | -    | -    | -    | -    | - |
| 3708 | Fe XX    | N07027   | 822.560 | 15.073    | 6.98 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.46 | 4.03 | 3.27 | 4.24 | 5.97 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3028 | Fe XIX   | O04015   | 823.380 | 15.058    | 6.92 | 3.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.08 | 3.52 | 3.38 | 4.85 | 6.99 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2442 | Fe XVIII | F01025   | 823.430 | 15.057    | 6.84 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.85 | 5.37 | 4.66 | 5.15 | 7.11 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2441 | Fe XVIII | F03081   | 823.490 | 15.056    | 6.85 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.38 | 5.61 | 4.74 | 5.14 | 7.06 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2440 | Fe XVIII | F02029   | 823.600 | 15.054    | 6.85 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.32 | 4.63 | 3.82 | 4.25 | 6.19 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3027 | Fe XIX   | O09119   | 823.650 | 15.053    | 6.92 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.21 | 4.59 | 4.42 | 5.87 | 8.00 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3706 | Fe XX    | N08030   | 823.870 | 15.049    | 6.98 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.85 | 5.42 | 4.65 | 5.62 | 7.35 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3026 | Fe XIX   | O09120   | 823.870 | 15.049    | 6.92 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.12 | 4.50 | 4.33 | 5.78 | 7.91 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3705 | Fe XX    | N07028   | 824.140 | 15.044    | 6.98 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.94 | 4.51 | 3.74 | 4.72 | 6.45 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2439 | Fe XVIII | F03082   | 824.640 | 15.035    | 6.85 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.72 | 4.95 | 4.08 | 4.48 | 6.39 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3025 | Fe XIX   | O05026   | 824.690 | 15.034    | 6.92 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.94 | 4.34 | 4.18 | 5.63 | 7.77 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3704 | Fe XX    | N07029   | 825.240 | 15.024    | 6.98 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.11 | 4.68 | 3.91 | 4.88 | 6.61 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3703 | Fe XX    | N10049   | 825.740 | 15.015    | 6.98 | 3.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.78 | 4.34 | 3.56 | 4.53 | 6.26 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2153 | Fe XVII  | NE01027  | 825.790 | 15.014    | 6.72 | 0.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.70 | 1.34 | 0.75 | 0.73 | 1.77 | 4.19 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3024 | Fe XIX   | O04016   | 825.900 | 15.012    | 6.92 | 2.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.68 | 3.11 | 2.98 | 4.44 | 6.59 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2438 | Fe XVIII | F01026   | 826.120 | 15.008    | 6.84 | 3.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.27 | 3.79 | 3.08 | 3.57 | 5.53 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3699 | Fe XX    | N06026   | 826.450 | 15.002    | 6.98 | 2.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.05 | 3.62 | 2.85 | 3.82 | 5.55 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3701 | Fe XX    | N08033   | 826.450 | 15.002    | 6.98 | 2.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.98 | 3.55 | 2.78 | 3.75 | 5.48 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 1506 | Ca XVIII | LI4      | 826.560 | 15.000    | 6.78 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.32 | 3.48 | 3.70 | 3.97 | 4.34 | 4.95 | 5.79 | 6.67 | -    | -    | -    | -    | -    |   |
| 3702 | Fe XX    | N07030   | 826.670 | 14.998    | 6.98 | 3.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.20 | 4.77 | 4.00 | 4.97 | 6.70 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3022 | Fe XIX   | O08099   | 827.550 | 14.982    | 6.92 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.70 | 5.09 | 4.92 | 6.38 | 8.51 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3023 | Fe XIX   | O01012   | 827.670 | 14.980    | 6.91 | 2.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.05 | 2.62 | 2.55 | 4.05 | 6.22 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3700 | Fe XX    | N10054   | 828.490 | 14.965    | 6.98 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.04 | 5.60 | 4.82 | 5.78 | 7.51 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3021 | Fe XIX   | O03013   | 829.440 | 14.948    | 6.92 | 3.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.01 | 3.45 | 3.32 | 4.79 | 6.94 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2436 | Fe XVIII | F01028   | 829.490 | 14.947    | 6.84 | 3.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.19 | 4.71 | 4.00 | 4.49 | 6.45 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 4238 | Fe XXI   | C14025   | 829.550 | 14.946    | 7.04 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.81 | 4.38 | 4.83 | 6.13 | 7.45 | -    | -    | -    | -    | -    | -    | -    |   |
| 3697 | Fe XX    | N07033   | 830.160 | 14.935    | 6.98 | 2.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.76 | 3.33 | 2.56 | 3.53 | 5.26 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3020 | Fe XIX   | O03014   | 830.380 | 14.931    | 6.92 | 3.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.86 | 3.30 | 3.17 | 4.64 | 6.79 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3698 | Fe XX    | N06027   | 830.660 | 14.926    | 6.98 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.03 | 4.61 | 3.84 | 4.81 | 6.54 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 3696 | Fe XX    | N08034   | 831.270 | 14.915    | 6.98 | 3.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.69 | 4.26 | 3.49 | 4.46 | 6.19 | -    | -    | -    | -    | -    | -    | -    | -    |   |
| 2435 | Fe XVIII | F02033   | 831.270 | 14.915    | 6.85 | 2.91  | -</ |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2434 | Fe XVIII | F03089   | 831.830 | 14.905    | 6.85 | 3.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.08 | 4.30 | 3.43 | 3.82 | 5.74 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2433 | Fe XVIII | F02034   | 832.000 | 14.902    | 6.85 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.81 | 4.12 | 3.30 | 3.73 | 5.67 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3695 | Fe XX    | N10057   | 832.330 | 14.896    | 6.98 | 3.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.91 | 4.47 | 3.69 | 4.65 | 6.38 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3018 | Fe XIX   | O07099   | 832.950 | 14.885    | 6.92 | 5.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.91 | 5.30 | 5.14 | 6.59 | 8.73 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3694 | Fe XX    | N06029   | 833.340 | 14.878    | 6.98 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.36 | 3.93 | 3.16 | 4.13 | 5.86 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3017 | Fe XIX   | O07100   | 833.400 | 14.877    | 6.92 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.37 | 3.76 | 3.60 | 5.05 | 7.19 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2432 | Fe XVIII | F02036   | 833.560 | 14.874    | 6.85 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.92 | 5.23 | 4.41 | 4.84 | 6.77 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 4237 | Fe XXI   | C13025   | 833.790 | 14.870    | 7.04 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.51 | 4.09 | 4.54 | 5.84 | 7.16 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3016 | Fe XIX   | O04021   | 834.010 | 14.866    | 6.92 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.51 | 3.94 | 3.80 | 5.27 | 7.41 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3693 | Fe XX    | N07034   | 834.120 | 14.864    | 6.98 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.36 | 3.93 | 3.16 | 4.13 | 5.86 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3692 | Fe XX    | N07035   | 834.740 | 14.853    | 6.98 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.78 | 5.34 | 4.57 | 5.54 | 7.27 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3691 | Fe XX    | N06030   | 834.800 | 14.852    | 6.98 | 2.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.20 | 3.77 | 3.00 | 3.97 | 5.70 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2431 | Fe XVIII | F03093   | 835.470 | 14.840    | 6.85 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.57 | 4.79 | 3.91 | 4.31 | 6.22 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3015 | Fe XIX   | O09144   | 835.810 | 14.834    | 6.92 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.62 | 5.00 | 4.82 | 6.27 | 8.40 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2430 | Fe XVIII | F01029   | 836.150 | 14.828    | 6.84 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.63 | 5.14 | 4.43 | 4.92 | 6.88 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3690 | Fe XX    | N06031   | 836.210 | 14.827    | 6.98 | 3.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.46 | 4.03 | 3.26 | 4.23 | 5.96 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3014 | Fe XIX   | O03016   | 836.430 | 14.823    | 6.92 | 3.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.53 | 3.97 | 3.83 | 5.30 | 7.45 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 282  | O VIII   | H4       | 836.770 | 14.817    | 6.52 | 2.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.86 | 2.61 | 2.51 | 2.73 | 2.97 | 3.21 | 3.43 | 3.64 | 3.84 | 4.03 | 4.20 | 4.36 | 4.49 | 4.58 | 4.63 |
| 4236 | Fe XXI   | C14027   | 837.000 | 14.813    | 7.04 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.53 | 4.10 | 4.55 | 5.84 | 7.17 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1505 | Ca XVIII | LI3      | 837.730 | 14.800    | 6.79 | 3.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.22 | 3.29 | 3.43 | 3.65 | 3.97 | 4.54 | 5.35 | 6.20 | 6.99 | -    | -    | -    | -    | -    |      |
| 3689 | Fe XX    | N06033   | 837.790 | 14.799    | 6.98 | 2.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.62 | 3.19 | 2.42 | 3.39 | 5.12 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2429 | Fe XVIII | F03097   | 838.010 | 14.795    | 6.85 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.46 | 4.68 | 3.80 | 4.20 | 6.11 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3013 | Fe XIX   | O03018   | 839.770 | 14.764    | 6.92 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.27 | 4.71 | 4.57 | 6.04 | 8.19 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2427 | Fe XVIII | F03098   | 839.890 | 14.762    | 6.85 | 2.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.51 | 3.73 | 2.85 | 3.25 | 5.16 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2428 | Fe XVIII | F02040   | 839.890 | 14.762    | 6.85 | 3.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.78 | 4.08 | 3.26 | 3.69 | 5.62 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3012 | Fe XIX   | O01013   | 840.570 | 14.750    | 6.91 | 2.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.17 | 2.73 | 2.66 | 4.16 | 6.32 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 4235 | Fe XXI   | C13026   | 840.740 | 14.747    | 7.04 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.67 | 4.25 | 4.69 | 5.99 | 7.31 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3011 | Fe XIX   | O06100   | 841.030 | 14.742    | 6.92 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.80 | 4.19 | 4.03 | 5.48 | 7.61 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 4234 | Fe XXI   | C13027   | 841.200 | 14.739    | 7.04 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.05 | 4.62 | 5.07 | 6.37 | 7.69 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3010 | Fe XIX   | O07110   | 841.260 | 14.738    | 6.92 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.39 | 4.78 | 4.61 | 6.07 | 8.20 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3009 | Fe XIX   | O04025   | 841.310 | 14.737    | 6.92 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.61 | 4.03 | 3.89 | 5.35 | 7.49 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3008 | Fe XIX   | O02018   | 841.370 | 14.736    | 6.92 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.49 | 4.93 | 4.79 | 6.26 | 8.41 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2425 | Fe XVIII | F02042   | 841.660 | 14.731    | 6.85 | 3.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.42 | 4.72 | 3.90 | 4.33 | 6.26 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2424 | Fe XVIII | F03100   | 842.060 | 14.724    | 6.85 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.61 | 3.83 | 2.95 | 3.35 | 5.26 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3688 | Fe XX    | N06034   | 842.170 | 14.722    | 6.98 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.09 | 4.66 | 3.89 | 4.85 | 6.58 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2423 | Fe XVIII | F02043   | 842.170 | 14.722    | 6.85 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.31 | 4.61 | 3.79 | 4.22 | 6.15 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3007 | Fe XIX   | O03019   | 842.230 | 14.721    | 6.92 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.87 | 5.30 | 5.17 | 6.64 | 8.78 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3006 | Fe XIX   | O06102   | 842.280 | 14.720    | 6.92 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.44 | 4.83 | 4.67 | 6.12 | 8.25 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2422 | Fe XVIII | F01031   | 842.740 | 14.712    | 6.84 | 3.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.32 | 3.83 | 3.12 | 3.60 | 5.56 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3687 | Fe XX    | N06035   | 842.800 | 14.711    | 6.98 | 3.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.72 | 4.29 | 3.52 | 4.48 | 6.21 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 4233 | Fe XXI   | C13028   | 842.860 | 14.710    | 7.04 | 3.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.92 | 3.50 | 3.94 | 5.24 | 6.56 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3005 | Fe XIX   | O04026   | 843.320 | 14.702    | 6.92 | 4.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.99 | 4.42 | 4.27 | 5.74 | 7.88 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3686 | Fe XX    | N07037   | 843.370 | 14.701    | 6.98 | 4.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.33 | 4.90 | 4.12 | 5.09 | 6.82 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2421 | Fe XVIII | F01033   | 843.370 | 14.701    | 6.84 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.48 | 4.99 | 4.27 | 4.76 | 6.72 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3004 | Fe XIX   | O03020   | 843.490 | 14.699    | 6.92 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.09 | 4.52 | 4.39 | 5.86 | 8.00 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3685 | Fe XX    | N08041   | 843.950 | 14.691    | 6.98 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.82 | 5.38 | 4.61 | 5.57 | 7.30 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3684 | Fe XX    | N11083   | 844.060 | 14.689    | 6.98 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.84 | 5.39 | 4.60 | 5.56 | 7.28 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2420 | Fe XVIII | F02046   | 844.120 | 14.688    | 6.85 | 3.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.61 | 3.91 | 3.08 | 3.51 | 5.44 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3683 | Fe XX    | N13100   | 844.230 | 14.686    | 6.98 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.18 | 5.72 | 4.92 | 5.88 | 7.60 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3003 | Fe XIX   | O03021   | 844.520 | 14.681    | 6.92 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.95 | 4.38 | 4.25 | 5.72 | 7.86 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2418 | Fe XVIII | F01034   | 844.580 | 14.680    | 6.84 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.54 | 5.05 | 4.33 | 4.82 | 6.78 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3002 | Fe XIX   | O01015   | 845.160 | 14.670    | 6.91 | 2.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.78 | 2.34 | 2.27 | 3.77 | 5.93 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3001 | Fe XIX   | O04027   | 845.210 | 14.669    | 6.92 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.19 | 4.61 | 4.47 | 5.93 | 8.07 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3000 | Fe XIX   | O03022   | 846.140 | 14.653    | 6.92 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.36 | 4.80 | 4.66 | 6.13 | 8.27 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 2999 | Fe XIX   | O02021   | 846.140 | 14.653    | 6.92 | 3     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |





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| Nr   | ion      | Transit. | E(eV)     | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |   |   |   |   |
|------|----------|----------|-----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---|---|---|---|
| 3656 | Fe XX    | N04020   | 872.020   | 14.218    | 6.98 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.08 | 4.66 | 3.90 | 4.87 | 6.60 | -    | -    | -    | -   | -   | -   | -   | -   |   |   |   |   |
| 2949 | Fe XIX   | O01030   | 872.150   | 14.216    | 6.91 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.90 | 3.45 | 3.38 | 4.88 | 7.03 | -    | -    | -   | -   | -   | -   | -   | - |   |   |   |
| 2387 | Fe XVIII | F01055   | 872.390   | 14.212    | 6.84 | 1.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.83 | 2.32 | 1.60 | 2.09 | 4.04 | -    | -    | -    | -   | -   | -   | -   | -   | - |   |   |   |
| 2948 | Fe XIX   | O07144   | 872.580   | 14.209    | 6.92 | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.21 | 4.58 | 4.41 | 5.85 | 7.98 | -    | -    | -   | -   | -   | -   | -   | - |   |   |   |
| 2386 | Fe XVIII | F01056   | 872.880   | 14.204    | 6.84 | 1.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.55 | 2.04 | 1.32 | 1.81 | 3.76 | -    | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2947 | Fe XIX   | O04049   | 872.880   | 14.204    | 6.92 | 4.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.71 | 5.12 | 4.97 | 6.43 | 8.56 | -    | -    | -   | -   | -   | -   | -   | - |   |   |   |
| 4219 | Fe XXI   | C12030   | 873.010   | 14.202    | 7.04 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.27 | 3.84 | 4.29 | 5.58 | 6.90 | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 3655 | Fe XX    | N12120   | 873.190   | 14.199    | 6.98 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.46 | 4.99 | 4.19 | 5.14 | 6.86 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2385 | Fe XVIII | F03105   | 873.250   | 14.198    | 6.85 | 3.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.41 | 4.60 | 3.71 | 4.10 | 6.00 | -    | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2946 | Fe XIX   | O04050   | 873.370   | 14.196    | 6.92 | 4.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.97 | 4.38 | 4.23 | 5.69 | 7.82 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2945 | Fe XIX   | O03037   | 873.370   | 14.196    | 6.92 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.36 | 4.78 | 4.64 | 6.10 | 8.25 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2944 | Fe XIX   | O07146   | 873.990   | 14.186    | 6.92 | 3.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.45 | 3.82 | 3.65 | 5.09 | 7.22 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 4218 | Fe XXI   | C12031   | 874.240   | 14.182    | 7.04 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.26 | 4.83 | 5.27 | 6.57 | 7.89 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2943 | Fe XIX   | O06129   | 874.300   | 14.181    | 6.92 | 3.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.77 | 4.15 | 3.98 | 5.42 | 7.55 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2384 | Fe XVIII | F03106   | 874.360   | 14.180    | 6.85 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.57 | 4.76 | 3.87 | 4.26 | 6.16 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2942 | Fe XIX   | O08150   | 874.480   | 14.178    | 6.92 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.33 | 4.70 | 4.52 | 5.97 | 8.10 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 2941 | Fe XIX   | O07147   | 874.480   | 14.178    | 6.92 | 3.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.17 | 3.54 | 3.36 | 4.81 | 6.94 | -    | -    | -   | -   | -   | -   | -   | - | - |   |   |
| 4217 | Fe XXI   | C12032   | 874.670   | 14.175    | 7.04 | 4.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.83 | 4.40 | 4.85 | 6.14 | 7.46 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 4216 | Fe XXI   | C07025   | 874.730   | 14.174    | 7.04 | 3.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.02 | 3.60 | 4.05 | 5.35 | 6.67 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2940 | Fe XIX   | O07148   | 874.850   | 14.172    | 6.92 | 3.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.20 | 3.57 | 3.39 | 4.84 | 6.97 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2939 | Fe XIX   | O05067   | 874.920   | 14.171    | 6.92 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.62 | 4.99 | 4.82 | 6.27 | 8.40 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 4215 | Fe XXI   | C10029   | 875.220   | 14.166    | 7.04 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.35 | 4.92 | 5.37 | 6.66 | 7.98 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2383 | Fe XVIII | F03108   | 875.470   | 14.162    | 6.85 | 3.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.12 | 4.31 | 3.42 | 3.81 | 5.71 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 3654 | Fe XX    | N11116   | 875.720   | 14.158    | 6.98 | 3.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.80 | 4.33 | 3.53 | 4.48 | 6.20 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2938 | Fe XIX   | O06131   | 875.720   | 14.158    | 6.92 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.20 | 3.58 | 3.40 | 4.85 | 6.98 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2382 | Fe XVIII | F01057   | 875.970   | 14.154    | 6.84 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.98 | 3.47 | 2.75 | 3.23 | 5.19 | -    | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 4214 | Fe XXI   | C13042   | 876.090   | 14.152    | 7.04 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.88 | 4.44 | 4.88 | 6.18 | 7.50 | -   | -   | -   | -   | -   | - | - | - | - |
| 2937 | Fe XIX   | O06133   | 876.400   | 14.147    | 6.92 | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.57 | 3.95 | 3.77 | 5.22 | 7.35 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2936 | Fe XIX   | O04052   | 876.520   | 14.145    | 6.92 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.64 | 5.05 | 4.90 | 6.36 | 8.49 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2935 | Fe XIX   | O01033   | 876.520   | 14.145    | 6.91 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.93 | 4.48 | 4.40 | 5.90 | 8.06 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 4213 | Fe XXI   | C11031   | 876.590   | 14.144    | 7.04 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.00 | 4.56 | 5.01 | 6.30 | 7.63 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 3653 | Fe XX    | N05023   | 876.770   | 14.141    | 6.98 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.83 | 5.41 | 4.64 | 5.62 | 7.35 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2934 | Fe XIX   | O04053   | 876.770   | 14.141    | 6.92 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.82 | 4.23 | 4.07 | 5.53 | 7.67 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2380 | Fe XVIII | F01058   | 876.770   | 14.141    | 6.84 | 3.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.33 | 3.82 | 3.10 | 3.58 | 5.54 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2933 | Fe XIX   | O04054   | 876.830   | 14.140    | 6.92 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.59 | 5.00 | 4.85 | 6.31 | 8.45 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 2932 | Fe XIX   | O03039   | 876.900   | 14.139    | 6.92 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.89 | 5.31 | 5.17 | 6.63 | 8.77 | -    | -   | -   | -   | -   | -   | - | - | - |   |
| 3652 | Fe XX    | N02017   | 877.020   | 14.137    | 6.98 | 3.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.95 | 4.54 | 3.78 | 4.75 | 6.49 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 4212 | Fe XXI   | C11032   | 877.020   | 14.137    | 7.04 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.17 | 4.74 | 5.18 | 6.48 | 7.80 | -   | -   | -   | -   | -   | - | - | - | - |
| 2931 | Fe XIX   | O01034   | 877.140   | 14.135    | 6.91 | 2.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.68 | 3.23 | 3.15 | 4.65 | 6.81 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2930 | Fe XIX   | O05072   | 877.580   | 14.128    | 6.92 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.20 | 4.58 | 4.40 | 5.85 | 7.98 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 3651 | Fe XX    | N03019   | 877.580   | 14.128    | 6.98 | 3.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.21 | 3.80 | 3.04 | 4.01 | 5.74 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2929 | Fe XIX   | O03043   | 877.760   | 14.125    | 6.92 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.85 | 4.27 | 4.13 | 5.59 | 7.73 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2928 | Fe XIX   | O03042   | 877.760   | 14.125    | 6.92 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.58 | 4.00 | 3.86 | 5.32 | 7.46 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2927 | Fe XIX   | O03045   | 877.830   | 14.124    | 6.92 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.75 | 4.17 | 4.03 | 5.49 | 7.63 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2379 | Fe XVIII | F02061   | 877.830   | 14.124    | 6.85 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.10 | 4.38 | 3.54 | 3.96 | 5.88 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 4211 | Fe XXI   | C10031   | 877.890   | 14.123    | 7.04 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.39 | 4.96 | 5.41 | 6.70 | 8.02 | -   | -   | -   | -   | -   | - | - | - | - |
| 3650 | Fe XX    | N05024   | 878.080   | 14.120    | 6.98 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.17 | 4.75 | 3.99 | 4.96 | 6.69 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2926 | Fe XIX   | O06136   | 878.390   | 14.115    | 6.92 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.51 | 4.88 | 4.71 | 6.16 | 8.29 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 2925 | Fe XIX   | O10250   | 878.640   | 14.111    | 6.92 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.54 | 4.85 | 4.63 | 6.05 | 8.16 | -    | -   | -   | -   | -   | -   | - | - | - | - |
| 4210 | Fe XXI   | C09027   | 878.640   | 14.111    | 7.04 | 3.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.51 | 3.08 | 3.53 | 4.82 | 6.14 | -   | -   | -   | -   | -   | - | - | - | - |
| 2924 | Fe XIX   | O07149   | 878.950</ |           |      |       |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |     |     |     |     |     |   |   |   |   |







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| Nr   | ion     | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |
|------|---------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| 4193 | Fe XXI  | C15082   | 902.430 | 13.739    | 7.05 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.80 | 4.35 | 4.78 | 6.07 | 7.38 | -    | -    | -   | -   | -   | -   | -   |
| 3609 | Fe XX   | N07090   | 902.430 | 13.739    | 6.98 | 3.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.25 | 4.79 | 4.00 | 4.95 | 6.67 | -    | -    | -   | -   | -   | -   | -   |
| 2869 | Fe XIX  | O03065   | 902.490 | 13.738    | 6.92 | 2.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.27 | 2.68 | 2.53 | 3.99 | 6.13 | -    | -    | -   | -   | -   | -   | -   |
| 2871 | Fe XIX  | O04076   | 902.490 | 13.738    | 6.92 | 2.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.22 | 2.62 | 2.46 | 3.91 | 6.05 | -    | -    | -   | -   | -   | -   | -   |
| 3615 | Fe XX   | N01019   | 902.950 | 13.731    | 6.97 | 2.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.30 | 3.03 | 2.34 | 3.35 | 5.10 | -    | -    | -   | -   | -   | -   | -   |
| 2868 | Fe XIX  | O04077   | 903.020 | 13.730    | 6.92 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.69 | 4.09 | 3.93 | 5.38 | 7.52 | -    | -    | -   | -   | -   | -   | -   |
| 4566 | Fe XXII | B10017   | 903.080 | 13.729    | 7.10 | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.64 | 4.52 | 4.45 | 5.31 | 6.27 | 7.28 | -   | -   | -   | -   | -   |
| 2867 | Fe XIX  | O07172   | 903.210 | 13.727    | 6.92 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.63 | 4.99 | 4.81 | 6.25 | 8.37 | -    | -    | -   | -   | -   | -   | -   |
| 4192 | Fe XXI  | C11045   | 903.350 | 13.725    | 7.04 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.30 | 4.86 | 5.30 | 6.59 | 7.91 | -    | -   | -   | -   | -   | -   |
| 2866 | Fe XIX  | O07174   | 903.350 | 13.725    | 6.92 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.83 | 4.19 | 4.01 | 5.44 | 7.57 | -    | -    | -   | -   | -   | -   | -   |
| 3608 | Fe XX   | N04034   | 903.410 | 13.724    | 6.98 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.65 | 5.22 | 4.45 | 5.42 | 7.15 | -    | -    | -   | -   | -   | -   | -   |
| 2865 | Fe XIX  | O04078   | 903.810 | 13.718    | 6.92 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.18 | 3.58 | 3.42 | 4.87 | 7.01 | -    | -    | -   | -   | -   | -   | -   |
| 2864 | Fe XIX  | O03067   | 904.070 | 13.714    | 6.92 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.71 | 4.12 | 3.97 | 5.43 | 7.57 | -    | -    | -   | -   | -   | -   | -   |
| 3607 | Fe XX   | N04035   | 904.070 | 13.714    | 6.98 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.08 | 5.65 | 4.87 | 5.84 | 7.57 | -    | -    | -   | -   | -   | -   | -   |
| 3606 | Fe XX   | N03029   | 904.200 | 13.712    | 6.98 | 4.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.31 | 4.88 | 4.12 | 5.09 | 6.82 | -    | -    | -   | -   | -   | -   | -   |
| 3605 | Fe XX   | N15249   | 904.270 | 13.711    | 6.99 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.38 | 5.85 | 5.02 | 5.95 | 7.65 | -    | -    | -   | -   | -   | -   | -   |
| 4191 | Fe XXI  | C15083   | 904.330 | 13.710    | 7.05 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.34 | 4.89 | 5.32 | 6.61 | 7.92 | -    | -   | -   | -   | -   | -   |
| 2863 | Fe XIX  | O07175   | 904.400 | 13.709    | 6.92 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.40 | 3.76 | 3.58 | 5.01 | 7.14 | -    | -    | -   | -   | -   | -   | -   |
| 3604 | Fe XX   | N07094   | 904.400 | 13.709    | 6.98 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.04 | 5.58 | 4.79 | 5.74 | 7.47 | -    | -    | -   | -   | -   | -   | -   |
| 4190 | Fe XXI  | C10045   | 904.660 | 13.705    | 7.04 | 4.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.26 | 4.82 | 5.26 | 6.55 | 7.87 | -    | -   | -   | -   | -   | -   |
| 2862 | Fe XIX  | O06163   | 904.660 | 13.705    | 6.92 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.59 | 4.95 | 4.77 | 6.21 | 8.33 | -    | -    | -   | -   | -   | -   | -   |
| 4189 | Fe XXI  | O05022   | 904.800 | 13.703    | 7.04 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.98 | 4.56 | 5.01 | 6.31 | 7.64 | -    | -   | -   | -   | -   | -   |
| 410  | Ne IX   | HE6      | 904.990 | 13.700    | 6.59 | 1.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.40 | 2.77 | 1.80 | 1.48 | 1.85 | 2.53 | 3.20 | 3.79 | 4.33 | 4.83 | 5.29 | -   | -   | -   | -   | -   |
| 4565 | Fe XXII | B12029   | 904.990 | 13.700    | 7.10 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.04 | 4.91 | 4.83 | 5.69 | 6.64 | 7.65 | -   | -   | -   | -   | -   |
| 2861 | Fe XIX  | O05092   | 905.130 | 13.698    | 6.92 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.00 | 4.37 | 4.19 | 5.63 | 7.75 | -    | -    | -   | -   | -   | -   | -   |
| 2860 | Fe XIX  | O07177   | 905.190 | 13.697    | 6.92 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.97 | 5.33 | 5.15 | 6.59 | 8.71 | -    | -    | -   | -   | -   | -   | -   |
| 3603 | Fe XX   | N05038   | 905.320 | 13.695    | 6.98 | 4.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.20 | 5.77 | 5.00 | 5.96 | 7.69 | -    | -    | -   | -   | -   | -   | -   |
| 3602 | Fe XX   | N02026   | 905.460 | 13.693    | 6.98 | 4.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.31 | 4.88 | 4.11 | 5.08 | 6.81 | -    | -    | -   | -   | -   | -   | -   |
| 4564 | Fe XXII | B09017   | 905.520 | 13.692    | 7.10 | 3.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.53 | 3.42 | 3.34 | 4.20 | 5.16 | 6.17 | -   | -   | -   | -   | -   |
| 3601 | Fe XX   | N03030   | 905.660 | 13.690    | 6.98 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.85 | 5.42 | 4.65 | 5.62 | 7.35 | -    | -    | -   | -   | -   | -   | -   |
| 2858 | Fe XIX  | O02067   | 905.720 | 13.689    | 6.92 | 3.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.08 | 3.49 | 3.34 | 4.80 | 6.94 | -    | -    | -   | -   | -   | -   | -   |
| 2859 | Fe XIX  | O09199   | 905.720 | 13.689    | 6.92 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.59 | 4.93 | 4.74 | 6.17 | 8.30 | -    | -    | -   | -   | -   | -   | -   |
| 2857 | Fe XIX  | O04080   | 905.850 | 13.687    | 6.92 | 3.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.04 | 3.44 | 3.28 | 4.73 | 6.86 | -    | -    | -   | -   | -   | -   | -   |
| 3600 | Fe XX   | N05039   | 906.120 | 13.683    | 6.98 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.69 | 5.25 | 4.48 | 5.44 | 7.17 | -    | -    | -   | -   | -   | -   | -   |
| 4563 | Fe XXII | B13032   | 906.320 | 13.680    | 7.10 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.18 | 5.06 | 4.97 | 5.83 | 6.78 | 7.79 | -   | -   | -   | -   | -   |
| 3599 | Fe XX   | N02027   | 906.580 | 13.676    | 6.98 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.77 | 5.35 | 4.58 | 5.55 | 7.28 | -    | -    | -   | -   | -   | -   | -   |
| 2855 | Fe XIX  | O01056   | 906.850 | 13.672    | 6.91 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.44 | 2.98 | 2.90 | 4.40 | 6.55 | -    | -    | -   | -   | -   | -   | -   |
| 2856 | Fe XIX  | O03070   | 906.850 | 13.672    | 6.92 | 3.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.75 | 4.16 | 4.01 | 5.47 | 7.61 | -    | -    | -   | -   | -   | -   | -   |
| 4188 | Fe XXI  | C17150   | 906.980 | 13.670    | 7.05 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.38 | 4.91 | 5.33 | 6.61 | 7.93 | -    | -   | -   | -   | -   | -   |
| 2853 | Fe XIX  | O03072   | 906.980 | 13.670    | 6.92 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.79 | 3.20 | 3.05 | 4.51 | 6.65 | -    | -    | -   | -   | -   | -   | -   |
| 2854 | Fe XIX  | O03071   | 906.980 | 13.670    | 6.92 | 2.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.60 | 3.01 | 2.86 | 4.32 | 6.46 | -    | -    | -   | -   | -   | -   | -   |
| 3598 | Fe XX   | N03031   | 907.110 | 13.668    | 6.98 | 3.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.10 | 4.67 | 3.90 | 4.87 | 6.60 | -    | -    | -   | -   | -   | -   | -   |
| 4562 | Fe XXII | B10018   | 907.180 | 13.667    | 7.10 | 3.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.88 | 3.77 | 3.69 | 4.55 | 5.51 | 6.52 | -   | -   | -   | -   | -   |
| 2852 | Fe XIX  | O09200   | 907.510 | 13.662    | 6.92 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.32 | 4.66 | 4.47 | 5.90 | 8.02 | -    | -    | -   | -   | -   | -   | -   |
| 4187 | Fe XXI  | C12052   | 907.910 | 13.656    | 7.04 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.68 | 4.24 | 4.68 | 5.97 | 7.29 | -    | -   | -   | -   | -   | -   |
| 2850 | Fe XIX  | O03073   | 907.910 | 13.656    | 6.92 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.60 | 4.01 | 3.86 | 5.32 | 7.45 | -    | -    | -   | -   | -   | -   | -   |
| 2849 | Fe XIX  | O04081   | 908.040 | 13.654    | 6.92 | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.55 | 3.95 | 3.78 | 5.24 | 7.37 | -    | -    | -   | -   | -   | -   | -   |
| 3597 | Fe XX   | N02028   | 908.180 | 13.652    | 6.98 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.09 | 5.66 | 4.89 | 5.86 | 7.59 | -    | -    | -   | -   | -   | -   | -   |
| 2851 | Fe XIX  | O01057   | 908.310 | 13.650    | 6.91 | 2.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.93 | 2.47 | 2.39 | 3.88 | 6.04 | -    | -    | -   | -   | -   | -   | -   |
| 2848 | Fe XIX  | O02072   | 908.380 | 13.649    | 6.92 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.65 | 4.06 | 3.91 | 5.37 | 7.50 | -    | -    | -   | -   | -   | -   | -   |
| 2846 | Fe XIX  | O07181   | 908.710 | 13.644    | 6.92 | 4.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.79 | 5.14 | 4.96 | 6.40 | 8.52 | -    | -    | -   | -   | -   | -   | -   |
| 3596 | Fe XX   | N13189   | 908.780 | 13.643    | 6.99 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.14 | 5.64 | 4.83 | 5.78 | 7.49 | -    | -    | -   | -   | -   | -   | -   |
| 2845 | Fe XIX  | O01061   | 908.840 | 13.642    | 6.91 | 3.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.89 | 3.43 | 3.35 | 4.84 | 7.00 | -    | -    | -   | -   | -   | -   | -   |
| 2847 | Fe XIX  | O01059   | 909.310 | 13.635    |      |       |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---|
| 3595 | Fe XX    | N06088   | 909.840 | 13.627    | 6.98 | 4.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.50 | 5.04 | 4.25 | 5.20 | 6.92 | -    | -    | -   | -   | -   | -   | -   |   |
| 2843 | Fe XIX   | O06168   | 910.040 | 13.624    | 6.92 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.18 | 4.54 | 4.35 | 5.79 | 7.92 | -    | -    | -   | -   | -   | -   | -   |   |
| 4186 | Fe XXI   | C11052   | 910.240 | 13.621    | 7.04 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 7.61 | -    | -    | -   | -   | -   | -   | -   |   |
| 2842 | Fe XIX   | O06170   | 910.310 | 13.620    | 6.92 | 3.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.93 | 4.29 | 4.10 | 5.54 | 7.67 | -    | -    | -   | -   | -   | -   | -   |   |
| 4185 | Fe XXI   | C07039   | 910.510 | 13.617    | 7.04 | 2.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.24 | 2.81 | 3.25 | 4.54 | 5.86 | -    | -   | -   | -   | -   | -   | - |
| 3594 | Fe XX    | N06090   | 910.510 | 13.617    | 6.98 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.85 | 4.39 | 3.60 | 4.56 | 6.28 | -    | -    | -   | -   | -   | -   | -   |   |
| 3593 | Fe XX    | N12179   | 910.640 | 13.615    | 6.99 | 5.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.34 | 5.85 | 5.04 | 5.99 | 7.70 | -    | -    | -   | -   | -   | -   | -   |   |
| 3592 | Fe XX    | N06091   | 910.640 | 13.615    | 6.98 | 3.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.49 | 4.03 | 3.24 | 4.20 | 5.92 | -    | -    | -   | -   | -   | -   | -   |   |
| 3591 | Fe XX    | N02030   | 910.710 | 13.614    | 6.98 | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.59 | 5.16 | 4.39 | 5.36 | 7.09 | -    | -    | -   | -   | -   | -   | -   |   |
| 2841 | Fe XIX   | O04085   | 910.710 | 13.614    | 6.92 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.14 | 4.53 | 4.37 | 5.82 | 7.96 | -    | -    | -   | -   | -   | -   | -   |   |
| 3590 | Fe XX    | N06092   | 910.850 | 13.612    | 6.98 | 3.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.38 | 3.92 | 3.13 | 4.09 | 5.81 | -    | -    | -   | -   | -   | -   | -   |   |
| 2840 | Fe XIX   | O06172   | 910.850 | 13.612    | 6.92 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.83 | 4.19 | 4.00 | 5.44 | 7.57 | -    | -    | -   | -   | -   | -   | -   |   |
| 2839 | Fe XIX   | O04086   | 911.250 | 13.606    | 6.92 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.83 | 5.22 | 5.06 | 6.51 | 8.65 | -    | -    | -   | -   | -   | -   | -   |   |
| 3589 | Fe XX    | N01021   | 911.650 | 13.600    | 6.98 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.74 | 4.46 | 3.77 | 4.78 | 6.53 | -    | -    | -   | -   | -   | -   | -   |   |
| 4184 | Fe XXI   | C14075   | 911.780 | 13.598    | 7.05 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.21 | 4.76 | 5.20 | 6.49 | 7.80 | -    | -   | -   | -   | -   | -   | - |
| 2837 | Fe XIX   | O06177   | 912.860 | 13.582    | 6.92 | 3.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.94 | 4.29 | 4.11 | 5.55 | 7.67 | -    | -    | -   | -   | -   | -   | -   |   |
| 3588 | Fe XX    | N03034   | 913.060 | 13.579    | 6.98 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.55 | 5.12 | 4.35 | 5.32 | 7.05 | -    | -    | -   | -   | -   | -   | -   |   |
| 2836 | Fe XIX   | O06178   | 913.060 | 13.579    | 6.92 | 3.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.76 | 4.11 | 3.93 | 5.37 | 7.49 | -    | -    | -   | -   | -   | -   | -   |   |
| 3587 | Fe XX    | N09137   | 913.130 | 13.578    | 6.98 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.09 | 5.61 | 4.81 | 5.76 | 7.48 | -    | -    | -   | -   | -   | -   | -   |   |
| 2835 | Fe XIX   | O06179   | 913.390 | 13.574    | 6.92 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.70 | 5.06 | 4.88 | 6.32 | 8.44 | -    | -    | -   | -   | -   | -   | -   |   |
| 2834 | Fe XIX   | O04087   | 913.390 | 13.574    | 6.92 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.98 | 4.37 | 4.21 | 5.66 | 7.80 | -    | -    | -   | -   | -   | -   | -   |   |
| 2833 | Fe XIX   | O03077   | 913.530 | 13.572    | 6.92 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.80 | 4.21 | 4.05 | 5.51 | 7.65 | -    | -    | -   | -   | -   | -   | -   |   |
| 2832 | Fe XIX   | O01065   | 913.660 | 13.570    | 6.91 | 2.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.30 | 2.84 | 2.76 | 4.25 | 6.41 | -    | -    | -   | -   | -   | -   | -   |   |
| 3586 | Fe XX    | N03035   | 913.730 | 13.569    | 6.98 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.86 | 5.43 | 4.66 | 5.63 | 7.35 | -    | -    | -   | -   | -   | -   | -   |   |
| 3585 | Fe XX    | N08109   | 914.000 | 13.565    | 6.98 | 2.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.23 | 3.77 | 2.97 | 3.93 | 5.64 | -    | -    | -   | -   | -   | -   | -   |   |
| 3584 | Fe XX    | N04039   | 914.140 | 13.563    | 6.98 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.65 | 5.21 | 4.44 | 5.41 | 7.13 | -    | -    | -   | -   | -   | -   | -   |   |
| 3583 | Fe XX    | N08110   | 914.540 | 13.557    | 6.98 | 2.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.23 | 3.77 | 2.97 | 3.93 | 5.64 | -    | -    | -   | -   | -   | -   | -   |   |
| 3582 | Fe XX    | N10145   | 914.680 | 13.555    | 6.98 | 4.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.01 | 5.53 | 4.73 | 5.68 | 7.39 | -    | -    | -   | -   | -   | -   | -   |   |
| 2363 | Fe XVIII | F02071   | 914.680 | 13.555    | 6.85 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.86 | 5.11 | 4.25 | 4.66 | 6.58 | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 2831 | Fe XIX   | O01067   | 914.740 | 13.554    | 6.91 | 2.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.65 | 3.19 | 3.11 | 4.60 | 6.75 | -    | -    | -   | -   | -   | -   | -   |   |
| 409  | Ne IX    | HE5      | 914.810 | 13.553    | 6.58 | 2.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.82 | 3.21 | 2.28 | 2.01 | 2.42 | 3.13 | 3.81 | 4.42 | 4.98 | 5.49 | 5.98 | -   | -   | -   | -   | -   |   |
| 383  | Ne VIII  | LI S2    | 914.950 | 13.551    | 6.46 | 2.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.78 | 3.89 | 2.98 | 2.56 | 2.68 | 3.44 | 4.45 | 5.42 | -    | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 352  | Ne VII   | BE S3    | 914.950 | 13.551    | 6.46 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.21 | 5.82 | 5.24 | 4.93 | 5.07 | 5.92 | 7.11 | 8.30 | -    | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 353  | Ne VII   | BE S4    | 914.950 | 13.551    | 6.48 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.66 | 6.05 | 5.34 | 4.94 | 5.03 | 5.84 | 7.01 | 8.19 | -    | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 3581 | Fe XX    | N05045   | 915.080 | 13.549    | 6.98 | 3.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.61 | 4.17 | 3.39 | 4.36 | 6.08 | -    | -    | -   | -   | -   | -   | -   |   |
| 3580 | Fe XX    | N14248   | 915.150 | 13.548    | 6.99 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.71 | 5.18 | 4.35 | 5.28 | 6.98 | -    | -    | -   | -   | -   | -   | -   |   |
| 4183 | Fe XXI   | C18161   | 915.690 | 13.540    | 7.05 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.18 | 4.71 | 5.13 | 6.41 | 7.72 | -    | -   | -   | -   | -   | -   | - |
| 3579 | Fe XX    | N05047   | 916.030 | 13.535    | 6.98 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.26 | 4.82 | 4.04 | 5.00 | 6.73 | -    | -    | -   | -   | -   | -   | -   |   |
| 3578 | Fe XX    | N03036   | 916.160 | 13.533    | 6.98 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.08 | 5.65 | 4.88 | 5.84 | 7.57 | -    | -    | -   | -   | -   | -   | -   |   |
| 2830 | Fe XIX   | O04089   | 916.300 | 13.531    | 6.92 | 3.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.21 | 3.60 | 3.44 | 4.89 | 7.02 | -    | -    | -   | -   | -   | -   | -   |   |
| 4182 | Fe XXI   | C07042   | 916.370 | 13.530    | 7.04 | 1.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.47 | 2.03 | 2.48 | 3.77 | 5.09 | -    | -   | -   | -   | -   | -   | - |
| 2829 | Fe XIX   | O06181   | 916.370 | 13.530    | 6.92 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.64 | 5.00 | 4.81 | 6.25 | 8.37 | -    | -    | -   | -   | -   | -   | -   |   |
| 2828 | Fe XIX   | O03080   | 916.370 | 13.530    | 6.92 | 2.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.84 | 3.24 | 3.08 | 4.54 | 6.68 | -    | -    | -   | -   | -   | -   | -   |   |
| 2361 | Fe XVIII | F02072   | 916.370 | 13.530    | 6.85 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.54 | 4.78 | 3.93 | 4.34 | 6.25 | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 3577 | Fe XX    | N05048   | 916.370 | 13.530    | 6.98 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.90 | 5.46 | 4.69 | 5.65 | 7.38 | -    | -    | -   | -   | -   | -   | -   |   |
| 2827 | Fe XIX   | O04090   | 916.500 | 13.528    | 6.92 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.65 | 4.04 | 3.88 | 5.33 | 7.46 | -    | -    | -   | -   | -   | -   | -   |   |
| 3576 | Fe XX    | N13195   | 916.640 | 13.526    | 6.99 | 4.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.08 | 5.58 | 4.77 | 5.71 | 7.42 | -    | -    | -   | -   | -   | -   | -   |   |
| 3575 | Fe XX    | N07108   | 916.640 | 13.526    | 6.98 | 2.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.87 | 3.41 | 2.61 | 3.56 | 5.28 | -    | -    | -   | -   | -   | -   | -   |   |
| 3574 | Fe XX    | N07109   | 916.840 | 13.523    | 6.98 | 2.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.11 | 3.65 | 2.85 | 3.80 | 5.52 | -    | -    | -   | -   | -   | -   | -   |   |
| 2826 | Fe XIX   | O01068   | 916.980 | 13.521    | 6.91 | 1.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 3.11 | 1.65 | 1.56 | 3.06 | 5.21 | -    | -    | -   | -   | -   | -   | -   |   |
| 3573 | Fe XX    | N01022   | 917.040 | 13.520    | 6.98 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.69 | 4.41 | 3.72 | 4.73 | 6.48 | -    | -    | -   | -   | -   | -   | -   |   |
| 2825 | Fe XIX   | O06182   | 917.040 | 13.520    | 6.92 | 3.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.47 | 3.82 | 3.64 | 5.08 | 7.20 | -    | -    | -   | -   | -   | -   | -   |   |
| 2359 | Fe XVIII | F01066   | 917.180 | 13.518    | 6.84 | 4.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.64 | 5.12 | 4.38 | 4.86 | 6.81 | -    | -    | -    | -   | -   | -   | -   | -   |   |
| 3572 | Fe XX    | N07110   | 917.310 | 13.5      |      |       |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |   |



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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4 | 8.6 | 8.8 | 9.0 |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|---|---|
| 4172 | Fe XXI   | C09052   | 924.700 | 13.408    | 7.04 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.33 | 3.89 | 4.33 | 5.62 | 6.94 | -    | -    | -    | -   | -   | -   | -   |   |   |
| 3548 | Fe XX    | N06111   | 924.770 | 13.407    | 6.98 | 2.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.53 | 3.06 | 2.27 | 3.22 | 4.94 | -    | -    | -    | -   | -   | -   | -   |   |   |
| 2348 | Fe XVIII | F02079   | 924.840 | 13.406    | 6.85 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.07 | 5.31 | 4.45 | 4.86 | 6.77 | -    | -    | -    | -    | -   | -   | -   | -   |   |   |
| 4559 | Fe XXII  | B08018   | 924.840 | 13.406    | 7.10 | 3.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.05 | 3.94 | 3.86 | 4.72 | 5.68 | 6.69 | -    | -   | -   | -   | -   |   |   |
| 2349 | Fe XVIII | F01069   | 924.840 | 13.406    | 6.84 | 2.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.20 | 3.67 | 2.94 | 3.41 | 5.36 | -    | -    | -    | -    | -   | -   | -   | -   |   |   |
| 3549 | Fe XX    | N06109   | 924.910 | 13.405    | 6.98 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.98 | 4.51 | 3.72 | 4.67 | 6.39 | -    | -    | -    | -   | -   | -   | -   |   |   |
| 3550 | Fe XX    | N09161   | 924.910 | 13.405    | 6.99 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.83 | 5.34 | 4.54 | 5.49 | 7.20 | -    | -    | -    | -   | -   | -   | -   |   |   |
| 2805 | Fe XIX   | O01078   | 924.980 | 13.404    | 6.91 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.21 | 4.75 | 4.66 | 6.15 | 8.31 | -    | -    | -   | -   | -   | -   |   |   |
| 2804 | Fe XIX   | O07190   | 925.190 | 13.401    | 6.92 | 3.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.42 | 3.77 | 3.58 | 5.02 | 7.14 | -    | -    | -   | -   | -   | -   |   |   |
| 4558 | Fe XXII  | B15061   | 925.600 | 13.395    | 7.10 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.27 | 5.13 | 5.04 | 5.89 | 6.84 | 7.85 | -   | -   | -   | -   |   |   |
| 3547 | Fe XX    | N05058   | 925.740 | 13.393    | 6.98 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.90 | 5.46 | 4.68 | 5.64 | 7.37 | -    | -    | -   | -   | -   | -   |   |   |
| 3546 | Fe XX    | N05059   | 926.020 | 13.389    | 6.98 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.56 | 4.12 | 3.34 | 4.30 | 6.02 | -    | -    | -   | -   | -   | -   |   |   |
| 2345 | Fe XVIII | F03120   | 926.150 | 13.387    | 6.86 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.68 | 5.84 | 4.92 | 5.30 | 7.19 | -    | -    | -    | -   | -   | -   | -   |   |   |
| 2803 | Fe XIX   | O08195   | 926.220 | 13.386    | 6.92 | 4.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.03 | 4.38 | 4.19 | 5.63 | 7.75 | -    | -    | -   | -   | -   | -   |   |   |
| 2802 | Fe XIX   | O05112   | 926.500 | 13.382    | 6.92 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.71 | 5.06 | 4.87 | 6.31 | 8.43 | -    | -    | -   | -   | -   | -   |   |   |
| 3545 | Fe XX    | N03042   | 926.570 | 13.381    | 6.98 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.87 | 4.43 | 3.65 | 4.62 | 6.35 | -    | -    | -   | -   | -   | -   |   |   |
| 3544 | Fe XX    | N10165   | 926.640 | 13.380    | 6.99 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.97 | 5.49 | 4.68 | 5.63 | 7.34 | -    | -    | -   | -   | -   | -   |   |   |
| 2346 | Fe XVIII | F01070   | 926.780 | 13.378    | 6.84 | 2.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.88 | 3.35 | 2.61 | 3.09 | 5.04 | -    | -    | -   | -   | -   | -   |   |   |
| 3543 | Fe XX    | N05060   | 926.920 | 13.376    | 6.98 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.06 | 4.61 | 3.83 | 4.80 | 6.52 | -    | -    | -   | -   | -   | -   |   |   |
| 2801 | Fe XIX   | O06186   | 926.980 | 13.375    | 6.92 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.83 | 5.18 | 4.99 | 6.43 | 8.55 | -    | -    | -   | -   | -   | -   |   |   |
| 2800 | Fe XIX   | O03090   | 926.980 | 13.375    | 6.92 | 4.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.00 | 4.40 | 4.24 | 5.69 | 7.83 | -    | -    | -   | -   | -   | -   |   |   |
| 2799 | Fe XIX   | O01080   | 927.050 | 13.374    | 6.91 | 3.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.29 | 3.83 | 3.75 | 5.24 | 7.39 | -    | -    | -   | -   | -   | -   |   |   |
| 4557 | Fe XXII  | B11031   | 927.190 | 13.372    | 7.10 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.25 | 5.12 | 5.03 | 5.89 | 6.84 | 7.86 | -   | -   | -   | -   |   |   |
| 2343 | Fe XVIII | F01071   | 927.260 | 13.371    | 6.84 | 3.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.13 | 4.60 | 3.86 | 4.34 | 6.28 | -    | -    | -   | -   | -   | -   |   |   |
| 3542 | Fe XX    | N11189   | 927.260 | 13.371    | 6.99 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.34 | 4.85 | 4.04 | 4.98 | 6.69 | -    | -   | -   | -   | -   | - |   |
| 3541 | Fe XX    | N04050   | 927.330 | 13.370    | 6.98 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.96 | 4.52 | 3.75 | 4.71 | 6.44 | -    | -    | -   | -   | -   | -   |   |   |
| 2798 | Fe XIX   | O06187   | 927.400 | 13.369    | 6.92 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.22 | 4.57 | 4.38 | 5.82 | 7.94 | -    | -    | -   | -   | -   | -   |   |   |
| 2797 | Fe XIX   | O07193   | 927.470 | 13.368    | 6.92 | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.61 | 3.96 | 3.77 | 5.21 | 7.33 | -    | -    | -   | -   | -   | -   |   |   |
| 4170 | Fe XXI   | C12065   | 927.470 | 13.368    | 7.05 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.01 | 4.56 | 5.00 | 6.29 | 7.60 | -    | -   | -   | -   | -   | - |   |
| 2342 | Fe XVIII | F02080   | 927.960 | 13.361    | 6.85 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.39 | 4.63 | 3.77 | 4.18 | 6.09 | -    | -    | -   | -   | -   | -   |   |   |
| 3540 | Fe XX    | N10167   | 927.960 | 13.361    | 6.99 | 4.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.06 | 5.58 | 4.77 | 5.72 | 7.43 | -    | -    | -   | -   | -   | -   |   |   |
| 3539 | Fe XX    | N12194   | 928.100 | 13.359    | 6.99 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.88 | 5.39 | 4.58 | 5.52 | 7.23 | -    | -    | -   | -   | -   | -   |   |   |
| 2341 | Fe XVIII | F01072   | 928.230 | 13.357    | 6.84 | 2.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.12 | 3.59 | 2.85 | 3.32 | 5.27 | -    | -    | -   | -   | -   | -   |   |   |
| 3538 | Fe XX    | N10168   | 928.300 | 13.356    | 6.99 | 4.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.44 | 4.95 | 4.15 | 5.09 | 6.81 | -    | -   | -   | -   | -   | - |   |
| 3537 | Fe XX    | N09165   | 928.650 | 13.351    | 6.99 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.56 | 5.07 | 4.26 | 5.21 | 6.93 | -    | -   | -   | -   | -   | - |   |
| 3536 | Fe XX    | N02039   | 928.790 | 13.349    | 6.98 | 2.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.16 | 3.73 | 2.95 | 3.92 | 5.65 | -    | -   | -   | -   | -   | - |   |
| 4169 | Fe XXI   | C13086   | 928.790 | 13.349    | 7.05 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.92 | 4.46 | 4.90 | 6.18 | 7.50 | -    | -   | -   | -   | -   | - |   |
| 3535 | Fe XX    | N10169   | 929.140 | 13.344    | 6.99 | 4.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.27 | 5.79 | 4.98 | 5.93 | 7.64 | -    | -   | -   | -   | -   | - |   |
| 2796 | Fe XIX   | O01081   | 929.280 | 13.342    | 6.91 | 3.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.68 | 4.22 | 4.14 | 5.63 | 7.78 | -    | -   | -   | -   | -   | - |   |
| 2795 | Fe XIX   | O07194   | 929.350 | 13.341    | 6.92 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.79 | 4.14 | 3.95 | 5.38 | 7.51 | -    | -   | -   | -   | -   | - |   |
| 3534 | Fe XX    | N12197   | 929.420 | 13.340    | 6.99 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.19 | 5.69 | 4.88 | 5.82 | 7.53 | -    | -   | -   | -   | -   | - |   |
| 3533 | Fe XX    | N10171   | 929.630 | 13.337    | 6.99 | 4.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.12 | 5.63 | 4.82 | 5.77 | 7.48 | -    | -   | -   | -   | -   | - |   |
| 3532 | Fe XX    | N01031   | 929.700 | 13.336    | 6.98 | 2.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.96 | 3.68 | 2.99 | 4.00 | 5.75 | -    | -   | -   | -   | -   | - |   |
| 3531 | Fe XX    | N13207   | 930.180 | 13.329    | 6.99 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.04 | 5.53 | 4.72 | 5.66 | 7.37 | -    | -   | -   | -   | -   | - |   |
| 4168 | Fe XXI   | C06029   | 930.250 | 13.328    | 7.04 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.37 | 4.94 | 5.39 | 6.68 | 8.00 | -   | -   | -   | -   | - | - |
| 2793 | Fe XIX   | O04097   | 930.320 | 13.327    | 6.92 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.37 | 4.75 | 4.58 | 6.03 | 8.16 | -    | -   | -   | -   | -   | - |   |
| 3530 | Fe XX    | N09168   | 930.320 | 13.327    | 6.99 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.63 | 5.14 | 4.33 | 5.28 | 6.99 | -    | -   | -   | -   | -   | - |   |
| 2339 | Fe XVIII | F01073   | 930.600 | 13.323    | 6.84 | 3.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.32 | 3.79 | 3.05 | 3.52 | 5.47 | -    | -   | -   | -   | -   | - |   |
| 2792 | Fe XIX   | O06189   | 930.950 | 13.318    | 6.92 | 3.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.02 | 3.37 | 3.18 | 4.62 | 6.74 | -    | -   | -   | -   | -   | - |   |
| 3529 | Fe XX    | N09169   | 931.090 | 13.316    | 6.99 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.89 | 5.40 | 4.59 | 5.54 | 7.26 | -    | -   | -   | -   | -   | - |   |
| 3528 | Fe XX    | N11193   | 931.230 | 13.314    | 6.99 | 3.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.17 | 4.68 | 3.87 | 4.81 | 6.52 | -    | -   | -   | -   | -   | - |   |
| 2338 | Fe XVIII | F01074   | 931.370 | 13.312    | 6.84 | 2.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.02 | 3.49 | 2.75 | 3.22 | 5.17 | -    | -   | -   | -   | -   | - |   |
| 3527 | Fe XX    | N12199   | 931.580 | 13.309    | 6.99 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.39 | 4.89 | 4.07 | 5.02 | 6.73 |      |     |     |     |     |   |   |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---|---|
| 3525 | Fe XX    | N02042   | 931.650 | 13.308    | 6.98 | 2.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.09 | 3.66 | 2.88 | 3.85 | 5.58 | -    | -    | -    | -   | -   | -   | -   | -   |   |   |
| 2791 | Fe XIX   | O01085   | 931.860 | 13.305    | 6.91 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.76 | 4.30 | 4.21 | 5.71 | 7.86 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2336 | Fe XVIII | F01075   | 931.930 | 13.304    | 6.84 | 3.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.82 | 4.29 | 3.55 | 4.02 | 5.97 | -    | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3524 | Fe XX    | N05063   | 931.930 | 13.304    | 6.98 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.92 | 5.48 | 4.70 | 5.66 | 7.38 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3523 | Fe XX    | N06116   | 932.070 | 13.302    | 6.98 | 3.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 3.97 | 3.17 | 4.13 | 5.84 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3522 | Fe XX    | N05064   | 932.140 | 13.301    | 6.98 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.55 | 5.10 | 4.32 | 5.28 | 7.01 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2790 | Fe XIX   | O07196   | 932.210 | 13.300    | 6.92 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.61 | 4.96 | 4.77 | 6.20 | 8.32 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2335 | Fe XVIII | F01076   | 932.420 | 13.297    | 6.84 | 4.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.08 | 5.55 | 4.81 | 5.29 | 7.23 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3521 | Fe XX    | N03045   | 932.700 | 13.293    | 6.98 | 3.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 4.00 | 3.22 | 4.19 | 5.91 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2789 | Fe XIX   | O06190   | 932.840 | 13.291    | 6.92 | 3.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.60 | 3.95 | 3.76 | 5.19 | 7.32 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3520 | Fe XX    | N03046   | 932.910 | 13.290    | 6.98 | 2.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.08 | 3.64 | 2.86 | 3.83 | 5.55 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3519 | Fe XX    | N12200   | 933.050 | 13.288    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.72 | 5.22 | 4.41 | 5.35 | 7.06 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3518 | Fe XX    | N05065   | 933.050 | 13.288    | 6.98 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.13 | 5.68 | 4.90 | 5.86 | 7.58 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4167 | Fe XXI   | C04023   | 933.260 | 13.285    | 7.04 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.07 | 4.64 | 5.09 | 6.39 | 7.71 | -    | -   | -   | -   | -   | -   | - |   |
| 4166 | Fe XXI   | C12073   | 933.550 | 13.281    | 7.05 | 4.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.47 | 5.02 | 5.46 | 6.74 | 8.06 | -    | -   | -   | -   | -   | -   | - |   |
| 3517 | Fe XX    | N04058   | 933.760 | 13.278    | 6.98 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.89 | 5.44 | 4.66 | 5.62 | 7.35 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3514 | Fe XX    | N03048   | 934.040 | 13.274    | 6.98 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.26 | 4.82 | 4.04 | 5.01 | 6.73 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2334 | Fe XVIII | F03128   | 934.180 | 13.272    | 6.86 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.63 | 5.78 | 4.86 | 5.24 | 7.13 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2788 | Fe XIX   | O01087   | 934.670 | 13.265    | 6.91 | 2.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.47 | 3.01 | 2.92 | 4.41 | 6.57 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3515 | Fe XX    | N04059   | 934.670 | 13.265    | 6.98 | 2.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.99 | 3.54 | 2.76 | 3.72 | 5.45 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3516 | Fe XX    | N09175   | 934.670 | 13.265    | 6.99 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.03 | 5.55 | 4.74 | 5.69 | 7.40 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4165 | Fe XXI   | C03022   | 934.880 | 13.262    | 7.04 | 2.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.21 | 2.79 | 3.24 | 4.54 | 5.86 | -    | -   | -   | -   | -   | -   | - |   |
| 3513 | Fe XX    | N04060   | 934.880 | 13.262    | 6.98 | 2.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.14 | 3.70 | 2.92 | 3.88 | 5.61 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2787 | Fe XIX   | O06193   | 935.090 | 13.259    | 6.92 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 4.78 | 4.60 | 6.03 | 8.15 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2786 | Fe XIX   | O03094   | 935.090 | 13.259    | 6.92 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.52 | 4.92 | 4.76 | 6.21 | 8.34 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3512 | Fe XX    | N11195   | 935.170 | 13.258    | 6.99 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.11 | 4.62 | 3.80 | 4.74 | 6.46 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3511 | Fe XX    | N08132   | 935.870 | 13.248    | 6.98 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.82 | 5.34 | 4.54 | 5.49 | 7.21 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3510 | Fe XX    | N11197   | 936.220 | 13.243    | 6.99 | 3.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.01 | 4.52 | 3.70 | 4.64 | 6.36 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4556 | Fe XXII  | B06017   | 936.220 | 13.243    | 7.10 | 2.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.74 | 2.63 | 2.55 | 3.42 | 4.37 | 5.39 | -   | -   | -   | -   | -   | - |   |
| 4164 | Fe XXI   | C04024   | 936.370 | 13.241    | 7.04 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.38 | 3.96 | 4.41 | 5.70 | 7.03 | -    | -   | -   | -   | -   | -   | - |   |
| 2785 | Fe XIX   | O04104   | 936.580 | 13.238    | 6.92 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.68 | 5.06 | 4.89 | 6.34 | 8.47 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2784 | Fe XIX   | O04105   | 936.930 | 13.233    | 6.92 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.43 | 4.81 | 4.64 | 6.09 | 8.22 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4555 | Fe XXII  | B07018   | 937.000 | 13.232    | 7.10 | 2.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.25 | 3.14 | 3.06 | 3.93 | 4.88 | 5.90 | -   | -   | -   | -   | -   | - |   |
| 3509 | Fe XX    | N03050   | 937.000 | 13.232    | 6.98 | 4.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.58 | 5.14 | 4.36 | 5.33 | 7.05 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3507 | Fe XX    | N03051   | 937.640 | 13.223    | 6.98 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.50 | 4.06 | 3.28 | 4.24 | 5.97 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3508 | Fe XX    | N03052   | 937.640 | 13.223    | 6.98 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.38 | 3.94 | 3.16 | 4.12 | 5.85 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2783 | Fe XIX   | O04106   | 937.640 | 13.223    | 6.92 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.48 | 4.86 | 4.69 | 6.14 | 8.27 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3506 | Fe XX    | N02045   | 937.780 | 13.221    | 6.98 | 3.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.53 | 4.10 | 3.32 | 4.28 | 6.01 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4554 | Fe XXII  | B10023   | 938.070 | 13.217    | 7.10 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.95 | 4.82 | 4.74 | 5.60 | 6.55 | 7.57 | -   | -   | -   | -   | -   | - |   |
| 3505 | Fe XX    | N11199   | 938.420 | 13.212    | 6.99 | 3.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.93 | 4.44 | 3.62 | 4.56 | 6.27 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3504 | Fe XX    | N07132   | 938.710 | 13.208    | 6.98 | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.66 | 5.19 | 4.39 | 5.34 | 7.05 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3503 | Fe XX    | N02047   | 938.780 | 13.207    | 6.98 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.17 | 4.73 | 3.95 | 4.91 | 6.64 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4163 | Fe XXI   | C13101   | 938.850 | 13.206    | 7.05 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.38 | 4.93 | 5.36 | 6.64 | 7.96 | -    | -   | -   | -   | -   | -   | - | - |
| 3502 | Fe XX    | N12205   | 939.060 | 13.203    | 6.99 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.22 | 5.72 | 4.91 | 5.85 | 7.56 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3501 | Fe XX    | N02048   | 939.130 | 13.202    | 6.98 | 3.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.62 | 4.19 | 3.41 | 4.37 | 6.10 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 2782 | Fe XIX   | O07198   | 939.420 | 13.198    | 6.92 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.01 | 4.36 | 4.16 | 5.60 | 7.72 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3500 | Fe XX    | N04062   | 939.630 | 13.195    | 6.98 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.51 | 4.06 | 3.28 | 4.24 | 5.97 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3499 | Fe XX    | N07135   | 939.700 | 13.194    | 6.98 | 4.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.53 | 5.05 | 4.25 | 5.20 | 6.92 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4553 | Fe XXII  | B06018   | 939.770 | 13.193    | 7.10 | 4.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.50 | 4.39 | 4.31 | 5.18 | 6.13 | 7.15 | -   | -   | -   | -   | -   | - | - |
| 3498 | Fe XX    | N04064   | 940.130 | 13.188    | 6.98 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.73 | 4.28 | 3.50 | 4.46 | 6.19 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 3497 | Fe XX    | N09185   | 940.200 | 13.187    | 6.99 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.49 | 5.00 | 4.19 | 5.14 | 6.85 | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4162 | Fe XXI   | C02021   | 940.490 | 13.183    | 7.04 | 3.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.89 | 3.47 | 3.93 | 5.23 | 6.55 | -    | -   | -   | -   | -   | -   | - | - |
| 2332 | Fe XVIII | F01080   | 940.560 | 13.182    | 6.84 |       |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |     |     |     |     |     |   |   |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2 | 8.4 | 8.6 | 8.8 | 9.0 |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---|---|
| 3495 | Fe XX    | N05070   | 940.840 | 13.178    | 6.98 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.88 | 5.43 | 4.64 | 5.60 | 7.33 | -    | -    | -   | -   | -   | -   | -   |   |   |
| 4161 | Fe XXI   | C06034   | 941.560 | 13.168    | 7.04 | 3.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.68 | 3.24 | 3.69 | 4.98 | 6.30 | -   | -   | -   | -   | -   | - |   |
| 4160 | Fe XXI   | C02022   | 941.630 | 13.167    | 7.04 | 3.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.70 | 3.28 | 3.74 | 5.04 | 6.36 | -   | -   | -   | -   | -   | - |   |
| 4159 | Fe XXI   | C12079   | 941.700 | 13.166    | 7.05 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.06 | 4.61 | 5.05 | 6.34 | 7.65 | -   | -   | -   | -   | -   | - |   |
| 3494 | Fe XX    | N08141   | 941.910 | 13.163    | 6.98 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.93 | 5.45 | 4.65 | 5.59 | 7.31 | -    | -    | -   | -   | -   | -   | -   |   |   |
| 3493 | Fe XX    | N03056   | 942.130 | 13.160    | 6.98 | 2.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.65 | 3.21 | 2.43 | 3.39 | 5.12 | -    | -   | -   | -   | -   | -   | - |   |
| 2116 | Fe XVII  | NE01037  | 942.130 | 13.160    | 6.73 | 2.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.74 | 3.29 | 2.65 | 2.59 | 3.60 | 6.01 | -    | -    | -    | -   | -   | -   | -   | -   | - |   |
| 5258 | Ni XX    | F3D      | 942.130 | 13.160    | 6.81 | 2.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.76 | 3.62 | 2.92 | 3.53 | 5.68 | -    | -    | -    | -   | -   | -   | -   | -   | - |   |
| 4158 | Fe XXI   | C12080   | 942.130 | 13.160    | 7.05 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.72 | 4.27 | 4.70 | 5.99 | 7.31 | -   | -   | -   | -   | -   | - |   |
| 3492 | Fe XX    | N02050   | 942.130 | 13.160    | 6.98 | 2.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.09 | 3.65 | 2.87 | 3.83 | 5.56 | -    | -   | -   | -   | -   | -   | - |   |
| 3491 | Fe XX    | N12208   | 942.340 | 13.157    | 6.99 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.07 | 4.57 | 3.75 | 4.69 | 6.40 | -    | -   | -   | -   | -   | -   | - |   |
| 3490 | Fe XX    | N07137   | 942.490 | 13.155    | 6.98 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.13 | 5.66 | 4.85 | 5.80 | 7.52 | -    | -   | -   | -   | -   | -   | - |   |
| 3489 | Fe XX    | N08143   | 942.560 | 13.154    | 6.98 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.30 | 4.82 | 4.02 | 4.97 | 6.68 | -    | -   | -   | -   | -   | -   | - |   |
| 4157 | Fe XXI   | C13110   | 942.630 | 13.153    | 7.05 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.75 | 4.30 | 4.73 | 6.02 | 7.33 | -   | -   | -   | -   | -   | - |   |
| 3487 | Fe XX    | N10187   | 942.770 | 13.151    | 6.99 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.12 | 5.62 | 4.81 | 5.76 | 7.47 | -    | -   | -   | -   | -   | -   | - |   |
| 3486 | Fe XX    | N08145   | 943.200 | 13.145    | 6.98 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.21 | 5.73 | 4.92 | 5.87 | 7.59 | -    | -   | -   | -   | -   | -   | - |   |
| 3488 | Fe XX    | N02052   | 943.280 | 13.144    | 6.98 | 2.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.65 | 3.21 | 2.43 | 3.39 | 5.12 | -    | -   | -   | -   | -   | -   | - |   |
| 3485 | Fe XX    | N03058   | 943.420 | 13.142    | 6.98 | 2.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.18 | 3.74 | 2.96 | 3.92 | 5.65 | -    | -   | -   | -   | -   | -   | - |   |
| 3484 | Fe XX    | N05073   | 943.640 | 13.139    | 6.98 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.77 | 5.32 | 4.53 | 5.49 | 7.22 | -    | -   | -   | -   | -   | -   | - |   |
| 4156 | Fe XXI   | C11079   | 943.990 | 13.134    | 7.05 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.14 | 4.69 | 5.13 | 6.42 | 7.73 | -   | -   | -   | -   | -   | - |   |
| 4155 | Fe XXI   | C11080   | 944.500 | 13.127    | 7.05 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.44 | 4.99 | 5.42 | 6.71 | 8.02 | -   | -   | -   | -   | -   | - |   |
| 2781 | Fe XIX   | O03098   | 944.640 | 13.125    | 6.92 | 3.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.71 | 4.10 | 3.94 | 5.39 | 7.52 | -    | -   | -   | -   | -   | -   | - |   |
| 3483 | Fe XX    | N09187   | 944.790 | 13.123    | 6.99 | 4.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.27 | 5.77 | 4.96 | 5.91 | 7.62 | -    | -   | -   | -   | -   | -   | - |   |
| 2331 | Fe XVIII | F03144   | 944.930 | 13.121    | 6.86 | 3.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.38 | 4.53 | 3.60 | 3.97 | 5.86 | -    | -   | -   | -   | -   | -   | - |   |
| 3482 | Fe XX    | N07143   | 945.360 | 13.115    | 6.98 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.68 | 5.20 | 4.40 | 5.35 | 7.06 | -    | -   | -   | -   | -   | -   | - |   |
| 4154 | Fe XXI   | C12083   | 945.360 | 13.115    | 7.05 | 3.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.51 | 3.06 | 3.49 | 4.78 | 6.09 | -   | -   | -   | -   | -   | - |   |
| 2780 | Fe XIX   | O01093   | 945.720 | 13.110    | 6.91 | 3.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.96 | 3.49 | 3.40 | 4.89 | 7.05 | -    | -   | -   | -   | -   | -   | - |   |
| 2779 | Fe XIX   | O01094   | 945.790 | 13.109    | 6.91 | 3.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.07 | 3.60 | 3.51 | 5.00 | 7.16 | -    | -   | -   | -   | -   | -   | - |   |
| 4153 | Fe XXI   | C11082   | 945.790 | 13.109    | 7.05 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.33 | 3.88 | 4.31 | 5.60 | 6.91 | -   | -   | -   | -   | -   | - | - |
| 2328 | Fe XVIII | F03154   | 945.790 | 13.109    | 6.86 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.47 | 5.62 | 4.69 | 5.06 | 6.95 | -    | -   | -   | -   | -   | -   | - |   |
| 3481 | Fe XX    | N01039   | 946.370 | 13.101    | 6.98 | 2.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.80 | 3.52 | 2.82 | 3.83 | 5.58 | -    | -   | -   | -   | -   | -   | - |   |
| 2778 | Fe XIX   | O03101   | 946.370 | 13.101    | 6.92 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.94 | 5.33 | 5.17 | 6.62 | 8.75 | -    | -   | -   | -   | -   | -   | - |   |
| 3480 | Fe XX    | N03061   | 946.440 | 13.100    | 6.98 | 3.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.30 | 3.86 | 3.08 | 4.04 | 5.76 | -    | -   | -   | -   | -   | -   | - |   |
| 2327 | Fe XVIII | F03156   | 946.440 | 13.100    | 6.86 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.02 | 5.16 | 4.23 | 4.60 | 6.49 | -    | -   | -   | -   | -   | -   | - |   |
| 2776 | Fe XIX   | O03103   | 946.730 | 13.096    | 6.92 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.94 | 5.33 | 5.17 | 6.62 | 8.75 | -    | -   | -   | -   | -   | -   | - |   |
| 3479 | Fe XX    | N07147   | 946.810 | 13.095    | 6.98 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.75 | 4.27 | 3.47 | 4.42 | 6.13 | -    | -   | -   | -   | -   | -   | - |   |
| 3478 | Fe XX    | N05079   | 946.950 | 13.093    | 6.98 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.15 | 4.70 | 3.91 | 4.87 | 6.60 | -    | -   | -   | -   | -   | -   | - |   |
| 3477 | Fe XX    | N02056   | 947.020 | 13.092    | 6.98 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.57 | 5.13 | 4.35 | 5.32 | 7.04 | -    | -   | -   | -   | -   | -   | - |   |
| 5257 | Ni XX    | F3C      | 947.020 | 13.092    | 6.81 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.75 | 3.61 | 2.91 | 3.51 | 5.67 | -    | -   | -   | -   | -   | -   | - |   |
| 2775 | Fe XIX   | O03104   | 947.100 | 13.091    | 6.92 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.65 | 5.04 | 4.88 | 6.33 | 8.46 | -    | -   | -   | -   | -   | -   | - |   |
| 3476 | Fe XX    | N07148   | 947.100 | 13.091    | 6.98 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.96 | 5.48 | 4.67 | 5.62 | 7.34 | -    | -   | -   | -   | -   | -   | - |   |
| 3475 | Fe XX    | N05080   | 947.310 | 13.088    | 6.98 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.89 | 4.44 | 3.66 | 4.61 | 6.34 | -    | -   | -   | -   | -   | -   | - |   |
| 3474 | Fe XX    | N05081   | 947.460 | 13.086    | 6.98 | 3.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.80 | 4.35 | 3.57 | 4.52 | 6.25 | -    | -   | -   | -   | -   | -   | - |   |
| 4152 | Fe XXI   | C11083   | 947.670 | 13.083    | 7.05 | 2.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.41 | 2.96 | 3.39 | 4.68 | 5.99 | -   | -   | -   | -   | -   | - | - |
| 3473 | Fe XX    | N13219   | 947.750 | 13.082    | 6.99 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.74 | 5.23 | 4.41 | 5.34 | 7.05 | -    | -   | -   | -   | -   | -   | - |   |
| 4151 | Fe XXI   | C06038   | 947.750 | 13.082    | 7.04 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.71 | 4.28 | 4.72 | 6.01 | 7.33 | -   | -   | -   | -   | -   | - | - |
| 3472 | Fe XX    | N06135   | 947.820 | 13.081    | 6.98 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.63 | 5.15 | 4.35 | 5.30 | 7.02 | -    | -   | -   | -   | -   | -   | - |   |
| 2774 | Fe XIX   | O02101   | 948.040 | 13.078    | 6.92 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.55 | 4.94 | 4.78 | 6.23 | 8.37 | -    | -   | -   | -   | -   | -   | - |   |
| 4149 | Fe XXI   | C07065   | 948.110 | 13.077    | 7.05 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.05 | 4.61 | 5.04 | 6.33 | 7.65 | -   | -   | -   | -   | -   | - | - |
| 3471 | Fe XX    | N04069   | 948.110 | 13.077    | 6.98 | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.51 | 5.06 | 4.28 | 5.24 | 6.96 | -    | -   | -   | -   | -   | -   | - |   |
| 4150 | Fe XXI   | C08065   | 948.110 | 13.077    | 7.05 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.02 | 4.57 | 5.01 | 6.30 | 7.62 | -   | -   | -   | -   | -   | - | - |
| 3470 | Fe XX    | N08155   | 948.180 | 13.076    | 6.99 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.64 | 5.16 | 4.35 | 5.30 | 7.02 | -    | -   | -   | -   | -   | -   | - |   |
| 2773 | Fe XIX   | O03106   | 948.180 | 13.       |      |       |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |     |     |     |     |     |   |   |





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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4 | 8.6 | 8.8 | 9.0 |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|
| 3443 | Fe XX    | N04080   | 955.340 | 12.978    | 6.98 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.86 | 5.41 | 4.62 | 5.58 | 7.30 | -    | -    | -    | -   | -   | -   |     |
| 2761 | Fe XIX   | O03112   | 955.640 | 12.974    | 6.92 | 4.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.07 | 4.46 | 4.29 | 5.74 | 7.87 | -    | -    | -   | -   | -   |     |
| 2322 | Fe XVIII | F02091   | 955.640 | 12.974    | 6.85 | 4.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.85 | 5.07 | 4.19 | 4.59 | 6.50 | -    | -    | -    | -   | -   | -   |     |
| 4132 | Fe XXI   | C15147   | 955.860 | 12.971    | 7.05 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.11 | 4.64 | 5.07 | 6.35 | 7.66 | -    | -    | -   | -   | -   |     |
| 3441 | Fe XX    | N02065   | 956.080 | 12.968    | 6.98 | 3.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.46 | 4.01 | 3.23 | 4.19 | 5.92 | -    | -    | -   | -   | -   |     |
| 4131 | Fe XXI   | C08074   | 956.300 | 12.965    | 7.05 | 3.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.49 | 4.04 | 4.48 | 5.77 | 7.08 | -    | -   | -   | -   | -   |
| 3440 | Fe XX    | N06149   | 956.300 | 12.965    | 6.98 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.49 | 4.01 | 3.20 | 4.15 | 5.87 | -    | -    | -   | -   | -   |     |
| 3439 | Fe XX    | N01047   | 956.300 | 12.965    | 6.98 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.36 | 4.07 | 3.38 | 4.38 | 6.13 | -    | -    | -   | -   | -   |     |
| 3438 | Fe XX    | N01048   | 956.300 | 12.965    | 6.98 | 1.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.99 | 2.70 | 2.01 | 3.01 | 4.76 | -    | -    | -   | -   | -   |     |
| 4547 | Fe XXII  | B14072   | 956.670 | 12.960    | 7.11 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.83 | 4.69 | 4.59 | 5.44 | 6.39 | 7.39 | -   | -   | -   | -   |
| 3437 | Fe XX    | N10200   | 956.820 | 12.958    | 6.99 | 3.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.01 | 4.51 | 3.69 | 4.63 | 6.35 | -    | -    | -   | -   | -   |     |
| 3436 | Fe XX    | N05085   | 956.890 | 12.957    | 6.98 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.62 | 5.16 | 4.37 | 5.33 | 7.05 | -    | -    | -   | -   | -   |     |
| 2321 | Fe XVIII | F02092   | 956.960 | 12.956    | 6.85 | 3.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.49 | 4.71 | 3.83 | 4.23 | 6.14 | -    | -    | -    | -   | -   | -   |     |
| 2758 | Fe XIX   | O01101   | 957.110 | 12.954    | 6.91 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.20 | 3.73 | 3.64 | 5.12 | 7.28 | -    | -    | -   | -   | -   |     |
| 2757 | Fe XIX   | O02112   | 957.260 | 12.952    | 6.92 | 3.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.42 | 3.81 | 3.64 | 5.09 | 7.22 | -    | -    | -   | -   | -   |     |
| 2756 | Fe XIX   | O01104   | 957.330 | 12.951    | 6.91 | 2.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.65 | 3.18 | 3.08 | 4.57 | 6.73 | -    | -    | -   | -   | -   |     |
| 3435 | Fe XX    | N09199   | 957.330 | 12.951    | 6.99 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.51 | 5.02 | 4.20 | 5.14 | 6.86 | -    | -    | -   | -   | -   |     |
| 4130 | Fe XXI   | C09076   | 957.410 | 12.950    | 7.05 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.43 | 4.98 | 5.42 | 6.71 | 8.02 | -    | -   | -   | -   | -   |
| 3434 | Fe XX    | N06150   | 957.480 | 12.949    | 6.98 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.63 | 5.14 | 4.34 | 5.29 | 7.00 | -    | -    | -   | -   | -   |     |
| 3433 | Fe XX    | N08169   | 957.630 | 12.947    | 6.99 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.25 | 5.76 | 4.96 | 5.90 | 7.62 | -    | -    | -   | -   | -   |     |
| 4129 | Fe XXI   | C15149   | 957.630 | 12.947    | 7.05 | 3.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.47 | 4.01 | 4.43 | 5.72 | 7.03 | -    | -   | -   | -   | -   |
| 4128 | Fe XXI   | C11096   | 957.780 | 12.945    | 7.05 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.96 | 4.51 | 4.94 | 6.23 | 7.54 | -    | -   | -   | -   | -   |
| 3432 | Fe XX    | N03069   | 957.780 | 12.945    | 6.98 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.55 | 5.10 | 4.31 | 5.27 | 7.00 | -    | -    | -   | -   | -   |     |
| 3431 | Fe XX    | N07165   | 958.000 | 12.942    | 6.99 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.91 | 5.42 | 4.62 | 5.56 | 7.28 | -    | -    | -   | -   | -   |     |
| 3430 | Fe XX    | N03070   | 958.520 | 12.935    | 6.98 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.95 | 4.50 | 3.72 | 4.68 | 6.40 | -    | -    | -   | -   | -   |     |
| 2317 | Fe XVIII | F02094   | 958.670 | 12.933    | 6.85 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.26 | 5.48 | 4.60 | 5.00 | 6.91 | -    | -    | -    | -   | -   | -   |     |
| 3429 | Fe XX    | N06153   | 958.670 | 12.933    | 6.99 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.46 | 4.98 | 4.17 | 5.12 | 6.83 | -    | -    | -   | -   | -   |     |
| 4127 | Fe XXI   | C09079   | 958.740 | 12.932    | 7.05 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.18 | 4.73 | 5.17 | 6.46 | 7.77 | -    | -   | -   | -   | -   |
| 3428 | Fe XX    | N09200   | 958.810 | 12.931    | 6.99 | 3.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.05 | 4.55 | 3.73 | 4.67 | 6.38 | -    | -    | -   | -   | -   |     |
| 2755 | Fe XIX   | O01105   | 958.810 | 12.931    | 6.91 | 2.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.38 | 2.91 | 2.82 | 4.31 | 6.46 | -    | -    | -   | -   | -   |     |
| 2315 | Fe XVIII | F02096   | 958.890 | 12.930    | 6.85 | 4.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.62 | 5.84 | 4.96 | 5.36 | 7.27 | -    | -    | -    | -   | -   | -   |     |
| 4126 | Fe XXI   | C11097   | 958.890 | 12.930    | 7.05 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.31 | 4.85 | 5.28 | 6.57 | 7.88 | -    | -   | -   | -   | -   |
| 4125 | Fe XXI   | C12101   | 959.180 | 12.926    | 7.05 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.31 | 4.85 | 5.28 | 6.57 | 7.88 | -    | -   | -   | -   | -   |
| 5255 | Ni XX    | F3A      | 959.330 | 12.924    | 6.81 | 2.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.57 | 3.42 | 2.72 | 3.32 | 5.48 | -    | -    | -    | -   | -   | -   |     |
| 2754 | Fe XIX   | O01106   | 959.330 | 12.924    | 6.91 | 2.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.43 | 2.96 | 2.87 | 4.36 | 6.51 | -    | -    | -   | -   | -   |     |
| 3427 | Fe XX    | N01050   | 959.560 | 12.921    | 6.98 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.46 | 4.17 | 3.48 | 4.48 | 6.23 | -    | -    | -   | -   | -   |     |
| 3424 | Fe XX    | N10203   | 960.300 | 12.911    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.73 | 5.23 | 4.41 | 5.35 | 7.06 | -    | -    | -   | -   | -   |     |
| 3425 | Fe XX    | N11215   | 960.300 | 12.911    | 6.99 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.34 | 5.83 | 5.01 | 5.95 | 7.66 | -    | -    | -   | -   | -   |     |
| 3423 | Fe XX    | N07170   | 960.600 | 12.907    | 6.99 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.89 | 5.40 | 4.60 | 5.54 | 7.26 | -    | -    | -   | -   | -   |     |
| 4124 | Fe XXI   | C19214   | 960.750 | 12.905    | 7.05 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.74 | 4.26 | 4.67 | 5.94 | 7.25 | -    | -   | -   | -   | -   |
| 3426 | Fe XX    | N01052   | 960.820 | 12.904    | 6.98 | 2.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.07 | 2.78 | 2.08 | 3.09 | 4.84 | -    | -    | -   | -   | -   |     |
| 3422 | Fe XX    | N08176   | 960.890 | 12.903    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.71 | 5.22 | 4.41 | 5.36 | 7.07 | -    | -    | -   | -   | -   |     |
| 3421 | Fe XX    | N08177   | 961.040 | 12.901    | 6.99 | 3.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.11 | 4.62 | 3.81 | 4.76 | 6.47 | -    | -    | -   | -   | -   |     |
| 3420 | Fe XX    | N03073   | 961.270 | 12.898    | 6.98 | 4.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.23 | 5.77 | 4.99 | 5.95 | 7.67 | -    | -    | -   | -   | -   |     |
| 2751 | Fe XIX   | O01107   | 961.490 | 12.895    | 6.91 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 4.97 | 4.88 | 6.37 | 8.52 | -    | -    | -   | -   | -   |     |
| 3418 | Fe XX    | N06160   | 961.860 | 12.890    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.71 | 5.22 | 4.42 | 5.37 | 7.08 | -    | -    | -   | -   | -   |     |
| 3419 | Fe XX    | N03074   | 962.010 | 12.888    | 6.98 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.58 | 4.12 | 3.34 | 4.30 | 6.02 | -    | -    | -   | -   | -   |     |
| 4123 | Fe XXI   | C07079   | 962.310 | 12.884    | 7.05 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.37 | 4.92 | 5.35 | 6.64 | 7.95 | -    | -   | -   | -   | -   |
| 4122 | Fe XXI   | C09083   | 962.460 | 12.882    | 7.05 | 3.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.04 | 3.59 | 4.02 | 5.31 | 6.63 | -    | -   | -   | -   | -   |
| 4121 | Fe XXI   | C08080   | 962.760 | 12.878    | 7.05 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.97 | 4.52 | 4.96 | 6.24 | 7.56 | -    | -   | -   | -   | -   |
| 4120 | Fe XXI   | C07080   | 962.760 | 12.878    | 7.05 | 4.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.45 | 5.00 | 5.44 | 6.73 | 8.04 | -    | -   | -   | -   | -   |
| 2750 | Fe XIX   | O04121   | 962.760 | 12.878    | 6.92 | 4.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.74 | 5.11 | 4.93 | 6.37 | 8.50 | -    | -    | -   | -   | -   |     |
| 3417 | Fe XX    | N08178   | 962.760 | 12.878    | 6.99 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.30 | 4.81 | 4.00 | 4.94 | 6.66 | -    | -    | -   | -   | -   |     |
| 3416 | Fe XX    | N02069   | 962.830 | 12.877    | 6.98 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.91 | 4.46 | 3.68 | 4.64 | 6.36 | -    | -    | -   | -   | -   |     |
| 4119 | Fe XXI   | C12110   | 962.980 | 12.875    | 7.05 | 3.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.59 | 3.13 | 3.56 | 4.85 | 6.16 | -    | -   | -   |     |     |



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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8 | 9.0 |   |   |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|---|---|---|---|
| 4102 | Fe XXI   | C04035   | 970.520 | 12.775    | 7.04 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.75 | 3.32 | 3.76 | 5.06 | 6.38 | -    | -    | -    | -    | -   | -   |   |   |   |   |
| 4101 | Fe XXI   | C14144   | 971.050 | 12.768    | 7.05 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.57 | 4.10 | 4.53 | 5.81 | 7.12 | -    | -    | -    | -   | -   | - |   |   |   |
| 2307 | Fe XVIII | F01094   | 971.210 | 12.766    | 6.84 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.03 | 4.49 | 3.74 | 4.21 | 6.15 | -    | -    | -    | -    | -    | -    | -   | -   | - |   |   |   |
| 2737 | Fe XIX   | O04134   | 971.360 | 12.764    | 6.92 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.18 | 4.54 | 4.37 | 5.81 | 7.93 | -    | -    | -    | -    | -    | -   | -   | - |   |   |   |
| 2306 | Fe XVIII | F01095   | 971.360 | 12.764    | 6.84 | 3.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.86 | 4.31 | 3.56 | 4.03 | 5.97 | -    | -    | -    | -    | -    | -    | -   | -   | - |   |   |   |
| 2305 | Fe XVIII | F01096   | 971.430 | 12.763    | 6.84 | 4.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.35 | 4.80 | 4.05 | 4.52 | 6.46 | -    | -    | -    | -    | -    | -    | -   | -   | - |   |   |   |
| 4545 | Fe XXII  | B06023   | 971.430 | 12.763    | 7.10 | 2.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.38 | 2.26 | 2.18 | 3.04 | 3.99 | 5.00 | -    | -    | -    | -   | -   | - |   |   |   |
| 4544 | Fe XXII  | B04017   | 971.890 | 12.757    | 7.10 | 3.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.32 | 4.20 | 4.13 | 4.99 | 5.95 | 6.96 | -    | -    | -    | -   | -   | - | - |   |   |
| 4099 | Fe XXI   | C14145   | 971.890 | 12.757    | 7.05 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.69 | 4.22 | 4.65 | 5.93 | 7.24 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 4100 | Fe XXI   | C17214   | 971.890 | 12.757    | 7.05 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.87 | 4.39 | 4.80 | 6.08 | 7.38 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 3392 | Fe XX    | N01062   | 971.890 | 12.757    | 6.98 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.71 | 5.42 | 4.72 | 5.72 | 7.47 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 2735 | Fe XIX   | O04135   | 971.970 | 12.756    | 6.92 | 3.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.65 | 4.02 | 3.84 | 5.28 | 7.40 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 3391 | Fe XX    | N01063   | 972.200 | 12.753    | 6.98 | 3.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.58 | 4.29 | 3.59 | 4.59 | 6.34 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 4098 | Fe XXI   | C14147   | 972.350 | 12.751    | 7.05 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.27 | 4.80 | 5.23 | 6.51 | 7.82 | -    | -    | -    | -   | -   | - | - | - |   |
| 4097 | Fe XXI   | C15157   | 972.500 | 12.749    | 7.05 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.94 | 4.47 | 4.90 | 6.17 | 7.49 | -    | -    | -    | -   | -   | - | - | - |   |
| 2733 | Fe XIX   | O04138   | 972.650 | 12.747    | 6.92 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.90 | 5.26 | 5.08 | 6.52 | 8.65 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 3390 | Fe XX    | N08189   | 972.810 | 12.745    | 6.99 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.05 | 5.56 | 4.75 | 5.69 | 7.40 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 4826 | Fe XXIII | BE09014  | 973.040 | 12.742    | 7.18 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.89 | 5.00 | 4.34 | 4.74 | 5.31 | 5.99 | 6.89 | 8.03 | -   | -   | - | - | - |   |
| 2732 | Fe XIX   | O03121   | 973.190 | 12.740    | 6.92 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.35 | 4.73 | 4.56 | 6.00 | 8.13 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 2731 | Fe XIX   | O04140   | 973.340 | 12.738    | 6.92 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.93 | 4.29 | 4.11 | 5.56 | 7.68 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 3389 | Fe XX    | N01065   | 973.340 | 12.738    | 6.98 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.50 | 5.21 | 4.51 | 5.52 | 7.26 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 4543 | Fe XXII  | B12068   | 973.570 | 12.735    | 7.11 | 3.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.31 | 4.17 | 4.07 | 4.92 | 5.87 | 6.88 | -    | -    | -   | -   | - | - | - |   |
| 2729 | Fe XIX   | O04142   | 973.650 | 12.734    | 6.92 | 4.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.00 | 4.36 | 4.18 | 5.63 | 7.75 | -    | -    | -    | -    | -   | -   | - | - |   |   |
| 4096 | Fe XXI   | C08092   | 973.880 | 12.731    | 7.05 | 3.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.42 | 3.97 | 4.40 | 5.68 | 7.00 | -    | -    | -    | -   | -   | - | - | - |   |
| 4095 | Fe XXI   | C18220   | 974.180 | 12.727    | 7.05 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.22 | 4.73 | 5.14 | 6.42 | 7.72 | -    | -    | -    | -   | -   | - | - | - |   |
| 4542 | Fe XXII  | B10041   | 974.410 | 12.724    | 7.10 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.05 | 4.91 | 4.82 | 5.68 | 6.63 | 7.64 | -    | -    | -   | -   | - | - | - |   |
| 4541 | Fe XXII  | B13072   | 974.570 | 12.722    | 7.11 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.44 | 4.30 | 4.20 | 5.05 | 6.00 | 7.01 | -    | -    | -   | -   | - | - | - |   |
| 3388 | Fe XX    | N06180   | 974.720 | 12.720    | 6.99 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.89 | 5.40 | 4.59 | 5.53 | 7.25 | -    | -    | -    | -   | -   | - | - | - |   |
| 3387 | Fe XX    | N10212   | 974.870 | 12.718    | 6.99 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.70 | 5.20 | 4.38 | 5.31 | 7.02 | -    | -    | -    | -    | -   | -   | - | - | - |   |
| 4094 | Fe XXI   | C04036   | 975.260 | 12.713    | 7.04 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.39 | 3.96 | 4.40 | 5.69 | 7.01 | -    | -    | -    | -   | -   | - | - | - |   |
| 4540 | Fe XXII  | B11062   | 975.490 | 12.710    | 7.11 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.02 | 4.88 | 4.78 | 5.64 | 6.58 | 7.59 | -    | -    | -   | -   | - | - | - |   |
| 4093 | Fe XXI   | C04037   | 975.870 | 12.705    | 7.04 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.08 | 3.65 | 4.09 | 5.38 | 6.70 | -    | -    | -    | -   | -   | - | - | - |   |
| 4092 | Fe XXI   | C16205   | 976.560 | 12.696    | 7.05 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.26 | 4.78 | 5.19 | 6.47 | 7.78 | -    | -    | -    | -   | -   | - | - | - |   |
| 4090 | Fe XXI   | C09102   | 976.560 | 12.696    | 7.05 | 4.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.63 | 4.18 | 4.61 | 5.89 | 7.21 | -    | -    | -    | -   | -   | - | - | - |   |
| 4091 | Fe XXI   | C13147   | 976.560 | 12.696    | 7.05 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.83 | 4.37 | 4.79 | 6.08 | 7.39 | -    | -    | -    | -   | -   | - | - | - |   |
| 4825 | Fe XXIII | BE09015  | 976.950 | 12.691    | 7.18 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.23 | 4.34 | 3.68 | 4.08 | 4.65 | 5.33 | 6.23 | 7.37 | -   | -   | - | - | - |   |
| 3386 | Fe XX    | N09213   | 977.180 | 12.688    | 6.99 | 4.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.29 | 5.78 | 4.96 | 5.90 | 7.61 | -    | -    | -    | -   | -   | - | - | - |   |
| 4824 | Fe XXIII | BE09016  | 977.410 | 12.685    | 7.18 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.57 | 4.68 | 4.02 | 4.42 | 4.99 | 5.67 | 6.57 | 7.71 | -   | -   | - | - | - | - |
| 4539 | Fe XXII  | B10045   | 977.560 | 12.683    | 7.10 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.86 | 3.73 | 3.64 | 4.50 | 5.45 | 6.46 | -    | -    | -   | -   | - | - | - | - |
| 4538 | Fe XXII  | B10046   | 977.640 | 12.682    | 7.10 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.14 | 4.01 | 3.92 | 4.78 | 5.73 | 6.74 | -    | -    | -   | -   | - | - | - | - |
| 2107 | Fe XVII  | NE01039  | 977.640 | 12.682    | 6.73 | 2.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.17 | 3.69 | 3.04 | 2.96 | 3.97 | 6.38 | -    | -    | -    | -   | -   | - | - | - |   |
| 4089 | Fe XXI   | C04040   | 978.180 | 12.675    | 7.04 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.70 | 4.27 | 4.71 | 6.00 | 7.32 | -    | -    | -    | -   | -   | - | - | - |   |
| 4088 | Fe XXI   | C13149   | 978.410 | 12.672    | 7.05 | 2.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.20 | 2.74 | 3.16 | 4.45 | 5.76 | -    | -    | -    | -   | -   | - | - | - | - |
| 4537 | Fe XXII  | B12072   | 978.640 | 12.669    | 7.11 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.94 | 4.80 | 4.70 | 5.55 | 6.50 | 7.51 | -    | -    | -   | -   | - | - | - | - |
| 4536 | Fe XXII  | B07027   | 978.720 | 12.668    | 7.10 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.64 | 4.52 | 4.43 | 5.29 | 6.24 | 7.26 | -    | -    | -   | -   | - | - | - | - |
| 2728 | Fe XIX   | O03130   | 979.340 | 12.660    | 6.92 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.37 | 4.75 | 4.57 | 6.02 | 8.15 | -    | -    | -    | -    | -   | -   | - | - | - |   |
| 4535 | Fe XXII  | B11063   | 979.490 | 12.658    | 7.11 | 4.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.43 | 4.28 | 4.19 | 5.04 | 5.99 | 7.00 | -    | -    | -   | -   | - | - | - | - |
| 3385 | Fe XX    | N07193   | 979.490 | 12.658    | 6.99 | 4.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.30 | 5.81 | 5.00 | 5.94 | 7.65 | -    | -    | -    | -   | -   | - | - | - | - |
| 2727 | Fe XIX   | O05162   | 979.880 | 12.653    | 6.92 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.78 | 5.11 | 4.91 | 6.34 | 8.45 | -    | -    | -    | -   | -   | - | - | - | - |
| 5221 | Ni XIX   | NE4      | 979.960 | 12.652    | 6.67 | 2.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.28 | 2.40 | 2.55 | 3.78 | -    | -    | -    | -    | -   | -   | - | - | - | - |
| 4534 | Fe XXII  | B09045   |         |           |      |       |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |     |     |   |   |   |   |

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| Nr   | ion | Transit. | E(eV)   | Lambda(A) | Tmax   | -Qmax | 4.0  | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |
|------|-----|----------|---------|-----------|--------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 4085 | Fe  | XXI      | C09111  | 980.970   | 12.639 | 7.05  | 4.56 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.07 | 4.61 | 5.04 | 6.33 | 7.64 | -    | -    | -    | -    | -   | -   |     |
| 3383 | Fe  | XX       | N08197  | 981.740   | 12.629 | 6.99  | 3.49 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.80 | 4.30 | 3.49 | 4.43 | 6.14 | -    | -    | -    | -    | -   | -   |     |
| 4532 | Fe  | XXII     | B10049  | 981.980   | 12.626 | 7.10  | 3.48 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.87 | 3.74 | 3.65 | 4.51 | 5.45 | 6.47 | -    | -    | -   | -   |     |
| 4084 | Fe  | XXI      | C07107  | 982.360   | 12.621 | 7.05  | 4.82 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.32 | 4.87 | 5.30 | 6.58 | 7.90 | -    | -    | -    | -   | -   |     |
| 4531 | Fe  | XXII     | B09047  | 982.600   | 12.618 | 7.10  | 3.87 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.26 | 4.13 | 4.04 | 4.90 | 5.84 | 6.86 | -    | -    | -   | -   |     |
| 4083 | Fe  | XXI      | C16214  | 982.830   | 12.615 | 7.05  | 4.25 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.79 | 4.31 | 4.72 | 5.99 | 7.30 | -    | -    | -    | -   | -   |     |
| 4081 | Fe  | XXI      | C05054  | 983.140   | 12.611 | 7.05  | 3.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.82 | 3.38 | 3.82 | 5.11 | 6.42 | -    | -    | -    | -   | -   |     |
| 4082 | Fe  | XXI      | C11120  | 983.140   | 12.611 | 7.05  | 4.00 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.51 | 4.05 | 4.47 | 5.76 | 7.07 | -    | -    | -    | -   | -   |     |
| 3382 | Fe  | XX       | N07194  | 983.220   | 12.610 | 6.99  | 2.91 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.22 | 3.72 | 2.91 | 3.85 | 5.56 | -    | -    | -    | -   | -   |     |
| 3381 | Fe  | XX       | N07195  | 983.460   | 12.607 | 6.99  | 3.55 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.86 | 4.36 | 3.55 | 4.49 | 6.20 | -    | -    | -    | -   | -   |     |
| 4078 | Fe  | XXI      | C07110  | 983.610   | 12.605 | 7.05  | 3.29 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.80 | 3.34 | 3.77 | 5.06 | 6.37 | -    | -    | -    | -   | -   |     |
| 4079 | Fe  | XXI      | C08110  | 983.610   | 12.605 | 7.05  | 4.61 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.12 | 4.66 | 5.09 | 6.38 | 7.69 | -    | -    | -    | -   | -   |     |
| 4080 | Fe  | XXI      | C15170  | 983.610   | 12.605 | 7.05  | 4.79 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.31 | 4.84 | 5.26 | 6.54 | 7.85 | -    | -    | -    | -   | -   |     |
| 4077 | Fe  | XXI      | C05056  | 983.850   | 12.602 | 7.05  | 3.15 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.64 | 3.20 | 3.64 | 4.93 | 6.24 | -    | -    | -    | -   | -   |     |
| 2726 | Fe  | XIX      | O03140  | 983.850   | 12.602 | 6.92  | 4.87 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.81 | 5.18 | 5.01 | 6.45 | 8.58 | -    | -    | -    | -    | -   | -   |     |
| 2724 | Fe  | XIX      | O01121  | 983.920   | 12.601 | 6.91  | 4.49 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.23 | 4.75 | 4.66 | 6.14 | 8.29 | -    | -    | -    | -   | -   |     |
| 3379 | Fe  | XX       | N08199  | 984.000   | 12.600 | 6.99  | 4.46 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.78 | 5.28 | 4.46 | 5.40 | 7.12 | -    | -    | -    | -   | -   |     |
| 3378 | Fe  | XX       | N01073  | 984.000   | 12.600 | 6.98  | 2.31 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.32 | 3.02 | 2.32 | 3.32 | 5.07 | -    | -    | -    | -   | -   |     |
| 3380 | Fe  | XX       | N01072  | 984.000   | 12.600 | 6.98  | 2.42 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.43 | 3.13 | 2.43 | 3.43 | 5.18 | -    | -    | -    | -   | -   |     |
| 3377 | Fe  | XX       | N07197  | 984.550   | 12.593 | 6.99  | 4.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.65 | 5.15 | 4.34 | 5.28 | 6.99 | -    | -    | -    | -   | -   |     |
| 4076 | Fe  | XXI      | C08111  | 984.550   | 12.593 | 7.05  | 4.54 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.05 | 4.59 | 5.02 | 6.31 | 7.62 | -    | -    | -    | -   | -   |     |
| 2722 | Fe  | XIX      | O01123  | 984.630   | 12.592 | 6.91  | 4.54 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.27 | 4.80 | 4.70 | 6.19 | 8.34 | -    | -    | -    | -   | -   |     |
| 4075 | Fe  | XXI      | C11124  | 985.170   | 12.585 | 7.05  | 4.69 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.20 | 4.74 | 5.17 | 6.45 | 7.76 | -    | -    | -    | -   | -   |     |
| 2720 | Fe  | XIX      | O02140  | 985.490   | 12.581 | 6.92  | 4.50 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 4.82 | 4.64 | 6.09 | 8.22 | -    | -    | -    | -   | -   |     |
| 3376 | Fe  | XX       | N01075  | 985.570   | 12.580 | 6.98  | 2.75 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.75 | 3.46 | 2.76 | 3.76 | 5.51 | -    | -    | -    | -   | -   |     |
| 4074 | Fe  | XXI      | C15171  | 985.640   | 12.579 | 7.05  | 4.47 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.99 | 4.52 | 4.94 | 6.22 | 7.53 | -    | -    | -    | -   | -   |     |
| 2719 | Fe  | XIX      | O05171  | 985.800   | 12.577 | 6.92  | 4.28 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.28 | 4.61 | 4.41 | 5.83 | 7.95 | -    | -    | -    | -   | -   |     |
| 4069 | Fe  | XXI      | C05058  | 985.800   | 12.577 | 7.05  | 3.24 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.73 | 3.29 | 3.72 | 5.01 | 6.33 | -    | -    | -    | -   | -   |     |
| 2718 | Fe  | XIX      | O01125  | 985.880   | 12.576 | 6.91  | 4.42 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.16 | 4.68 | 4.58 | 6.07 | 8.22 | -    | -    | -    | -   | -   |     |
| 2717 | Fe  | XIX      | O04155  | 986.510   | 12.568 | 6.92  | 4.58 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.54 | 4.90 | 4.72 | 6.16 | 8.28 | -    | -    | -    | -   | -   |     |
| 4073 | Fe  | XXI      | C03035  | 986.590   | 12.567 | 7.04  | 2.94 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.42 | 2.99 | 3.44 | 4.73 | 6.05 | -    | -    | -    | -   | -   |     |
| 4072 | Fe  | XXI      | C12134  | 986.590   | 12.567 | 7.05  | 4.68 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.19 | 4.73 | 5.16 | 6.44 | 7.75 | -    | -    | -    | -   | -   |     |
| 4071 | Fe  | XXI      | C04044  | 986.590   | 12.567 | 7.04  | 4.22 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.70 | 4.26 | 4.71 | 6.00 | 7.32 | -    | -    | -    | -   | -   |     |
| 3375 | Fe  | XX       | N07199  | 986.740   | 12.565 | 6.99  | 4.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.94 | 5.44 | 4.62 | 5.57 | 7.28 | -    | -    | -    | -   | -   |     |
| 3374 | Fe  | XX       | N03096  | 986.900   | 12.563 | 6.98  | 4.66 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.92 | 5.45 | 4.66 | 5.62 | 7.34 | -    | -    | -    | -   | -   |     |
| 4070 | Fe  | XXI      | C12137  | 987.450   | 12.556 | 7.05  | 4.48 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.99 | 4.53 | 4.96 | 6.24 | 7.55 | -    | -    | -    | -   | -   |     |
| 2716 | Fe  | XIX      | O01126  | 987.920   | 12.550 | 6.91  | 3.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.25 | 3.77 | 3.67 | 5.16 | 7.31 | -    | -    | -    | -   | -   |     |
| 5275 | Ni  | XXI      | O4      | 987.920   | 12.550 | 6.91  | 3.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.40 | 3.75 | 3.68 | 5.32 | -    | -    | -    | -    | -   | -   |     |
| 3373 | Fe  | XX       | N05119  | 988.550   | 12.542 | 6.98  | 4.98 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.26 | 5.79 | 4.99 | 5.94 | 7.66 | -    | -    | -    | -   | -   |     |
| 2715 | Fe  | XIX      | O01128  | 988.870   | 12.538 | 6.91  | 4.43 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.17 | 4.70 | 4.60 | 6.08 | 8.23 | -    | -    | -    | -   | -   |     |
| 4068 | Fe  | XXI      | C14157  | 989.030   | 12.536 | 7.05  | 4.41 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.94 | 4.47 | 4.89 | 6.17 | 7.48 | -    | -    | -    | -   | -   |     |
| 3372 | Fe  | XX       | N03099  | 989.030   | 12.536 | 6.98  | 4.59 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.85 | 5.39 | 4.60 | 5.55 | 7.27 | -    | -    | -    | -   | -   |     |
| 4067 | Fe  | XXI      | C12139  | 989.180   | 12.534 | 7.05  | 4.88 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.39 | 4.93 | 5.36 | 6.64 | 7.95 | -    | -    | -    | -   | -   |     |
| 4530 | Fe  | XXII     | B15107  | 989.340   | 12.532 | 7.11  | 4.60 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.03 | 4.87 | 4.76 | 5.61 | 6.55 | 7.56 | -    | -    | -   | -   |     |
| 2714 | Fe  | XIX      | O04157  | 989.340   | 12.532 | 6.92  | 4.11 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.07 | 4.43 | 4.25 | 5.68 | 7.81 | -    | -    | -    | -   | -   |     |
| 4066 | Fe  | XXI      | C04046  | 989.500   | 12.530 | 7.04  | 4.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.86 | 4.42 | 4.87 | 6.16 | 7.48 | -    | -    | -    | -   | -   |     |
| 2713 | Fe  | XIX      | O06207  | 989.970   | 12.524 | 6.92  | 4.82 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.83 | 5.15 | 4.95 | 6.37 | 8.49 | -    | -    | -    | -   | -   |     |
| 4823 | Fe  | XXIII    | BE08014 | 989.970   | 12.524 | 7.18  | 3.97 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.52 | 4.64 | 3.97 | 4.38 | 4.95 | 5.63 | 6.52 | 7.66 | -   | -   |     |
| 2712 | Fe  | XIX      | O01130  | 990.050   | 12.523 | 6.91  | 3.81 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.55 | 4.07 | 3.97 | 5.46 | 7.61 | -    | -    | -    | -   | -   |     |
| 2106 | Fe  | XVII     | NE01042 | 990.130   | 12.522 | 6.73  | 3.12 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.40 | 3.91 | 3.25 | 3.17 | 4.18 | 6.58 | -    | -    | -   | -   |     |
| 4065 | Fe  | XXI      | C13153  | 990.130   | 12.522 | 7.05  | 4.81 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.33 | 4.86 | 5.28 | 6.56 | 7.87 | -    | -    | -    | -   | -   |     |
| 4529 | Fe  | XXII     | B02016  | 990.760   | 12.514 | 7.10  | 2.84 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.20 | 3.09 | 3.02 | 3.89 | 4.84 | 5.86 | -    | -    | -   | -   |     |
| 4528 | Fe  | XXII     | B05022  | 990.920   | 12.512 | 7.10  | 3.55 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.93 | 3.81 | 3.73 | 4.59 | 5.54 | 6.56 | -    | -    | -   | -   |     |
| 3371 | Fe  | XX       | N04114  | 990.920   | 12.512 | 6.98  | 4.88 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.15 | 5.68 | 4.88 | 5.84 | 7.55 | -    | -    | -    | -   | -   |     |
| 4061 | Fe  | XXI      | C04048  | 991.240   | 12.508 | 7.04  | 4.03 | -   | -   | -   |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |     |     |     |

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| Nr   | ion      | Transit. | E(eV)   | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8 | 9.0 |   |   |   |
|------|----------|----------|---------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|---|---|---|
| 3370 | Fe XX    | N06194   | 991.320 | 12.507    | 6.99 | 3.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.91 | 4.41 | 3.60 | 4.54 | 6.25 | -    | -    | -    | -    | -    | -   | -   |   |   |   |
| 4527 | Fe XXII  | B10054   | 991.320 | 12.507    | 7.10 | 3.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.07 | 3.94 | 3.84 | 4.70 | 5.65 | 6.66 | -    | -    | -    | -   | -   | - |   |   |
| 3369 | Fe XX    | N03101   | 991.480 | 12.505    | 6.98 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.07 | 5.61 | 4.81 | 5.77 | 7.49 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3368 | Fe XX    | N06195   | 991.560 | 12.504    | 6.99 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.15 | 5.65 | 4.84 | 5.78 | 7.49 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3367 | Fe XX    | N02095   | 991.720 | 12.502    | 6.98 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.77 | 5.31 | 4.52 | 5.47 | 7.19 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4063 | Fe XXI   | C04047   | 991.790 | 12.501    | 7.04 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.12 | 4.68 | 5.12 | 6.41 | 7.73 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4060 | Fe XXI   | C03037   | 991.790 | 12.501    | 7.04 | 3.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.01 | 3.57 | 4.01 | 5.31 | 6.63 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4062 | Fe XXI   | C03036   | 991.790 | 12.501    | 7.04 | 2.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.02 | 2.59 | 3.03 | 4.33 | 5.65 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4064 | Fe XXI   | C06072   | 991.790 | 12.501    | 7.05 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.27 | 3.83 | 4.26 | 5.55 | 6.87 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4059 | Fe XXI   | C12141   | 991.950 | 12.499    | 7.05 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.35 | 4.89 | 5.31 | 6.60 | 7.91 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3366 | Fe XX    | N02096   | 991.950 | 12.499    | 6.98 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.11 | 5.64 | 4.85 | 5.81 | 7.53 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3365 | Fe XX    | N06196   | 992.030 | 12.498    | 6.99 | 2.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.31 | 3.81 | 3.00 | 3.94 | 5.65 | -    | -    | -    | -    | -   | -   | - |   |   |
| 2711 | Fe XIX   | O04158   | 992.030 | 12.498    | 6.92 | 5.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.96 | 5.32 | 5.13 | 6.57 | 8.69 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4058 | Fe XXI   | C05060   | 992.190 | 12.496    | 7.05 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.91 | 4.46 | 4.90 | 6.19 | 7.51 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4056 | Fe XXI   | C02035   | 992.270 | 12.495    | 7.04 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.46 | 4.03 | 4.47 | 5.76 | 7.09 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4057 | Fe XXI   | C06073   | 992.270 | 12.495    | 7.05 | 3.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.56 | 3.12 | 3.55 | 4.84 | 6.16 | -    | -    | -    | -   | -   | - | - |   |
| 2710 | Fe XIX   | O04159   | 992.350 | 12.494    | 6.92 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.56 | 3.92 | 3.73 | 5.17 | 7.30 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3364 | Fe XX    | N03103   | 993.150 | 12.484    | 6.98 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.50 | 5.03 | 4.24 | 5.19 | 6.91 | -    | -    | -    | -    | -   | -   | - |   |   |
| 2709 | Fe XIX   | O01135   | 993.150 | 12.484    | 6.91 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.91 | 4.43 | 4.33 | 5.82 | 7.96 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4055 | Fe XXI   | C13157   | 993.220 | 12.483    | 7.05 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.12 | 3.65 | 4.08 | 5.36 | 6.67 | -    | -    | -    | -   | -   | - | - |   |
| 3363 | Fe XX    | N03104   | 993.460 | 12.480    | 6.98 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.00 | 5.54 | 4.74 | 5.70 | 7.42 | -    | -    | -    | -    | -   | -   | - |   |   |
| 2297 | Fe XVII  | F02103   | 993.540 | 12.479    | 6.85 | 4.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.68 | 5.87 | 4.98 | 5.37 | 7.27 | -    | -    | -    | -    | -    | -    | -   | -   | - |   |   |
| 2708 | Fe XIX   | O06209   | 993.540 | 12.479    | 6.92 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.67 | 4.99 | 4.79 | 6.21 | 8.33 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4054 | Fe XXI   | C04051   | 993.620 | 12.478    | 7.04 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.43 | 3.99 | 4.43 | 5.72 | 7.04 | -    | -    | -    | -   | -   | - | - |   |
| 2707 | Fe XIX   | O04160   | 993.700 | 12.477    | 6.92 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.17 | 4.53 | 4.34 | 5.78 | 7.91 | -    | -    | -    | -    | -   | -   | - |   |   |
| 2706 | Fe XIX   | O03153   | 993.780 | 12.476    | 6.92 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.46 | 4.83 | 4.65 | 6.09 | 8.22 | -    | -    | -    | -    | -   | -   | - |   |   |
| 3362 | Fe XX    | N02098   | 993.780 | 12.476    | 6.98 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.66 | 5.20 | 4.41 | 5.36 | 7.08 | -    | -    | -    | -    | -   | -   | - |   |   |
| 4822 | Fe XXIII | BE08015  | 993.860 | 12.475    | 7.18 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.92 | 5.04 | 4.37 | 4.78 | 5.35 | 6.03 | 6.92 | 8.06 | -   | -   | - | - |   |
| 4526 | Fe XXII  | B04019   | 994.020 | 12.473    | 7.10 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.64 | 3.52 | 3.44 | 4.30 | 5.25 | 6.27 | -    | -    | -   | -   | - | - |   |
| 4053 | Fe XXI   | C03040   | 994.020 | 12.473    | 7.04 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.76 | 3.32 | 3.76 | 5.05 | 6.37 | -    | -    | -    | -   | -   | - | - |   |
| 3361 | Fe XX    | N02099   | 994.100 | 12.472    | 6.98 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.72 | 5.26 | 4.46 | 5.42 | 7.14 | -    | -    | -    | -    | -   | -   | - | - |   |
| 4052 | Fe XXI   | C13158   | 994.100 | 12.472    | 7.05 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.08 | 4.61 | 5.03 | 6.31 | 7.62 | -    | -    | -    | -   | -   | - | - |   |
| 4525 | Fe XXII  | B14104   | 994.260 | 12.470    | 7.11 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.77 | 4.61 | 4.50 | 5.35 | 6.30 | 7.30 | -    | -    | -   | -   | - | - |   |
| 4051 | Fe XXI   | C11141   | 994.260 | 12.470    | 7.05 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.35 | 4.89 | 5.31 | 6.60 | 7.91 | -    | -    | -    | -   | -   | - | - |   |
| 4821 | Fe XXIII | BE08016  | 994.340 | 12.469    | 7.18 | 3.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.84 | 3.96 | 3.29 | 3.70 | 4.26 | 4.94 | 5.84 | 6.98 | -   | -   | - | - | - |
| 4050 | Fe XXI   | C06074   | 994.340 | 12.469    | 7.05 | 2.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.44 | 2.99 | 3.43 | 4.72 | 6.03 | -    | -    | -    | -   | -   | - | - |   |
| 4049 | Fe XXI   | C14166   | 994.500 | 12.467    | 7.05 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.47 | 5.00 | 5.42 | 6.70 | 8.01 | -    | -    | -    | -   | -   | - | - |   |
| 2704 | Fe XIX   | O01140   | 994.500 | 12.467    | 6.91 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.06 | 4.58 | 4.48 | 5.96 | 8.11 | -    | -    | -    | -    | -   | -   | - | - |   |
| 3360 | Fe XX    | N05127   | 994.580 | 12.466    | 6.98 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.73 | 5.26 | 4.46 | 5.41 | 7.13 | -    | -    | -    | -    | -   | -   | - | - |   |
| 4048 | Fe XXI   | C14167   | 994.740 | 12.464    | 7.05 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.96 | 4.49 | 4.91 | 6.19 | 7.50 | -    | -    | -    | -   | -   | - | - |   |
| 2705 | Fe XIX   | O01138   | 995.060 | 12.460    | 6.91 | 2.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.67 | 3.20 | 3.10 | 4.58 | 6.73 | -    | -    | -    | -    | -   | -   | - | - |   |
| 4524 | Fe XXII  | B08045   | 995.140 | 12.459    | 7.10 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.26 | 5.13 | 5.04 | 5.90 | 6.85 | 7.86 | -    | -    | -   | -   | - | - |   |
| 4523 | Fe XXII  | B08046   | 995.300 | 12.457    | 7.10 | 3.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.69 | 3.56 | 3.47 | 4.33 | 5.28 | 6.29 | -    | -    | -   | -   | - | - | - |
| 4522 | Fe XXII  | B15111   | 995.460 | 12.455    | 7.11 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.73 | 4.57 | 4.46 | 5.31 | 6.26 | 7.26 | -    | -    | -   | -   | - | - | - |
| 4047 | Fe XXI   | C12144   | 995.620 | 12.453    | 7.05 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.34 | 3.87 | 4.30 | 5.58 | 6.89 | -    | -    | -    | -   | -   | - | - | - |
| 4521 | Fe XXII  | B10055   | 995.780 | 12.451    | 7.10 | 3.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.01 | 3.87 | 3.78 | 4.64 | 5.59 | 6.60 | -    | -    | -   | -   | - | - | - |
| 4820 | Fe XXIII | BE07014  | 996.100 | 12.447    | 7.18 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.44 | 5.55 | 4.89 | 5.29 | 5.86 | 6.54 | 7.43 | 8.58 | -   | -   | - | - | - |
| 4819 | Fe XXIII | BE07013  | 996.100 | 12.447    | 7.18 | 3.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.10 | 4.21 | 3.55 | 3.95 | 4.52 | 5.20 | 6.10 | 7.24 | -   | -   | - | - | - |
| 4046 | Fe XXI   | C12145   | 996.420 | 12.443    | 7.05 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.34 | 3.87 | 4.30 | 5.58 | 6.89 | -    | -    | -    | -   | -   | - | - | - |
| 4520 | Fe XXII  | B12085   | 996.420 | 12.443    | 7.11 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.67 | 4.52 | 4.42 | 5.27 | 6.21 | 7.22 | -    | -    | -   | -   | - | - | - |
| 4519 | Fe XXII  | B14107   | 996.500 | 12.442    | 7.11 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.08 | 4.92 | 4.82 | 5.66 | 6.61 | 7.61 | -    | -    | -   | -   | - | - | - |
| 3359 | Fe XX    | N04119   | 996     |           |      |       |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |     |     |   |   |   |

line list SPEX version 2.0

| Nr   | ion       | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |
|------|-----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 2703 | Fe XIX    | O03155   | 996.980  | 12.436    | 6.92 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.18 | 4.54 | 4.37 | 5.81 | 7.94 | -    | -    | -    | -    | -   | -   | -   |
| 2294 | Fe XVIIII | F02107   | 997.060  | 12.435    | 6.85 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.58 | 5.77 | 4.88 | 5.26 | 7.17 | -    | -    | -    | -    | -    | -    | -   | -   | -   |
| 3355 | Fe XX     | N06202   | 997.220  | 12.433    | 6.99 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.98 | 5.48 | 4.66 | 5.60 | 7.31 | -    | -    | -    | -    | -   | -   | -   |
| 4045 | Fe XXI    | C02037   | 997.460  | 12.430    | 7.04 | 2.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.08 | 2.65 | 3.09 | 4.38 | 5.70 | -    | -    | -    | -   | -   | -   |
| 5220 | Ni XIX    | NE5      | 997.460  | 12.430    | 6.67 | 1.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 2.78 | 1.90 | 2.04 | 3.27 | -    | -    | -    | -    | -    | -   | -   | -   |
| 4518 | Fe XXII   | B08047   | 997.780  | 12.426    | 7.10 | 2.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.27 | 3.13 | 3.04 | 3.90 | 4.85 | 5.86 | -    | -    | -   | -   | -   |
| 4517 | Fe XXII   | B04022   | 997.860  | 12.425    | 7.10 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.57 | 4.45 | 4.37 | 5.23 | 6.18 | 7.19 | -    | -    | -   | -   | -   |
| 4044 | Fe XXI    | C04053   | 997.860  | 12.425    | 7.04 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.20 | 3.76 | 4.20 | 5.49 | 6.81 | -    | -    | -    | -   | -   | -   |
| 4043 | Fe XXI    | C11144   | 997.940  | 12.424    | 7.05 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.68 | 4.22 | 4.65 | 5.93 | 7.24 | -    | -    | -    | -   | -   | -   |
| 3354 | Fe XX     | N02103   | 998.180  | 12.421    | 6.98 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.75 | 5.29 | 4.49 | 5.45 | 7.17 | -    | -    | -    | -    | -   | -   | -   |
| 4516 | Fe XXII   | B09055   | 998.260  | 12.420    | 7.10 | 3.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.72 | 3.58 | 3.49 | 4.35 | 5.29 | 6.30 | -    | -    | -   | -   | -   |
| 4042 | Fe XXI    | C04054   | 998.260  | 12.420    | 7.04 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.72 | 4.28 | 4.72 | 6.01 | 7.33 | -    | -    | -    | -   | -   | -   |
| 4041 | Fe XXI    | C12149   | 998.660  | 12.415    | 7.05 | 3.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.95 | 3.48 | 3.91 | 5.19 | 6.50 | -    | -    | -    | -   | -   | -   |
| 4040 | Fe XXI    | C04055   | 998.830  | 12.413    | 7.04 | 3.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.04 | 3.60 | 4.04 | 5.33 | 6.65 | -    | -    | -    | -   | -   | -   |
| 4039 | Fe XXI    | C04056   | 998.990  | 12.411    | 7.04 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.24 | 4.80 | 5.24 | 6.53 | 7.84 | -    | -    | -    | -   | -   | -   |
| 4515 | Fe XXII   | B07038   | 999.150  | 12.409    | 7.10 | 4.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.75 | 4.62 | 4.53 | 5.39 | 6.34 | 7.35 | -    | -    | -   | -   | -   |
| 4038 | Fe XXI    | C11147   | 999.230  | 12.408    | 7.05 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.38 | 4.92 | 5.34 | 6.63 | 7.94 | -    | -    | -    | -   | -   | -   |
| 4514 | Fe XXII   | B06035   | 999.390  | 12.406    | 7.10 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.99 | 3.86 | 3.77 | 4.63 | 5.58 | 6.59 | -    | -    | -   | -   | -   |
| 3353 | Fe XX     | N02105   | 999.470  | 12.405    | 6.98 | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.65 | 5.18 | 4.39 | 5.34 | 7.06 | -    | -    | -    | -    | -   | -   | -   |
| 3352 | Fe XX     | N03113   | 999.710  | 12.402    | 6.98 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.82 | 5.35 | 4.56 | 5.51 | 7.23 | -    | -    | -    | -    | -   | -   | -   |
| 2702 | Fe XIX    | O02156   | 999.790  | 12.401    | 6.92 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.34 | 4.71 | 4.53 | 5.98 | 8.10 | -    | -    | -    | -   | -   | -   |
| 2701 | Fe XIX    | O03157   | 999.870  | 12.400    | 6.92 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.40 | 4.77 | 4.59 | 6.03 | 8.16 | -    | -    | -    | -   | -   | -   |
| 4037 | Fe XXI    | C02040   | 999.950  | 12.399    | 7.04 | 2.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.50 | 2.07 | 2.51 | 3.80 | 5.12 | -    | -    | -    | -   | -   | -   |
| 4036 | Fe XXI    | C09125   | 999.950  | 12.399    | 7.05 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.21 | 4.75 | 5.18 | 6.46 | 7.77 | -    | -    | -    | -   | -   | -   |
| 3351 | Fe XX     | N02106   | 1000.100 | 12.397    | 6.98 | 3.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.92 | 4.46 | 3.66 | 4.62 | 6.34 | -    | -    | -    | -   | -   | -   |
| 4035 | Fe XXI    | C06078   | 1000.200 | 12.396    | 7.05 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.15 | 4.70 | 5.14 | 6.43 | 7.74 | -    | -    | -    | -   | -   | -   |
| 4034 | Fe XXI    | C06079   | 1000.400 | 12.394    | 7.05 | 3.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.74 | 3.29 | 3.73 | 5.01 | 6.33 | -    | -    | -    | -   | -   | -   |
| 3350 | Fe XX     | N05133   | 1000.400 | 12.394    | 6.98 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.04 | 5.56 | 4.76 | 5.71 | 7.42 | -    | -    | -    | -   | -   | -   |
| 4818 | Fe XXIII  | BE07016  | 1000.400 | 12.393    | 7.18 | 3.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.98 | 4.09 | 3.43 | 3.83 | 4.40 | 5.08 | 5.98 | 7.12 | -   | -   | -   |
| 4817 | Fe XXIII  | BE9      | 1000.500 | 12.392    | 7.17 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.95 | 4.09 | 3.47 | 3.90 | 4.49 | 5.17 | 6.03 | 7.09 | -   | -   | -   |
| 4033 | Fe XXI    | C10147   | 1000.500 | 12.392    | 7.05 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.47 | 5.00 | 5.43 | 6.71 | 8.02 | -    | -    | -    | -   | -   | -   |
| 4816 | Fe XXIII  | BE10025  | 1000.500 | 12.392    | 7.18 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.37 | 4.46 | 3.79 | 4.19 | 4.75 | 5.43 | 6.32 | 7.46 | -   | -   | -   |
| 4513 | Fe XXII   | B03019   | 1000.600 | 12.391    | 7.10 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.30 | 4.19 | 4.10 | 4.97 | 5.92 | 6.93 | -    | -    | -   | -   | -   |
| 3349 | Fe XX     | N05134   | 1000.700 | 12.390    | 6.98 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.16 | 4.68 | 3.88 | 4.83 | 6.55 | -    | -    | -    | -   | -   | -   |
| 4032 | Fe XXI    | C11149   | 1001.000 | 12.386    | 7.05 | 3.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.08 | 3.61 | 4.03 | 5.32 | 6.63 | -    | -    | -    | -   | -   | -   |
| 4512 | Fe XXII   | B05024   | 1001.100 | 12.385    | 7.10 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.27 | 5.15 | 5.06 | 5.92 | 6.88 | 7.89 | -    | -    | -   | -   | -   |
| 4511 | Fe XXII   | B13091   | 1001.200 | 12.384    | 7.11 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.30 | 5.15 | 5.04 | 5.89 | 6.84 | 7.84 | -    | -    | -   | -   | -   |
| 4031 | Fe XXI    | C06081   | 1001.200 | 12.383    | 7.05 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.99 | 3.54 | 3.98 | 5.26 | 6.58 | -    | -    | -    | -   | -   | -   |
| 4030 | Fe XXI    | C08120   | 1001.400 | 12.381    | 7.05 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.49 | 4.03 | 4.46 | 5.74 | 7.05 | -    | -    | -    | -   | -   | -   |
| 4029 | Fe XXI    | C07120   | 1001.400 | 12.381    | 7.05 | 3.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.80 | 3.34 | 3.77 | 5.05 | 6.36 | -    | -    | -    | -   | -   | -   |
| 4510 | Fe XXII   | B06038   | 1001.900 | 12.375    | 7.10 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.84 | 4.71 | 4.62 | 5.48 | 6.43 | 7.44 | -    | -    | -   | -   | -   |
| 4028 | Fe XXI    | C08122   | 1002.300 | 12.370    | 7.05 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.08 | 4.62 | 5.04 | 6.33 | 7.64 | -    | -    | -    | -   | -   | -   |
| 4509 | Fe XXII   | B09058   | 1002.500 | 12.367    | 7.10 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.95 | 4.81 | 4.72 | 5.57 | 6.52 | 7.53 | -    | -    | -   | -   | -   |
| 3348 | Fe XX     | N04127   | 1002.500 | 12.367    | 6.98 | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.55 | 5.07 | 4.27 | 5.22 | 6.94 | -    | -    | -    | -   | -   | -   |
| 2700 | Fe XIX    | O03158   | 1002.500 | 12.367    | 6.92 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.85 | 4.21 | 4.03 | 5.47 | 7.60 | -    | -    | -    | -   | -   | -   |
| 4027 | Fe XXI    | C03044   | 1002.500 | 12.368    | 7.04 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.95 | 4.51 | 4.95 | 6.24 | 7.56 | -    | -    | -    | -   | -   | -   |
| 4508 | Fe XXII   | B14111   | 1002.600 | 12.366    | 7.11 | 3.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.74 | 3.58 | 3.47 | 4.32 | 5.26 | 6.27 | -    | -    | -   | -   | -   |
| 3347 | Fe XX     | N03115   | 1002.600 | 12.366    | 6.98 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.01 | 4.54 | 3.74 | 4.70 | 6.41 | -    | -    | -    | -   | -   | -   |
| 4026 | Fe XXI    | C07123   | 1002.600 | 12.366    | 7.05 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.45 | 4.99 | 5.42 | 6.70 | 8.02 | -    | -    | -    | -   | -   | -   |
| 4507 | Fe XXII   | B07040   | 1003.000 | 12.361    | 7.10 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.73 | 4.60 | 4.51 | 5.37 | 6.32 | 7.33 | -    | -    | -   | -   | -   |
| 3346 | Fe XX     | N03117   | 1003.200 | 12.359    | 6.98 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.35 | 4.88 | 4.08 | 5.03 | 6.75 | -    | -    | -    | -   | -   | -   |
| 4025 | Fe XXI    | C08124   | 1003.400 | 12.356    | 7.05 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.09 | 4.62 | 5.05 | 6.34 | 7.65 | -    | -    | -    | -   | -   | -   |
| 3345 | Fe XX     | N04128   | 1003.600 | 12.354    | 6.98 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.21 | 4.73 | 3.93 | 4.88 | 6.60 | -    |      |      |     |     |     |

Table with columns: Nr, ion, Transit., E(eV), Lambda(A), Tmax, -Qmax, and 32 wavelength channels (4.0 to 9.0). Rows contain spectral data for various ions like Fe XXIII, Fe XX, Fe XXII, Fe XXI, Fe XIX, Fe XXII, Fe XXIII, Fe XX, Ni XXI, Ni XX, etc.





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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |   |   |   |   |   |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|---|---|---|---|---|
| 3317 | Fe XX    | N01113   | 1022.300 | 12.128    | 6.98 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.56 | 5.26 | 4.55 | 5.55 | 7.29 | -    | -    | -    | -    | -    | -   | -   | -   |   |   |   |   |   |
| 4811 | Fe XXIII | BE09024  | 1022.600 | 12.125    | 7.18 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.14 | 5.24 | 4.57 | 4.97 | 5.54 | 6.21 | 7.11 | 8.25 | -   | -   | -   | - |   |   |   |   |
| 2101 | Fe XVII  | NE01071  | 1022.600 | 12.124    | 6.73 | 1.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.76 | 2.25 | 1.57 | 1.48 | 2.48 | 4.88 | -    | -    | -    | -    | -   | -   | -   | - |   |   |   |   |
| 5249 | Ni XX    | F2I      | 1023.000 | 12.120    | 6.82 | 2.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.75 | 3.58 | 2.85 | 3.45 | 5.60 | -    | -    | -    | -    | -    | -   | -   | -   | - |   |   |   |   |
| 3316 | Fe XX    | N01114   | 1023.200 | 12.117    | 6.98 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.87 | 5.57 | 4.86 | 5.86 | 7.61 | -    | -    | -    | -    | -    | -   | -   | -   | - |   |   |   |   |
| 3987 | Fe XXI   | C03060   | 1023.200 | 12.117    | 7.05 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.66 | 4.22 | 4.66 | 5.95 | 7.26 | -    | -    | -    | -   | -   | -   | - | - |   |   |   |
| 3315 | Fe XX    | N05172   | 1023.600 | 12.113    | 6.99 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.20 | 5.72 | 4.91 | 5.85 | 7.57 | -    | -    | -    | -    | -   | -   | -   | - | - |   |   |   |
| 4482 | Fe XXII  | B10069   | 1023.600 | 12.112    | 7.11 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.30 | 4.16 | 4.06 | 4.91 | 5.86 | 6.87 | -    | -    | -   | -   | -   | - | - |   |   |   |
| 4481 | Fe XXII  | B06054   | 1023.900 | 12.109    | 7.10 | 2.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.18 | 3.04 | 2.95 | 3.81 | 4.75 | 5.76 | -    | -    | -   | -   | -   | - | - |   |   |   |
| 4480 | Fe XXII  | B11092   | 1024.200 | 12.105    | 7.11 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.06 | 4.91 | 4.80 | 5.65 | 6.60 | 7.60 | -    | -    | -   | -   | -   | - | - |   |   |   |
| 3986 | Fe XXI   | C01051   | 1024.200 | 12.106    | 7.04 | 3.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.67 | 3.34 | 3.84 | 5.17 | 6.50 | -    | -    | -    | -   | -   | -   | - | - |   |   |   |
| 4479 | Fe XXII  | B12110   | 1024.300 | 12.104    | 7.11 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.18 | 5.02 | 4.91 | 5.76 | 6.70 | 7.71 | -    | -    | -   | -   | -   | - | - |   |   |   |
| 3985 | Fe XXI   | C03061   | 1024.300 | 12.104    | 7.05 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.33 | 4.89 | 5.33 | 6.61 | 7.93 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3313 | Fe XX    | N04163   | 1024.700 | 12.099    | 6.99 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.60 | 5.12 | 4.31 | 5.26 | 6.98 | -    | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3984 | Fe XXI   | C02058   | 1025.200 | 12.094    | 7.05 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.08 | 4.63 | 5.07 | 6.36 | 7.68 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3312 | Fe XX    | N01115   | 1025.300 | 12.093    | 6.98 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.69 | 4.39 | 3.68 | 4.68 | 6.42 | -    | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4478 | Fe XXII  | B10071   | 1025.300 | 12.093    | 7.11 | 3.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.45 | 3.31 | 3.21 | 4.06 | 5.01 | 6.01 | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3983 | Fe XXI   | C02059   | 1025.400 | 12.091    | 7.05 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.23 | 3.79 | 4.23 | 5.52 | 6.84 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4477 | Fe XXII  | B07055   | 1025.600 | 12.089    | 7.10 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.33 | 4.19 | 4.10 | 4.95 | 5.90 | 6.91 | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3311 | Fe XX    | N01117   | 1025.900 | 12.086    | 6.98 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.72 | 5.42 | 4.71 | 5.71 | 7.45 | -    | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4476 | Fe XXII  | B09069   | 1026.100 | 12.083    | 7.11 | 3.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.78 | 3.63 | 3.54 | 4.39 | 5.34 | 6.34 | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4810 | Fe XXIII | BE08022  | 1026.100 | 12.083    | 7.18 | 3.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.20 | 4.30 | 3.63 | 4.03 | 4.60 | 5.28 | 6.17 | 7.31 | -   | -   | -   | - | - | - | - |   |
| 3982 | Fe XXI   | C05094   | 1026.300 | 12.081    | 7.05 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.39 | 4.94 | 5.37 | 6.66 | 7.97 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 2287 | Fe XVIII | F03202   | 1026.400 | 12.079    | 6.86 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.31 | 4.39 | 3.77 | 5.65 | -    | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3310 | Fe XX    | N07227   | 1026.400 | 12.080    | 6.99 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.21 | 5.69 | 4.87 | 5.80 | 7.51 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 3981 | Fe XXI   | C09152   | 1026.700 | 12.076    | 7.05 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.11 | 4.64 | 5.06 | 6.34 | 7.66 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4475 | Fe XXII  | B10073   | 1027.800 | 12.063    | 7.11 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.12 | 4.97 | 4.87 | 5.72 | 6.67 | 7.68 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 5248 | Ni XX    | F2H      | 1028.100 | 12.060    | 6.82 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.37 | 4.20 | 3.47 | 4.07 | 6.21 | -    | -    | -    | -   | -   | -   | - | - | - |   |   |
| 4474 | Fe XXII  | B10074   | 1028.100 | 12.060    | 7.11 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.08 | 3.93 | 3.84 | 4.69 | 5.63 | 6.64 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4809 | Fe XXIII | BE09025  | 1028.300 | 12.057    | 7.18 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.84 | 3.94 | 3.27 | 3.67 | 4.23 | 4.91 | 5.80 | 6.94 | -   | -   | -   | - | - | - | - |   |
| 4473 | Fe XXII  | B07056   | 1028.300 | 12.057    | 7.10 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.63 | 4.49 | 4.40 | 5.25 | 6.20 | 7.21 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 2684 | Fe XIX   | O04192   | 1028.300 | 12.057    | 6.92 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.67 | 5.01 | 4.82 | 6.25 | 8.37 | -    | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4472 | Fe XXII  | B06055   | 1028.400 | 12.056    | 7.10 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.82 | 4.68 | 4.58 | 5.44 | 6.39 | 7.40 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4471 | Fe XXII  | B05035   | 1028.700 | 12.053    | 7.10 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.99 | 4.86 | 4.77 | 5.63 | 6.58 | 7.59 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3980 | Fe XXI   | C01054   | 1028.800 | 12.051    | 7.04 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.57 | 4.24 | 4.74 | 6.06 | 7.40 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3979 | Fe XXI   | C02060   | 1029.000 | 12.049    | 7.05 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.22 | 2.78 | 3.22 | 4.50 | 5.82 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3308 | Fe XX    | N03151   | 1029.200 | 12.047    | 6.99 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.23 | 5.75 | 4.95 | 5.90 | 7.61 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3307 | Fe XX    | N06221   | 1029.300 | 12.046    | 6.99 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.20 | 5.69 | 4.86 | 5.80 | 7.51 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3306 | Fe XX    | N03152   | 1029.400 | 12.044    | 6.99 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.30 | 4.81 | 4.01 | 4.96 | 6.67 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3978 | Fe XXI   | C01056   | 1029.500 | 12.043    | 7.04 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.97 | 4.65 | 5.15 | 6.47 | 7.80 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3304 | Fe XX    | N06223   | 1029.800 | 12.040    | 6.99 | 4.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.10 | 5.59 | 4.76 | 5.70 | 7.41 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 5247 | Ni XX    | F2G      | 1029.800 | 12.040    | 6.82 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.80 | 3.62 | 2.90 | 3.49 | 5.64 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4470 | Fe XXII  | B03030   | 1029.900 | 12.038    | 7.10 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.17 | 5.04 | 4.95 | 5.81 | 6.76 | 7.78 | -    | -   | -   | -   | - | - | - | - | - |
| 4808 | Fe XXIII | BE07021  | 1030.000 | 12.037    | 7.18 | 3.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.53 | 4.64 | 3.97 | 4.37 | 4.93 | 5.61 | 6.51 | 7.65 | -   | -   | -   | - | - | - | - | - |
| 4469 | Fe XXII  | B10075   | 1030.200 | 12.035    | 7.11 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.72 | 4.57 | 4.48 | 5.33 | 6.27 | 7.28 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4468 | Fe XXII  | B09074   | 1030.500 | 12.031    | 7.11 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.26 | 4.11 | 4.01 | 4.87 | 5.81 | 6.82 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4467 | Fe XXII  | B05038   | 1031.100 | 12.024    | 7.10 | 3.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.07 | 3.94 | 3.85 | 4.71 | 5.66 | 6.67 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3977 | Fe XXI   | C03067   | 1031.300 | 12.022    | 7.05 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.92 | 4.47 | 4.91 | 6.20 | 7.51 | -    | -    | -    | -   | -   | -   | - | - | - | - |   |
| 4466 | Fe XXII  | B01018   | 1031.900 | 12.015    | 7.10 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.65 | 4.65 | 4.63 | 5.53 | 6.50 | 7.53 | -    | -    | -   | -   | -   | - | - | - | - |   |
| 3303 | Fe XX    | N03159   | 1032.300 | 12.011    | 6.99 |       |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |   |   |   |   |   |

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line list SPEX version 2.0

| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 3974 | Fe XXI   | C03069   | 1033.800 | 11.993    | 7.05 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.77 | 4.33 | 4.76 | 6.05 | 7.37 | -    | -    | -    | -    | -   | -   |     |
| 3300 | Fe XX    | N06226   | 1034.200 | 11.989    | 6.99 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.55 | 5.03 | 4.21 | 5.14 | 6.85 | -    | -    | -    | -    | -   | -   |     |
| 3972 | Fe XXI   | C07157   | 1034.200 | 11.988    | 7.05 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.11 | 4.64 | 5.06 | 6.34 | 7.65 | -    | -    | -    | -   | -   |     |
| 3971 | Fe XXI   | C03070   | 1034.300 | 11.987    | 7.05 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.69 | 3.25 | 3.68 | 4.97 | 6.29 | -    | -    | -    | -   | -   |     |
| 3299 | Fe XX    | N03163   | 1034.400 | 11.986    | 6.99 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.18 | 4.69 | 3.89 | 4.84 | 6.55 | -    | -    | -    | -    | -   | -   |     |
| 3298 | Fe XX    | N02152   | 1034.400 | 11.986    | 6.99 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.73 | 5.25 | 4.45 | 5.40 | 7.11 | -    | -    | -    | -    | -   | -   |     |
| 3297 | Fe XX    | N02154   | 1034.800 | 11.982    | 6.99 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.73 | 5.25 | 4.45 | 5.40 | 7.11 | -    | -    | -    | -    | -   | -   |     |
| 3296 | Fe XX    | N01127   | 1034.800 | 11.981    | 6.98 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.60 | 5.29 | 4.58 | 5.58 | 7.32 | -    | -    | -    | -    | -   | -   |     |
| 3970 | Fe XXI   | C03071   | 1034.900 | 11.980    | 7.05 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.82 | 4.37 | 4.80 | 6.09 | 7.41 | -    | -    | -    | -   | -   |     |
| 4464 | Fe XXII  | B11104   | 1035.000 | 11.979    | 7.11 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.13 | 4.97 | 4.87 | 5.71 | 6.66 | 7.66 | -    | -    | -   | -   |     |
| 4463 | Fe XXII  | B05040   | 1035.000 | 11.979    | 7.10 | 3.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.39 | 3.26 | 3.17 | 4.02 | 4.97 | 5.98 | -    | -    | -   | -   |     |
| 5246 | Ni XX    | F2F      | 1035.400 | 11.974    | 6.82 | 2.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.68 | 3.50 | 2.78 | 3.37 | 5.52 | -    | -    | -    | -    | -    | -   | -   |     |
| 3973 | Fe XXI   | C01058   | 1035.400 | 11.974    | 7.04 | 2.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.60 | 2.27 | 2.77 | 4.09 | 5.42 | -    | -    | -    | -   | -   |     |
| 3295 | Fe XX    | N08233   | 1035.400 | 11.974    | 6.99 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.08 | 5.56 | 4.73 | 5.66 | 7.37 | -    | -    | -    | -    | -   | -   |     |
| 4462 | Fe XXII  | B04035   | 1035.600 | 11.972    | 7.10 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.82 | 3.69 | 3.61 | 4.46 | 5.41 | 6.43 | -    | -    | -   | -   |     |
| 3294 | Fe XX    | N01128   | 1035.900 | 11.969    | 6.98 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.88 | 4.57 | 3.86 | 4.86 | 6.60 | -    | -    | -    | -    | -   | -   |     |
| 4806 | Fe XXIII | BE09029  | 1036.100 | 11.966    | 7.18 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.90 | 4.99 | 4.32 | 4.71 | 5.28 | 5.96 | 6.85 | 7.99 | -   | -   |     |
| 3293 | Fe XX    | N04182   | 1036.200 | 11.965    | 6.99 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.82 | 5.33 | 4.52 | 5.46 | 7.18 | -    | -    | -    | -    | -   | -   |     |
| 4460 | Fe XXII  | B05041   | 1036.200 | 11.965    | 7.10 | 3.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.20 | 4.07 | 3.97 | 4.83 | 5.78 | 6.79 | -    | -    | -   | -   |     |
| 4461 | Fe XXII  | B12117   | 1036.200 | 11.965    | 7.11 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.74 | 4.58 | 4.47 | 5.32 | 6.26 | 7.26 | -    | -    | -   | -   |     |
| 2681 | Fe XIX   | O06263   | 1036.500 | 11.962    | 6.92 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.87 | 5.17 | 4.96 | 6.37 | 8.48 | -    | -    | -    | -    | -   | -   |     |
| 3292 | Fe XX    | N01129   | 1036.700 | 11.959    | 6.98 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.64 | 5.34 | 4.63 | 5.63 | 7.37 | -    | -    | -    | -    | -   | -   |     |
| 3291 | Fe XX    | N05188   | 1036.800 | 11.958    | 6.99 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.04 | 5.55 | 4.73 | 5.68 | 7.39 | -    | -    | -    | -    | -   | -   |     |
| 3969 | Fe XXI   | C02066   | 1036.800 | 11.958    | 7.05 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.35 | 4.91 | 5.34 | 6.63 | 7.95 | -    | -    | -    | -   | -   |     |
| 3968 | Fe XXI   | C02067   | 1037.100 | 11.955    | 7.05 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.35 | 4.91 | 5.34 | 6.63 | 7.95 | -    | -    | -    | -   | -   |     |
| 3290 | Fe XX    | N02159   | 1037.300 | 11.953    | 6.99 | 3.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.14 | 4.65 | 3.85 | 4.79 | 6.51 | -    | -    | -    | -    | -   | -   |     |
| 3289 | Fe XX    | N01131   | 1037.800 | 11.947    | 6.98 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.50 | 5.19 | 4.49 | 5.48 | 7.22 | -    | -    | -    | -    | -   | -   |     |
| 3967 | Fe XXI   | C01060   | 1037.900 | 11.946    | 7.04 | 2.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.22 | 2.89 | 3.39 | 4.71 | 6.04 | -    | -    | -    | -   | -   |     |
| 4458 | Fe XXII  | B04038   | 1038.100 | 11.943    | 7.10 | 3.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.44 | 3.31 | 3.22 | 4.08 | 5.03 | 6.04 | -    | -    | -   | -   |     |
| 3287 | Fe XX    | N05192   | 1038.600 | 11.938    | 6.99 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.16 | 5.67 | 4.86 | 5.80 | 7.51 | -    | -    | -    | -    | -   | -   |     |
| 4459 | Fe XXII  | B02020   | 1038.900 | 11.934    | 7.10 | 2.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.62 | 2.50 | 2.42 | 3.28 | 4.23 | 5.25 | -    | -    | -   | -   |     |
| 2678 | Fe XIX   | O07281   | 1039.300 | 11.930    | 6.92 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.99 | 5.29 | 5.07 | 6.49 | 8.59 | -    | -    | -    | -    | -   | -   |     |
| 3286 | Fe XX    | N02163   | 1039.400 | 11.928    | 6.99 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.81 | 5.33 | 4.52 | 5.47 | 7.18 | -    | -    | -    | -    | -   | -   |     |
| 4805 | Fe XXIII | BE08024  | 1039.400 | 11.928    | 7.18 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.51 | 4.61 | 3.94 | 4.33 | 4.90 | 5.58 | 6.47 | 7.61 | -   | -   |     |
| 4457 | Fe XXII  | B02021   | 1039.500 | 11.927    | 7.10 | 2.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.83 | 2.71 | 2.63 | 3.49 | 4.44 | 5.46 | -    | -    | -   | -   |     |
| 4456 | Fe XXII  | B14125   | 1039.800 | 11.924    | 7.11 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.25 | 5.08 | 4.97 | 5.81 | 6.75 | 7.76 | -    | -    | -   | -   |     |
| 3966 | Fe XXI   | C02070   | 1040.100 | 11.920    | 7.05 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.38 | 3.93 | 4.37 | 5.66 | 6.98 | -    | -    | -    | -   | -   |     |
| 4804 | Fe XXIII | BE10046  | 1040.400 | 11.917    | 7.18 | 2.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.53 | 3.62 | 2.94 | 3.33 | 3.89 | 4.57 | 5.46 | 6.60 | -   | -   |     |
| 3285 | Fe XX    | N02164   | 1040.600 | 11.915    | 6.99 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.24 | 5.76 | 4.95 | 5.90 | 7.61 | -    | -    | -    | -    | -   | -   |     |
| 4803 | Fe XXIII | BE06022  | 1040.600 | 11.915    | 7.18 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.35 | 4.45 | 3.78 | 4.18 | 4.75 | 5.43 | 6.32 | 7.46 | -   | -   |     |
| 3965 | Fe XXI   | C05114   | 1040.700 | 11.914    | 7.05 | 4.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.63 | 4.17 | 4.60 | 5.88 | 7.20 | -    | -    | -    | -   | -   |     |
| 3284 | Fe XX    | N01134   | 1040.900 | 11.911    | 6.98 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.92 | 5.61 | 4.90 | 5.90 | 7.64 | -    | -    | -    | -    | -   | -   |     |
| 426  | Na III   | F S      | 1041.000 | 11.910    | 5.82 | 13.72 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   |     |
| 4455 | Fe XXII  | B08069   | 1041.300 | 11.907    | 7.11 | 3.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.88 | 3.74 | 3.64 | 4.49 | 5.44 | 6.45 | -    | -    | -   | -   |     |
| 3964 | Fe XXI   | C04094   | 1041.400 | 11.906    | 7.05 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.15 | 3.70 | 4.13 | 5.41 | 6.73 | -    | -    | -    | -   | -   |     |
| 4454 | Fe XXII  | B08070   | 1041.400 | 11.906    | 7.11 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.10 | 4.96 | 4.86 | 5.71 | 6.66 | 7.67 | -    | -    | -   | -   |     |
| 2285 | Fe XVIII | F02114   | 1042.100 | 11.898    | 6.85 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.40 | 5.56 | 4.64 | 5.02 | 6.91 | -    | -    | -    | -    | -   | -   |     |
| 4453 | Fe XXII  | B03035   | 1042.200 | 11.896    | 7.10 | 3.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.82 | 3.69 | 3.60 | 4.46 | 5.41 | 6.42 | -    | -    | -   | -   |     |
| 3963 | Fe XXI   | C04095   | 1042.400 | 11.894    | 7.05 | 4.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.43 | 4.98 | 5.41 | 6.69 | 8.01 | -    | -    | -    | -   | -   |     |
| 4802 | Fe XXIII | BE09033  | 1042.900 | 11.888    | 7.18 | 4.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.38 | 5.47 | 4.80 | 5.19 | 5.76 | 6.43 | 7.32 | 8.46 | -   | -   |     |
| 4452 | Fe XXII  | B04041   | 1043.200 | 11.885    | 7.10 | 2.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.09 | 2.96 | 2.87 | 3.73 | 4.68 | 5.69 | -    | -    | -   | -   |     |
| 3962 | Fe XXI   | C05116   | 1043.800 | 11.878    | 7.05 | 3.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.06 | 3.60 | 4.03 | 5.31 | 6.63 | -    | -    | -    | -   | -   |     |
| 4451 | Fe XXII  | B05049   | 1043.800 | 11.878    | 7.10 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.34 | 4.20 | 4.11 | 4.97 | 5.92 | 6.93 | -    | -    | -   | -   |     |
| 4450 | Fe XXII  | B04042   | 1044.400 | 11.871    | 7.10 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.10 | 3.97 | 3.88 | 4.74 | 5.69 | 6.70 | -    |      |     |     |     |

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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 4449 | Fe XXII  | B04043   | 1044.900 | 11.866    | 7.10 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.25 | 5.12 | 5.02 | 5.88 | 6.83 | 7.84 | -    | -    | -   | -   | -   |
| 2284 | Fe XVIII | F01110   | 1045.000 | 11.864    | 6.84 | 3.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.06 | 4.49 | 3.72 | 4.17 | 6.11 | -    | -    | -    | -    | -   | -   | -   |
| 5245 | Ni XX    | F2E      | 1045.000 | 11.864    | 6.82 | 2.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.52 | 3.34 | 2.61 | 3.20 | 5.35 | -    | -    | -    | -    | -   | -   | -   |
| 4801 | Fe XXIII | BE05017  | 1045.100 | 11.863    | 7.18 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.51 | 5.62 | 4.96 | 5.36 | 5.93 | 6.60 | 7.50 | 8.64 | -   | -   | -   |
| 4800 | Fe XXIII | BE08025  | 1045.200 | 11.862    | 7.18 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.22 | 5.32 | 4.65 | 5.05 | 5.61 | 6.29 | 7.18 | 8.32 | -   | -   | -   |
| 4448 | Fe XXII  | B08073   | 1045.400 | 11.860    | 7.11 | 4.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.56 | 4.42 | 4.32 | 5.17 | 6.12 | 7.13 | -    | -    | -   | -   | -   |
| 4799 | Fe XXIII | BE07024  | 1045.600 | 11.858    | 7.18 | 4.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.76 | 4.86 | 4.18 | 4.58 | 5.15 | 5.82 | 6.72 | 7.86 | -   | -   | -   |
| 4447 | Fe XXII  | B08074   | 1045.800 | 11.856    | 7.11 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.82 | 4.67 | 4.57 | 5.43 | 6.37 | 7.38 | -    | -    | -   | -   | -   |
| 3283 | Fe XX    | N03182   | 1045.800 | 11.855    | 6.99 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.82 | 5.33 | 4.52 | 5.46 | 7.18 | -    | -    | -    | -    | -   | -   | -   |
| 4798 | Fe XXIII | BE05018  | 1045.800 | 11.856    | 7.18 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.57 | 5.68 | 5.01 | 5.41 | 5.98 | 6.66 | 7.56 | 8.70 | -   | -   | -   |
| 4797 | Fe XXIII | BE04011  | 1045.800 | 11.855    | 7.18 | 3.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.61 | 3.73 | 3.06 | 3.45 | 4.00 | 4.65 | 5.51 | 6.59 | -   | -   | -   |
| 4446 | Fe XXII  | B04046   | 1046.500 | 11.848    | 7.10 | 4.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.52 | 4.38 | 4.29 | 5.15 | 6.10 | 7.11 | -    | -    | -   | -   | -   |
| 3960 | Fe XXI   | C04103   | 1046.600 | 11.846    | 7.05 | 4.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.74 | 4.29 | 4.72 | 6.00 | 7.32 | -    | -    | -    | -   | -   | -   |
| 4445 | Fe XXII  | B05050   | 1047.200 | 11.840    | 7.10 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.47 | 4.33 | 4.24 | 5.10 | 6.05 | 7.06 | -    | -    | -   | -   | -   |
| 428  | Na IV    | O S      | 1048.000 | 11.830    | 5.85 | 11.98 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -   | -   | -   |
| 4444 | Fe XXII  | B05051   | 1048.400 | 11.826    | 7.10 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.55 | 3.41 | 3.32 | 4.18 | 5.12 | 6.14 | -    | -    | -   | -   | -   |
| 5244 | Ni XX    | F2D      | 1048.500 | 11.825    | 6.82 | 2.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.12 | 2.94 | 2.21 | 2.80 | 4.95 | -    | -    | -    | -   | -   | -   |
| 4443 | Fe XXII  | B04047   | 1048.900 | 11.820    | 7.10 | 3.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.96 | 3.83 | 3.74 | 4.60 | 5.55 | 6.56 | -    | -    | -   | -   | -   |
| 3959 | Fe XXI   | C01070   | 1049.000 | 11.819    | 7.04 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.30 | 3.97 | 4.47 | 5.79 | 7.12 | -    | -    | -    | -   | -   | -   |
| 3958 | Fe XXI   | C04108   | 1049.100 | 11.818    | 7.05 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.52 | 4.06 | 4.49 | 5.78 | 7.09 | -    | -    | -    | -   | -   | -   |
| 4442 | Fe XXII  | B05052   | 1049.100 | 11.818    | 7.10 | 4.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.88 | 4.74 | 4.65 | 5.51 | 6.46 | 7.47 | -    | -    | -   | -   | -   |
| 4441 | Fe XXII  | B10089   | 1049.500 | 11.814    | 7.11 | 4.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.18 | 5.03 | 4.93 | 5.78 | 6.72 | 7.73 | -    | -    | -   | -   | -   |
| 2676 | Fe XIX   | O01192   | 1049.500 | 11.814    | 6.91 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.93 | 4.44 | 4.33 | 5.81 | 7.95 | -    | -    | -    | -   | -   | -   |
| 4440 | Fe XXII  | B04049   | 1050.700 | 11.800    | 7.10 | 2.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.94 | 2.81 | 2.72 | 3.58 | 4.52 | 5.54 | -    | -    | -   | -   | -   |
| 3281 | Fe XX    | N02182   | 1050.900 | 11.798    | 6.99 | 4.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.26 | 5.77 | 4.96 | 5.90 | 7.62 | -    | -    | -    | -   | -   | -   |
| 4439 | Fe XXII  | B03042   | 1051.100 | 11.796    | 7.10 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.59 | 3.46 | 3.37 | 4.23 | 5.18 | 6.19 | -    | -    | -   | -   | -   |
| 4796 | Fe XXIII | BE07025  | 1051.400 | 11.792    | 7.18 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.16 | 5.26 | 4.59 | 4.99 | 5.55 | 6.23 | 7.12 | 8.26 | -   | -   | -   |
| 4438 | Fe XXII  | B03043   | 1051.500 | 11.791    | 7.10 | 3.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.92 | 3.79 | 3.70 | 4.56 | 5.51 | 6.52 | -    | -    | -   | -   | -   |
| 5243 | Ni XX    | F2C      | 1051.600 | 11.790    | 6.82 | 3.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.35 | 4.17 | 3.44 | 4.03 | 6.17 | -    | -    | -    | -   | -   | -   |
| 3280 | Fe XX    | N01152   | 1051.900 | 11.787    | 6.98 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.30 | 3.99 | 3.27 | 4.27 | 6.01 | -    | -    | -    | -   | -   | -   |
| 2281 | Fe XVIII | F01112   | 1052.000 | 11.786    | 6.84 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.98 | 5.40 | 4.63 | 5.08 | 7.02 | -    | -    | -    | -   | -   | -   |
| 4437 | Fe XXII  | B07066   | 1052.000 | 11.786    | 7.11 | 3.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.89 | 3.74 | 3.65 | 4.50 | 5.45 | 6.45 | -    | -   | -   | -   |
| 3279 | Fe XX    | N01154   | 1052.300 | 11.782    | 6.98 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.01 | 4.71 | 3.99 | 4.99 | 6.73 | -    | -    | -    | -   | -   | -   |
| 4434 | Fe XXII  | B03045   | 1052.900 | 11.775    | 7.10 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.15 | 4.02 | 3.93 | 4.79 | 5.74 | 6.75 | -    | -    | -   | -   | -   |
| 4433 | Fe XXII  | B10090   | 1053.000 | 11.774    | 7.11 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.01 | 4.86 | 4.76 | 5.61 | 6.55 | 7.56 | -    | -    | -   | -   | -   |
| 4795 | Fe XXIII | BE08029  | 1053.000 | 11.774    | 7.18 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.59 | 4.68 | 4.01 | 4.41 | 4.97 | 5.65 | 6.54 | 7.68 | -   | -   | -   |
| 4432 | Fe XXII  | B05054   | 1053.100 | 11.773    | 7.10 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.34 | 4.20 | 4.11 | 4.96 | 5.91 | 6.92 | -    | -    | -   | -   | -   |
| 4431 | Fe XXII  | B03046   | 1053.100 | 11.773    | 7.10 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.22 | 4.09 | 4.00 | 4.86 | 5.81 | 6.82 | -    | -    | -   | -   | -   |
| 4436 | Fe XXII  | B07067   | 1053.400 | 11.770    | 7.11 | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.70 | 4.55 | 4.45 | 5.31 | 6.25 | 7.26 | -    | -    | -   | -   | -   |
| 4435 | Fe XXII  | B01020   | 1053.400 | 11.770    | 7.10 | 1.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.64 | 1.64 | 1.62 | 2.52 | 3.49 | 4.51 | -    | -    | -   | -   | -   |
| 5242 | Ni XX    | F2B      | 1053.400 | 11.770    | 6.82 | 3.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.35 | 4.17 | 3.44 | 4.03 | 6.17 | -    | -    | -    | -   | -   | -   |
| 2282 | Fe XVIII | F02122   | 1053.400 | 11.770    | 6.86 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.25 | 5.41 | 4.49 | 4.86 | 6.75 | -    | -    | -    | -   | -   | -   |
| 2280 | Fe XVIII | F01113   | 1053.700 | 11.767    | 6.84 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.78 | 5.20 | 4.43 | 4.88 | 6.81 | -    | -    | -    | -   | -   | -   |
| 4794 | Fe XXIII | BE09039  | 1054.100 | 11.762    | 7.18 | 4.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.58 | 5.67 | 5.00 | 5.39 | 5.95 | 6.63 | 7.52 | 8.66 | -   | -   | -   |
| 3278 | Fe XX    | N01159   | 1054.300 | 11.760    | 6.98 | 2.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.82 | 3.51 | 2.79 | 3.79 | 5.53 | -    | -    | -    | -   | -   | -   |
| 2279 | Fe XVIII | F01114   | 1054.600 | 11.756    | 6.84 | 4.57  | -   |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |     |     |     |





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| Nr   | ion | Transit. | E(eV)   | Lambda(A) | Tmax   | -Qmax | 4.0  | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0 |   |   |   |   |   |
|------|-----|----------|---------|-----------|--------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|---|---|---|---|---|
| 4766 | Fe  | XXIII    | BE05027 | 1085.900  | 11.418 | 7.18  | 4.64 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.22 | 5.32 | 4.65 | 5.04 | 5.61 | 6.29 | 7.18 | 8.32 | -    | -    | -   | - |   |   |   |   |
| 4770 | Fe  | XXIII    | BE04019 | 1086.300  | 11.413 | 7.18  | 2.53 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.09 | 3.20 | 2.54 | 2.94 | 3.50 | 4.18 | 5.08 | 6.22 | -    | -    | -   | - |   |   |   |   |
| 3925 | Fe  | XXI      | C01114  | 1086.300  | 11.413 | 7.04  | 4.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.70 | 4.36 | 4.86 | 6.18 | 7.51 | -    | -    | -    | -    | -    | -   |   |   |   |   |   |
| 4403 | Fe  | XXII     | B02044  | 1086.900  | 11.407 | 7.10  | 3.19 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.59 | 3.45 | 3.36 | 4.22 | 5.17 | 6.18 | -    | -    | -    | -    | -   | - |   |   |   |   |
| 4404 | Fe  | XXII     | B01032  | 1087.600  | 11.400 | 7.10  | 2.17 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.40 | 2.39 | 2.37 | 3.27 | 4.24 | 5.26 | -    | -    | -    | -    | -   | - |   |   |   |   |
| 3924 | Fe  | XXI      | C03130  | 1088.200  | 11.394 | 7.05  | 4.79 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.31 | 4.84 | 5.27 | 6.55 | 7.87 | -    | -    | -    | -    | -    | -   | - |   |   |   |   |
| 2670 | Fe  | XIX      | O07344  | 1088.400  | 11.391 | 6.93  | 3.90 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.97 | 4.25 | 4.01 | 5.42 | 7.53 | -    | -    | -    | -    | -    | -    | -   | - |   |   |   |   |
| 4765 | Fe  | XXIII    | BE25172 | 1088.600  | 11.389 | 7.20  | 4.57 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.43 | 4.57 | 4.84 | 5.33 | 5.96 | 6.82 | 7.93 | -    | -    | -   | - | - |   |   |   |
| 3923 | Fe  | XXI      | C01116  | 1089.500  | 11.380 | 7.04  | 3.09 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.46 | 3.12 | 3.62 | 4.94 | 6.27 | -    | -    | -    | -    | -    | -   | - | - |   |   |   |
| 4402 | Fe  | XXII     | B01034  | 1089.600  | 11.379 | 7.10  | 3.47 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.70 | 3.69 | 3.67 | 4.57 | 5.53 | 6.55 | -    | -    | -    | -    | -   | - | - |   |   |   |
| 4764 | Fe  | XXIII    | BE45197 | 1090.500  | 11.370 | 7.21  | 3.87 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.75 | 3.88 | 4.15 | 4.63 | 5.25 | 6.11 | 7.22 | -    | -    | -   | - | - | - |   |   |
| 4763 | Fe  | XXIII    | BE04020 | 1090.900  | 11.365 | 7.19  | 4.24 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.90 | 4.96 | 4.24 | 4.58 | 5.06 | 5.65 | 6.42 | 7.42 | -    | -    | -   | - | - | - |   |   |
| 4762 | Fe  | XXIII    | BE07046 | 1091.300  | 11.361 | 7.18  | 4.75 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.35 | 5.43 | 4.75 | 5.15 | 5.71 | 6.38 | 7.27 | 8.41 | -    | -    | -   | - | - | - |   |   |
| 447  | Na  | VIII     | BE S2   | 1091.400  | 11.360 | 6.50  | 6.21 | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.34 | 6.88 | 6.40 | 6.24 | 6.27 | 6.83 | 7.94 | 9.18 | -    | -    | -    | -    | -    | -    | -    | -   | - | - | - |   |   |
| 4401 | Fe  | XXII     | B01037  | 1091.900  | 11.355 | 7.10  | 3.61 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.84 | 3.83 | 3.81 | 4.70 | 5.67 | 6.69 | -    | -    | -    | -    | -   | - | - | - |   |   |
| 4761 | Fe  | XXIII    | BE25174 | 1092.300  | 11.351 | 7.20  | 4.77 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.64 | 4.77 | 5.05 | 5.54 | 6.17 | 7.02 | 8.14 | -    | -    | -   | - | - | - |   |   |
| 3920 | Fe  | XXI      | C02128  | 1092.900  | 11.344 | 7.05  | 4.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.13 | 4.67 | 5.09 | 6.38 | 7.69 | -    | -    | -    | -    | -    | -   | - | - | - |   |   |
| 4760 | Fe  | XXIII    | BE03017 | 1093.100  | 11.342 | 7.18  | 3.16 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.74 | 3.85 | 3.17 | 3.56 | 4.11 | 4.76 | 5.61 | 6.70 | -    | -    | -   | - | - | - | - |   |
| 3919 | Fe  | XXI      | C04150  | 1093.500  | 11.338 | 7.05  | 4.87 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.39 | 4.93 | 5.35 | 6.63 | 7.94 | -    | -    | -    | -    | -    | -   | - | - | - |   |   |
| 4759 | Fe  | XXIII    | BE03018 | 1093.700  | 11.336 | 7.18  | 2.75 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.33 | 3.43 | 2.75 | 3.14 | 3.68 | 4.33 | 5.18 | 6.25 | -    | -    | -   | - | - | - | - |   |
| 2669 | Fe  | XIX      | O07345  | 1094.200  | 11.331 | 6.93  | 4.42 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.50 | 4.78 | 4.54 | 5.95 | 8.05 | -    | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 3270 | Fe  | XX       | N10289  | 1094.600  | 11.327 | 6.99  | 4.68 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.09 | 5.53 | 4.68 | 5.59 | 7.29 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2248 | Fe  | XVIII    | F01177  | 1094.700  | 11.326 | 6.84  | 3.53 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.95 | 4.35 | 3.57 | 4.01 | 5.94 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2247 | Fe  | XVIII    | F01176  | 1094.700  | 11.326 | 6.84  | 2.68 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.10 | 3.50 | 2.72 | 3.16 | 5.09 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2246 | Fe  | XVIII    | F01178  | 1094.700  | 11.326 | 6.84  | 2.44 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.86 | 3.26 | 2.48 | 2.92 | 4.85 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2245 | Fe  | XVIII    | F01180  | 1094.700  | 11.326 | 6.84  | 2.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.75 | 3.15 | 2.37 | 2.81 | 4.74 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2244 | Fe  | XVIII    | F01181  | 1095.600  | 11.317 | 6.84  | 3.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.93 | 4.33 | 3.54 | 3.99 | 5.91 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2243 | Fe  | XVIII    | F01182  | 1095.900  | 11.313 | 6.84  | 4.01 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.43 | 4.83 | 4.04 | 4.49 | 6.41 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 5273 | Ni  | XXI      | O1,2    | 1096.100  | 11.311 | 6.91  | 2.31 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.23 | 2.56 | 2.47 | 4.10 | -    | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2668 | Fe  | XIX      | O06344  | 1096.100  | 11.311 | 6.93  | 3.22 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.30 | 3.58 | 3.34 | 4.75 | 6.85 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 2078 | Fe  | XVII     | NE01085 | 1096.800  | 11.304 | 6.74  | 3.58 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.03 | 4.45 | 3.74 | 3.63 | 4.61 | 7.00 | -    | -    | -    | -    | -    | -   | - | - | - | - |   |
| 4758 | Fe  | XXIII    | BE02017 | 1097.100  | 11.301 | 7.18  | 3.00 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.58 | 3.68 | 3.01 | 3.39 | 3.94 | 4.60 | 5.45 | 6.53 | -    | -    | -   | - | - | - | - | - |
| 4757 | Fe  | XXIII    | BE05030 | 1097.200  | 11.300 | 7.18  | 4.56 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.14 | 5.24 | 4.56 | 4.96 | 5.52 | 6.20 | 7.09 | 8.23 | -    | -    | -   | - | - | - | - | - |
| 2242 | Fe  | XVIII    | F03263  | 1097.900  | 11.293 | 6.86  | 4.24 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.27 | 5.30 | 4.31 | 4.64 | 6.50 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4756 | Fe  | XXIII    | BE24174 | 1098.100  | 11.291 | 7.20  | 4.64 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.50 | 4.64 | 4.92 | 5.41 | 6.03 | 6.89 | 8.01 | -    | -    | -   | - | - | - | - | - |
| 2241 | Fe  | XVIII    | F03264  | 1098.200  | 11.290 | 6.86  | 4.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.41 | 5.45 | 4.45 | 4.78 | 6.64 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4755 | Fe  | XXIII    | BE6C    | 1098.200  | 11.290 | 7.20  | 3.25 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.01 | 4.04 | 3.25 | 3.49 | 3.90 | 4.41 | 5.13 | 6.07 | 7.17 | -    | -   | - | - | - | - | - |
| 2240 | Fe  | XVIII    | F03265  | 1098.500  | 11.287 | 6.86  | 4.42 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.45 | 5.49 | 4.49 | 4.82 | 6.68 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 2077 | Fe  | XVII     | NE01087 | 1098.700  | 11.285 | 6.74  | 4.12 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.57 | 5.00 | 4.28 | 4.17 | 5.15 | 7.54 | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4754 | Fe  | XXIII    | BE24175 | 1098.900  | 11.283 | 7.20  | 3.86 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.72 | 3.86 | 4.14 | 4.63 | 5.25 | 6.11 | 7.23 | -    | -    | -   | - | - | - | - | - |
| 4400 | Fe  | XXII     | B04075  | 1099.000  | 11.282 | 7.11  | 4.69 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.10 | 4.95 | 4.85 | 5.70 | 6.65 | 7.66 | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4399 | Fe  | XXII     | B06105  | 1099.100  | 11.281 | 7.11  | 4.67 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.10 | 4.94 | 4.83 | 5.68 | 6.63 | 7.63 | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4753 | Fe  | XXIII    | BE96268 | 1099.200  | 11.280 | 7.22  | 4.56 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.50 | 4.56 | 4.79 | 5.25 | 5.86 | 6.70 | 7.81 | -    | -    | -   | - | - | - | - | - |
| 3269 | Fe  | XX       | N01209  | 1099.200  | 11.279 | 6.98  | 4.50 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.54 | 5.22 | 4.51 | 5.50 | 7.23 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4752 | Fe  | XXIII    | BE06046 | 1099.600  | 11.275 | 7.18  | 4.41 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.01 | 5.09 | 4.41 | 4.81 | 5.37 | 6.04 | 6.93 | 8.07 | -    | -    | -   | - | - | - | - | - |
| 2239 | Fe  | XVIII    | F02196  | 1099.900  | 11.272 | 6.86  | 4.03 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.92 | 5.03 | 4.09 | 4.45 | 6.34 | -    | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 2666 | Fe  | XIX      | O07352  | 1099.900  | 11.272 | 6.93  | 4.04 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.13 | 4.40 | 4.16 | 5.56 | 7.67 | -    | -    | -    | -    | -    | -   | - | - | - | - | - |
| 4912 | Fe  | XXIV     | LI02004 | 1100.300  | 11.268 | 7.29  | 2.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.76 | 2.57 | 2.55 | 2.77 | 3.11 | 3.67 | 4.46 | 5.41 | 6.46 | -   | - | - | - | - | - |
| 4751 | Fe  | XXIII    | BE94272 | 1100.600  | 11.2   |       |      |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |   |   |   |   |   |





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| Nr   | ion       | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |   |   |
|------|-----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|
| 459  | Na X      | HE5      | 1118.600 | 11.084    | 6.69 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.69 | 5.61 | 4.40 | 3.78 | 3.81 | 4.39 | 5.08 | 5.71 | 6.28 | 6.80 | 7.29 | -    | -    | -    | -    | -    |   |   |
| 2235 | Fe XVIIII | F01198   | 1118.700 | 11.083    | 6.84 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.72 | 5.11 | 4.32 | 4.76 | 6.68 | -    | -    | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2653 | Fe XIX    | O05272   | 1119.000 | 11.080    | 6.93 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.69 | 4.96 | 4.72 | 6.12 | 8.22 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 4387 | Fe XXII   | B02063   | 1120.000 | 11.070    | 7.11 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.98 | 4.84 | 4.75 | 5.60 | 6.55 | 7.56 | -    | -    | -    | -    | -    |   |   |
| 2652 | Fe XIX    | O07385   | 1120.200 | 11.068    | 6.93 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.62 | 4.88 | 4.64 | 6.04 | 8.14 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2651 | Fe XIX    | O07388   | 1120.500 | 11.065    | 6.93 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.30 | 4.56 | 4.32 | 5.72 | 7.82 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2650 | Fe XIX    | O07391   | 1120.900 | 11.061    | 6.93 | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.49 | 4.75 | 4.51 | 5.91 | 8.01 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2649 | Fe XIX    | O03223   | 1121.700 | 11.053    | 6.92 | 4.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.74 | 5.05 | 4.84 | 6.26 | 8.37 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2072 | Fe XVII   | NE01129  | 1122.900 | 11.041    | 6.74 | 3.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.97 | 4.37 | 3.65 | 3.52 | 4.50 | 6.89 | -    | -    | -    | -    | -    | -    |   |   |
| 2648 | Fe XIX    | O06372   | 1123.400 | 11.037    | 6.93 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.29 | 4.56 | 4.32 | 5.72 | 7.82 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2647 | Fe XIX    | O06373   | 1123.500 | 11.036    | 6.93 | 3.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.50 | 3.76 | 3.52 | 4.92 | 7.02 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 4909 | Fe XXIV   | LI02007  | 1123.700 | 11.034    | 7.29 | 2.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.39 | 2.19 | 2.17 | 2.37 | 2.71 | 3.26 | 4.04 | 4.96 | 5.96 | -    | - |   |
| 2646 | Fe XIX    | O07396   | 1123.700 | 11.034    | 6.93 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.55 | 4.81 | 4.56 | 5.96 | 8.06 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2645 | Fe XIX    | O06374   | 1124.000 | 11.031    | 6.93 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.77 | 4.03 | 3.79 | 5.19 | 7.29 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2644 | Fe XIX    | O04243   | 1124.000 | 11.031    | 6.93 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.46 | 4.76 | 4.54 | 5.95 | 8.06 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 4386 | Fe XXII   | B01057   | 1124.300 | 11.028    | 7.10 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.12 | 4.11 | 4.08 | 4.97 | 5.94 | 6.96 | -    | -    | -    | -    | -    | - |   |
| 2071 | Fe XVII   | NE01131  | 1124.600 | 11.025    | 6.74 | 2.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.11 | 3.51 | 2.78 | 2.66 | 3.64 | 6.03 | -    | -    | -    | -    | -    | -    | - |   |
| 4725 | Fe XXIII  | BE01014  | 1125.100 | 11.020    | 7.18 | 2.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.60 | 2.71 | 2.04 | 2.44 | 3.01 | 3.69 | 4.57 | 5.70 | -    | -    | -    | - |   |
| 450  | Na IX     | LI S3    | 1125.400 | 11.017    | 6.60 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.86 | 5.24 | 4.40 | 4.10 | 4.45 | 5.35 | 6.36 | 7.31 | -    | -    | -    | -    | - |   |
| 4724 | Fe XXIII  | BE03023  | 1125.600 | 11.015    | 7.18 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.91 | 5.01 | 4.34 | 4.74 | 5.30 | 5.98 | 6.87 | 8.01 | -    | -    | -    | - |   |
| 449  | Na IX     | LI S4    | 1126.800 | 11.003    | 6.62 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.21 | 5.42 | 4.47 | 4.11 | 4.41 | 5.28 | 6.27 | 7.21 | 8.08 | -    | -    | -    | - |   |
| 458  | Na X      | HE4      | 1126.900 | 11.002    | 6.71 | 3.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.08 | 3.80 | 3.11 | 3.09 | 3.63 | 4.31 | 4.93 | 5.50 | 6.03 | 6.52 | 6.97 | - | - |
| 2643 | Fe XIX    | O07401   | 1127.100 | 11.000    | 6.93 | 4.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.12 | 4.38 | 4.13 | 5.53 | 7.63 | -    | -    | -    | -    | -    | -    | - |   |
| 403  | Ne IX     | HE2      | 1127.100 | 11.000    | 6.60 | 2.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.78 | 4.04 | 2.98 | 2.61 | 2.95 | 3.60 | 4.25 | 4.83 | 5.37 | 5.86 | 6.33 | -    | - |   |
| 2642 | Fe XIX    | O07403   | 1127.500 | 10.996    | 6.93 | 4.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.12 | 4.38 | 4.13 | 5.53 | 7.63 | -    | -    | -    | -    | -    | -    | - |   |
| 2641 | Fe XIX    | O06388   | 1128.200 | 10.990    | 6.93 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.59 | 4.86 | 4.61 | 6.01 | 8.11 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2639 | Fe XIX    | O06390   | 1128.600 | 10.986    | 6.93 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.13 | 4.40 | 4.15 | 5.55 | 7.65 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 2640 | Fe XIX    | O06391   | 1128.600 | 10.986    | 6.93 | 4.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.18 | 4.45 | 4.20 | 5.60 | 7.70 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 4385 | Fe XXII   | B01061   | 1128.700 | 10.985    | 7.10 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.15 | 4.13 | 4.11 | 5.00 | 5.97 | 6.99 | -    | -    | -    | -    | -    | - |   |
| 4723 | Fe XXIII  | BE01015  | 1129.100 | 10.981    | 7.18 | 1.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.41 | 2.52 | 1.85 | 2.26 | 2.82 | 3.50 | 4.39 | 5.52 | -    | -    | -    | - |   |
| 2638 | Fe XIX    | O06393   | 1129.500 | 10.977    | 6.93 | 4.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.97 | 5.23 | 4.98 | 6.38 | 8.48 | -    | -    | -    | -    | -    | -    | -    |   |   |
| 4722 | Fe XXIII  | BE02023  | 1129.600 | 10.976    | 7.18 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.20 | 5.30 | 4.63 | 5.03 | 5.59 | 6.27 | 7.16 | 8.30 | -    | -    | -    | - |   |
| 4721 | Fe XXIII  | BE75305  | 1131.700 | 10.956    | 7.22 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.54 | 4.60 | 4.83 | 5.28 | 5.89 | 6.73 | 7.84 | -    | -    | -    | - |   |
| 2637 | Fe XIX    | O06397   | 1132.200 | 10.951    | 6.93 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.74 | 5.00 | 4.75 | 6.15 | 8.25 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 2636 | Fe XIX    | O06398   | 1132.300 | 10.950    | 6.93 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.72 | 4.98 | 4.73 | 6.13 | 8.23 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 2635 | Fe XIX    | O01222   | 1132.500 | 10.948    | 6.91 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.96 | 4.44 | 4.32 | 5.79 | 7.93 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 2634 | Fe XIX    | O04266   | 1132.900 | 10.944    | 6.93 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.97 | 5.26 | 5.04 | 6.45 | 8.56 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 4384 | Fe XXII   | B02068   | 1132.900 | 10.944    | 7.11 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.95 | 4.80 | 4.70 | 5.56 | 6.50 | 7.51 | -    | -    | -    | -    | -    | - |   |
| 2632 | Fe XIX    | O09484   | 1133.300 | 10.940    | 6.93 | 4.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.92 | 5.16 | 4.90 | 6.29 | 8.39 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 2631 | Fe XIX    | O06400   | 1133.400 | 10.939    | 6.93 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.63 | 4.89 | 4.64 | 6.04 | 8.14 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 4720 | Fe XXIII  | BE03026  | 1133.700 | 10.936    | 7.18 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.38 | 4.48 | 3.81 | 4.20 | 4.77 | 5.45 | 6.34 | 7.48 | -    | -    | -    | - | - |
| 4719 | Fe XXIII  | BE03027  | 1133.900 | 10.934    | 7.18 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.33 | 5.42 | 4.75 | 5.15 | 5.71 | 6.39 | 7.28 | 8.42 | -    | -    | -    | - | - |
| 2633 | Fe XIX    | O03240   | 1134.000 | 10.933    | 6.92 | 3.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.22 | 3.52 | 3.31 | 4.73 | 6.84 | -    | -    | -    | -    | -    | -    | - |   |
| 3267 | Fe XX     | N06289   | 1134.000 | 10.933    | 6.99 | 4.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.89 | 5.33 | 4.48 | 5.39 | 7.09 | -    | -    | -    | -    | -    | -    | - | - |
| 2630 | Fe XIX    | O03242   | 1134.100 | 10.932    | 6.92 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.75 | 4.06 | 3.84 | 5.26 | 7.37 | -    | -    | -    | -    | -    | -    | - |   |
| 4383 | Fe XXII   | B01063   | 1134.700 | 10.927    | 7.10 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.05 | 4.04 | 4.01 | 4.91 | 5.87 | 6.89 | -    | -    | -    | -    | -    | - |   |
| 4718 | Fe XXIII  | BE04031  | 1134.800 | 10.926    | 7.18 | 3.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.43 | 4.52 | 3.85 | 4.24 | 4.81 | 5.48 | 6.38 | 7.51 | -    | -    | -    | - | - |
| 5238 | Ni XX     | F1A      | 1135.400 | 10.920    | 6.82 | 3.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.11 | 3.90 | 3.15 | 3.72 | 5.86 | -    | -    | -    | -    | -    | -    | - | - |
| 3266 | Fe XX     | N03246   | 1135.500 | 10.919    | 6.99 | 4.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.31 | 5.78 | 4.95 | 5.88 | 7.58 | -    | -    | -    | -    | -    | -    | - | - |
| 2629 | Fe XIX    | O02242   | 1135.800 | 10.916    | 6.92 | 3.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.36 | 3.66 | 3.45 | 4.87 | 6.98 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 2628 | Fe XIX    | O05322   | 1135.900 | 10.915    | 6.93 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.42 | 4.68 | 4.43 | 5.83 | 7.93 | -    | -    | -    | -    | -    | -    | -    | - |   |
| 4717 | Fe XXIII  | BE03028  | 1136.500 | 10.909    | 7.18 | 4.50  | -   |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |

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line list SPEX version 2.0

| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6 | 8.8 | 9.0 |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|
| 2627 | Fe XIX   | O04270   | 1137.300 | 10.902    | 6.93 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.84 | 5.13 | 4.90 | 6.32 | 8.42 | -    | -    | -    | -    | -   | -   |     |
| 2625 | Fe XIX   | O04272   | 1137.700 | 10.898    | 6.93 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.36 | 4.65 | 4.42 | 5.83 | 7.94 | -    | -    | -    | -    | -   | -   |     |
| 2624 | Fe XIX   | O04273   | 1137.800 | 10.897    | 6.93 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.00 | 4.29 | 4.06 | 5.47 | 7.58 | -    | -    | -    | -    | -   | -   |     |
| 4714 | Fe XXIII | BE02027  | 1137.900 | 10.896    | 7.18 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.78 | 4.88 | 4.21 | 4.60 | 5.17 | 5.85 | 6.74 | 7.88 | -   | -   |     |
| 4382 | Fe XXII  | B02072   | 1138.000 | 10.895    | 7.11 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.86 | 4.71 | 4.61 | 5.46 | 6.41 | 7.42 | -    | -    | -   | -   |     |
| 2623 | Fe XIX   | O04276   | 1138.100 | 10.894    | 6.93 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.00 | 4.29 | 4.06 | 5.47 | 7.58 | -    | -    | -    | -    | -   | -   |     |
| 2622 | Fe XIX   | O01230   | 1138.600 | 10.889    | 6.91 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.25 | 4.73 | 4.61 | 6.08 | 8.22 | -    | -    | -    | -    | -   | -   |     |
| 3912 | Fe XXI   | C15242   | 1139.000 | 10.885    | 7.05 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.32 | 4.80 | 5.20 | 6.46 | 7.76 | -    | -    | -    | -   | -   |     |
| 2621 | Fe XIX   | O04279   | 1139.800 | 10.878    | 6.93 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.26 | 4.56 | 4.33 | 5.74 | 7.85 | -    | -    | -    | -    | -   | -   |     |
| 4713 | Fe XXIII | BE15172  | 1140.100 | 10.875    | 7.21 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.28 | 4.42 | 4.69 | 5.18 | 5.80 | 6.66 | 7.77 | -   | -   |     |
| 2620 | Fe XIX   | O04280   | 1140.400 | 10.872    | 6.93 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.57 | 4.86 | 4.64 | 6.05 | 8.16 | -    | -    | -    | -    | -   | -   |     |
| 2619 | Fe XIX   | O01235   | 1140.700 | 10.869    | 6.91 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.53 | 5.02 | 4.90 | 6.36 | 8.50 | -    | -    | -    | -    | -   | -   |     |
| 2618 | Fe XIX   | O01234   | 1140.700 | 10.869    | 6.91 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.24 | 4.72 | 4.60 | 6.07 | 8.20 | -    | -    | -    | -    | -   | -   |     |
| 2617 | Fe XIX   | O01233   | 1140.700 | 10.869    | 6.91 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.00 | 4.48 | 4.36 | 5.82 | 7.96 | -    | -    | -    | -    | -   | -   |     |
| 2616 | Fe XIX   | O09499   | 1141.000 | 10.866    | 6.93 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.79 | 5.03 | 4.77 | 6.16 | 8.25 | -    | -    | -    | -    | -   | -   |     |
| 2615 | Fe XIX   | O09500   | 1141.400 | 10.862    | 6.93 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.45 | 4.69 | 4.43 | 5.82 | 7.91 | -    | -    | -    | -    | -   | -   |     |
| 2614 | Fe XIX   | O04286   | 1143.100 | 10.846    | 6.93 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.73 | 5.02 | 4.80 | 6.21 | 8.31 | -    | -    | -    | -    | -   | -   |     |
| 4712 | Fe XXIII | BE14172  | 1144.000 | 10.838    | 7.21 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.45 | 4.58 | 4.86 | 5.35 | 5.97 | 6.83 | 7.94 | -   | -   |     |
| 2612 | Fe XIX   | O04289   | 1144.100 | 10.837    | 6.93 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.32 | 4.60 | 4.38 | 5.79 | 7.90 | -    | -    | -    | -    | -   | -   |     |
| 2611 | Fe XIX   | O03268   | 1144.200 | 10.836    | 6.92 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.95 | 5.25 | 5.03 | 6.44 | 8.55 | -    | -    | -    | -    | -   | -   |     |
| 2610 | Fe XIX   | O01242   | 1144.800 | 10.830    | 6.91 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.26 | 4.74 | 4.62 | 6.08 | 8.22 | -    | -    | -    | -    | -   | -   |     |
| 4711 | Fe XXIII | BE04037  | 1145.100 | 10.827    | 7.18 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.10 | 5.19 | 4.51 | 4.91 | 5.47 | 6.15 | 7.04 | 8.18 | -   | -   |     |
| 2609 | Fe XIX   | O04292   | 1145.100 | 10.827    | 6.93 | 3.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.43 | 3.72 | 3.49 | 4.90 | 7.00 | -    | -    | -    | -    | -   | -   |     |
| 2613 | Fe XIX   | O01240   | 1145.100 | 10.827    | 6.91 | 3.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.97 | 3.45 | 3.33 | 4.79 | 6.93 | -    | -    | -    | -    | -   | -   |     |
| 4710 | Fe XXIII | BE03030  | 1145.200 | 10.826    | 7.18 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.28 | 5.37 | 4.70 | 5.09 | 5.65 | 6.33 | 7.22 | 8.36 | -   | -   |     |
| 2607 | Fe XIX   | O04297   | 1145.700 | 10.822    | 6.93 | 3.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.80 | 4.08 | 3.86 | 5.27 | 7.37 | -    | -    | -    | -    | -   | -   |     |
| 2608 | Fe XIX   | O01243   | 1146.300 | 10.816    | 6.91 | 2.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 3.93 | 2.41 | 2.29 | 3.75 | 5.89 | -    | -    | -    | -    | -   | -   |     |
| 2606 | Fe XIX   | O04301   | 1146.400 | 10.815    | 6.93 | 3.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.35 | 3.63 | 3.41 | 4.82 | 6.92 | -    | -    | -    | -    | -   | -   |     |
| 2605 | Fe XIX   | O05334   | 1146.500 | 10.814    | 6.93 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.28 | 4.53 | 4.28 | 5.68 | 7.78 | -    | -    | -    | -    | -   | -   |     |
| 4381 | Fe XXII  | B01068   | 1147.500 | 10.805    | 7.10 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.43 | 4.42 | 4.39 | 5.28 | 6.25 | 7.27 | -    | -    | -   | -   |     |
| 2604 | Fe XIX   | O03270   | 1147.700 | 10.803    | 6.92 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.76 | 4.06 | 3.84 | 5.26 | 7.37 | -    | -    | -    | -    | -   | -   |     |
| 2603 | Fe XIX   | O03275   | 1148.400 | 10.796    | 6.92 | 4.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.98 | 5.28 | 5.06 | 6.47 | 8.58 | -    | -    | -    | -    | -   | -   |     |
| 5291 | Ni XXII  | N1       | 1149.000 | 10.791    | 6.99 | 2.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.74 | 3.06 | 2.28 | 3.36 | 5.28 | -    | -    | -    | -    | -   | -   |     |
| 2602 | Fe XIX   | O07430   | 1149.100 | 10.790    | 6.93 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.99 | 4.24 | 3.99 | 5.39 | 7.48 | -    | -    | -    | -    | -   | -   |     |
| 4709 | Fe XXIII | BE11169  | 1149.200 | 10.789    | 7.20 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.43 | 4.56 | 4.84 | 5.33 | 5.95 | 6.81 | 7.93 | -   | -   |     |
| 2601 | Fe XIX   | O02272   | 1149.800 | 10.783    | 6.92 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.89 | 4.19 | 3.97 | 5.39 | 7.49 | -    | -    | -    | -    | -   | -   |     |
| 2600 | Fe XIX   | O03279   | 1150.200 | 10.779    | 6.92 | 3.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.30 | 3.60 | 3.38 | 4.80 | 6.90 | -    | -    | -    | -    | -   | -   |     |
| 2599 | Fe XIX   | O07434   | 1150.500 | 10.777    | 6.93 | 4.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.04 | 5.28 | 5.03 | 6.43 | 8.52 | -    | -    | -    | -    | -   | -   |     |
| 2598 | Fe XIX   | O07435   | 1150.700 | 10.775    | 6.93 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.70 | 4.95 | 4.70 | 6.10 | 8.19 | -    | -    | -    | -    | -   | -   |     |
| 2597 | Fe XIX   | O03280   | 1151.000 | 10.772    | 6.93 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.76 | 4.06 | 3.84 | 5.25 | 7.36 | -    | -    | -    | -    | -   | -   |     |
| 402  | Ne IX    | HE1      | 1151.200 | 10.770    | 6.60 | 2.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.20 | 4.42 | 3.35 | 2.95 | 3.29 | 3.94 | 4.58 | 5.16 | 5.69 | 6.19 | 6.65 | -    | -    | -   | -   |     |
| 2596 | Fe XIX   | O07439   | 1151.300 | 10.769    | 6.93 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.45 | 4.70 | 4.45 | 5.84 | 7.94 | -    | -    | -    | -    | -   | -   |     |
| 2595 | Fe XIX   | O04318   | 1152.200 | 10.761    | 6.93 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.61 | 4.90 | 4.67 | 6.08 | 8.18 | -    | -    | -    | -    | -   | -   |     |
| 4708 | Fe XXIII | BE11170  | 1152.400 | 10.759    | 7.20 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.22 | 4.35 | 4.63 | 5.12 | 5.74 | 6.60 | 7.71 | -   | -   |     |
| 2594 | Fe XIX   | O02280   | 1152.600 | 10.757    | 6.92 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.04 | 4.34 | 4.12 | 5.53 | 7.64 | -    | -    | -    | -    | -   | -   |     |
| 4380 | Fe XXII  | B01072   | 1152.600 | 10.757    | 7.10 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.76 | 4.75 | 4.72 | 5.61 | 6.58 | 7.60 | -    | -    | -   | -   |     |
| 3265 | Fe XX    | N02257   | 1153.000 | 10.753    | 6.99 | 4.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.17 | 5.63 | 4.79 | 5.72 | 7.42 | -    | -    | -    | -    | -   | -   |     |
| 2593 | Fe XIX   | O04319   | 1153.000 | 10.753    | 6.93 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.80 | 5.09 | 4.86 | 6.26 | 8.37 | -    | -    | -    | -    | -   | -   |     |
| 2592 | Fe XIX   | O04320   | 1153.100 | 10.752    | 6.93 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.87 | 4.15 | 3.92 | 5.33 | 7.44 | -    | -    | -    | -    | -   | -   |     |
| 2591 | Fe XIX   | O03287   | 1154.000 | 10.744    | 6.93 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.40 | 4.70 | 4.48 | 5.89 | 8.00 | -    | -    | -    | -    | -   | -   |     |
| 2590 | Fe XIX   | O03288   | 1154.400 | 10.740    | 6.93 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.98 | 4.28 | 4.06 | 5.47 | 7.58 | -    | -    | -    | -    | -   | -   |     |
| 2588 | Fe XIX   | O03289   | 1154.500 | 10.739    | 6.93 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.86 | 4.16 | 3.94 | 5.35 | 7.46 | -    | -    | -    | -    | -   | -   |     |
| 2589 | Fe XIX   | O04322   | 1154.500 | 10.739    | 6.93 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.82 | 5.10 | 4.87 | 6.28 | 8.39 | -    | -    | -    | -    | -   | -   |     |
| 4707 | Fe XXIII | BE12171  | 1155.500 | 10.730    | 7.20 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.59 | 4.73 | 5.01 | 5.49 | 6.12 | 6.98 | 8.09 | -   | -   |     |
| 2587 | Fe XIX   | O03292   | 1155.700 | 10.728    | 6.93 | 4.03  | -   | -   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |

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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2586 | Fe XIX   | O03297   | 1156.200 | 10.723    | 6.93 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.74 | 5.04 | 4.82 | 6.23 | 8.34 | -    | -    | -    | -    | -    | -    | -    |      |
| 2585 | Fe XIX   | O06430   | 1156.700 | 10.719    | 6.93 | 4.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.18 | 4.43 | 4.18 | 5.57 | 7.67 | -    | -    | -    | -    | -    | -    | -    |      |
| 4706 | Fe XXIII | BE59241  | 1157.600 | 10.710    | 7.22 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.68 | 4.75 | 4.98 | 5.44 | 6.05 | 6.89 | 8.00 | -    | -    | -    |      |
| 2584 | Fe XIX   | O01270   | 1158.400 | 10.703    | 6.91 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.16 | 3.64 | 3.52 | 4.98 | 7.12 | -    | -    | -    | -    | -    | -    | -    |      |
| 2583 | Fe XIX   | O06437   | 1158.500 | 10.702    | 6.93 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.86 | 5.11 | 4.86 | 6.26 | 8.35 | -    | -    | -    | -    | -    | -    | -    |      |
| 3264 | Fe XX    | N08357   | 1158.700 | 10.700    | 6.99 | 3.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.05 | 4.47 | 3.61 | 4.52 | 6.21 | -    | -    | -    | -    | -    | -    | -    |      |
| 2581 | Fe XIX   | O01272   | 1158.900 | 10.698    | 6.91 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.67 | 4.15 | 4.03 | 5.49 | 7.63 | -    | -    | -    | -    | -    | -    | -    |      |
| 2582 | Fe XIX   | O01273   | 1158.900 | 10.698    | 6.91 | 4.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.94 | 4.42 | 4.30 | 5.76 | 7.90 | -    | -    | -    | -    | -    | -    | -    |      |
| 2580 | Fe XIX   | O01276   | 1160.500 | 10.684    | 6.91 | 2.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.41 | 2.89 | 2.77 | 4.23 | 6.37 | -    | -    | -    | -    | -    | -    | -    |      |
| 4705 | Fe XXIII | BE15184  | 1160.700 | 10.682    | 7.21 | 4.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.78 | 4.91 | 5.18 | 5.66 | 6.29 | 7.14 | 8.26 | -    | -    | -    |      |
| 2579 | Fe XIX   | O01279   | 1161.000 | 10.679    | 6.91 | 3.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.58 | 4.06 | 3.94 | 5.40 | 7.54 | -    | -    | -    | -    | -    | -    | -    |      |
| 4704 | Fe XXIII | BE59254  | 1161.000 | 10.679    | 7.22 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.82 | 4.89 | 5.12 | 5.58 | 6.19 | 7.03 | 8.14 | -    | -    | -    |      |
| 4703 | Fe XXIII | BE01022  | 1161.300 | 10.676    | 7.18 | 4.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.72 | 4.83 | 4.16 | 4.55 | 5.12 | 5.80 | 6.69 | 7.83 | -    | -    | -    |      |
| 4702 | Fe XXIII | BE55244  | 1161.600 | 10.674    | 7.22 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.74 | 4.81 | 5.04 | 5.50 | 6.11 | 6.95 | 8.06 | -    | -    | -    |      |
| 2578 | Fe XIX   | O04331   | 1161.600 | 10.674    | 6.93 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.28 | 4.56 | 4.33 | 5.74 | 7.84 | -    | -    | -    | -    | -    | -    | -    |      |
| 3263 | Fe XX    | N07357   | 1161.600 | 10.674    | 6.99 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.77 | 4.19 | 3.33 | 4.24 | 5.93 | -    | -    | -    | -    | -    | -    | -    |      |
| 2577 | Fe XIX   | O01280   | 1161.700 | 10.673    | 6.91 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.10 | 4.58 | 4.45 | 5.92 | 8.05 | -    | -    | -    | -    | -    | -    | -    |      |
| 2576 | Fe XIX   | O04332   | 1161.900 | 10.671    | 6.93 | 3.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.98 | 4.26 | 4.03 | 5.44 | 7.54 | -    | -    | -    | -    | -    | -    | -    |      |
| 2575 | Fe XIX   | O04333   | 1162.200 | 10.668    | 6.93 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.33 | 4.61 | 4.38 | 5.79 | 7.89 | -    | -    | -    | -    | -    | -    | -    |      |
| 4908 | Fe XXIV  | LI01005  | 1162.800 | 10.663    | 7.27 | 2.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.33 | 2.21 | 2.24 | 2.47 | 2.83 | 3.39 | 4.17 | 5.11 | 6.12 | -    | -    |
| 2573 | Fe XIX   | O01286   | 1163.000 | 10.661    | 6.91 | 2.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.16 | 2.64 | 2.51 | 3.98 | 6.11 | -    | -    | -    | -    | -    | -    | -    |      |
| 2574 | Fe XIX   | O03319   | 1163.500 | 10.656    | 6.93 | 4.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.19 | 4.49 | 4.26 | 5.67 | 7.78 | -    | -    | -    | -    | -    | -    | -    |      |
| 4700 | Fe XXIII | BE60268  | 1164.400 | 10.648    | 7.22 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.84 | 4.90 | 5.14 | 5.60 | 6.20 | 7.05 | 8.15 | -    | -    | -    |      |
| 2572 | Fe XIX   | O03322   | 1165.000 | 10.642    | 6.93 | 4.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.22 | 4.51 | 4.28 | 5.69 | 7.80 | -    | -    | -    | -    | -    | -    | -    |      |
| 2570 | Fe XIX   | O01289   | 1165.300 | 10.640    | 6.92 | 3.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.63 | 4.11 | 3.98 | 5.45 | 7.58 | -    | -    | -    | -    | -    | -    | -    |      |
| 2571 | Fe XIX   | O01288   | 1165.300 | 10.640    | 6.92 | 2.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.15 | 2.63 | 2.50 | 3.97 | 6.10 | -    | -    | -    | -    | -    | -    | -    |      |
| 2569 | Fe XIX   | O01292   | 1166.100 | 10.632    | 6.92 | 2.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.53 | 3.01 | 2.88 | 4.35 | 6.48 | -    | -    | -    | -    | -    | -    | -    |      |
| 2215 | Fe XVIII | F02212   | 1166.700 | 10.627    | 6.86 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.67 | 5.74 | 4.77 | 5.11 | 6.98 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3262 | Fe XX    | N01254   | 1167.300 | 10.621    | 6.98 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.70 | 5.37 | 4.64 | 5.62 | 7.35 | -    | -    | -    | -    | -    | -    | -    |      |
| 4907 | Fe XXIV  | LI01006  | 1167.500 | 10.620    | 7.27 | 1.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.06 | 1.94 | 1.96 | 2.19 | 2.55 | 3.11 | 3.90 | 4.83 | 5.84 | -    | -    |
| 2566 | Fe XIX   | O01301   | 1167.600 | 10.619    | 6.92 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.08 | 4.56 | 4.43 | 5.90 | 8.03 | -    | -    | -    | -    | -    | -    | -    |      |
| 2568 | Fe XIX   | O02322   | 1167.600 | 10.619    | 6.93 | 3.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.15 | 3.45 | 3.22 | 4.63 | 6.74 | -    | -    | -    | -    | -    | -    | -    |      |
| 2213 | Fe XVIII | F02215   | 1168.100 | 10.614    | 6.86 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.47 | 5.54 | 4.57 | 4.91 | 6.78 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4698 | Fe XXIII | BE60283  | 1168.500 | 10.611    | 7.22 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.77 | 4.83 | 5.07 | 5.52 | 6.13 | 6.98 | 8.08 | -    | -    | -    |      |
| 3261 | Fe XX    | N09390   | 1168.900 | 10.607    | 6.99 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.64 | 5.05 | 4.17 | 5.08 | 6.77 | -    | -    | -    | -    | -    | -    | -    |      |
| 3260 | Fe XX    | N06357   | 1169.700 | 10.600    | 6.99 | 3.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.51 | 3.93 | 3.06 | 3.97 | 5.67 | -    | -    | -    | -    | -    | -    | -    |      |
| 2565 | Fe XIX   | O07484   | 1170.000 | 10.597    | 6.93 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.97 | 5.21 | 4.95 | 6.34 | 8.44 | -    | -    | -    | -    | -    | -    | -    |      |
| 5315 | Ni XXIII | C4E      | 1170.800 | 10.590    | 7.05 | 3.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.31 | 3.77 | 4.28 | 5.74 | 7.09 | -    | -    | -    | -    | -    |      |
| 2564 | Fe XIX   | O03329   | 1171.000 | 10.588    | 6.93 | 4.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.53 | 4.82 | 4.60 | 6.01 | 8.12 | -    | -    | -    | -    | -    | -    | -    |      |
| 2212 | Fe XVIII | F01206   | 1171.900 | 10.580    | 6.85 | 3.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.09 | 4.45 | 3.65 | 4.08 | 6.00 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2563 | Fe XIX   | O03330   | 1171.900 | 10.580    | 6.93 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.48 | 4.77 | 4.54 | 5.95 | 8.06 | -    | -    | -    | -    | -    | -    | -    |      |
| 2211 | Fe XVIII | F01209   | 1173.300 | 10.567    | 6.85 | 3.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.90 | 4.26 | 3.46 | 3.89 | 5.81 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2562 | Fe XIX   | O03333   | 1173.600 | 10.564    | 6.93 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.47 | 4.76 | 4.54 | 5.95 | 8.05 | -    | -    | -    | -    | -    | -    | -    |      |
| 2210 | Fe XVIII | F01210   | 1173.600 | 10.564    | 6.85 | 3.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.89 | 4.25 | 3.45 | 3.88 | 5.80 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2209 | Fe XVIII | F02221   | 1174.200 | 10.559    | 6.86 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.67 | 5.73 | 4.76 | 5.09 | 6.97 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2561 | Fe XIX   | O01320   | 1174.400 | 10.557    | 6.92 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.43 | 4.90 | 4.77 | 6.24 | 8.37 | -    | -    | -    | -    | -    | -    | -    |      |
| 4999 | Fe XXV   | HE9      | 1175.200 | 10.550    | 7.70 | 3.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.78 | 4.42 | 3.71 | 3.47 | 3.47 | 3.67 | 4.02 | 4.43 | 4.82 | 5.19 | 5.53 |
| 2560 | Fe XIX   | O07489   | 1175.200 | 10.550    | 6.93 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.37 | 4.61 | 4.35 | 5.74 | 7.83 | -    | -    | -    | -    | -    | -    | -    |      |
| 2207 | Fe XVIII | F01211   | 1175.900 | 10.544    | 6.85 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.28 | 4.64 | 3.84 | 4.27 | 6.19 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2559 | Fe XIX   | O07497   | 1176.100 | 10.542    | 6.93 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.44 | 4.67 | 4.41 | 5.81 | 7.90 | -    | -    | -    | -    | -    | -    | -    |      |
| 2558 | Fe XIX   | O07498   | 1176.800 | 10.536    | 6.93 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.79 | 5.02 | 4.76 | 6.15 | 8.25 | -    | -    | -    | -    | -    | -    | -    |      |
| 5314 | Ni XXIII | C4D      | 1177.400 | 10.530    | 7.05 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.37 | 3.82 | 4.34 | 5.80 | 7.15 | -    | -    | -    | -    | -    |      |
| 2206 | Fe XVIII | F01212   | 1179.200 | 10.514    | 6.85 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.36 | 4.72 | 3.92 | 4.35 | 6.26 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2205 | Fe XVIII | F01213   | 1180.400 | 10.504    | 6.85 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.42 | 4.78 | 3.98 | 4.40 | 6.32 | -</  |      |      |      |      |      |      |      |      |

| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2204 | Fe XVIII | F01214   | 1180.600 | 10.502    | 6.85 | 3.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.24 | 4.60 | 3.80 | 4.22 | 6.14 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5313 | Ni XXIII | C4B      | 1180.800 | 10.500    | 7.05 | 2.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.56 | 3.02 | 3.53 | 4.99 | 6.34 | -    | -    | -    | -    | -    | -    | -    |
| 3259 | Fe XX    | N12483   | 1181.000 | 10.498    | 6.99 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.06 | 5.46 | 4.57 | 5.47 | 7.15 | -    | -    | -    | -    | -    | -    | -    | -    |
| 2557 | Fe XIX   | O01329   | 1181.600 | 10.493    | 6.92 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.42 | 4.89 | 4.76 | 6.22 | 8.36 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3909 | Fe XXI   | C11241   | 1182.000 | 10.489    | 7.05 | 4.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.23 | 4.72 | 5.11 | 6.37 | 7.67 | -    | -    | -    | -    | -    | -    | -    |
| 2556 | Fe XIX   | O06488   | 1182.300 | 10.487    | 6.93 | 3.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.12 | 4.36 | 4.10 | 5.49 | 7.59 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3258 | Fe XX    | N12486   | 1182.400 | 10.486    | 6.99 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.30 | 5.69 | 4.80 | 5.70 | 7.38 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3908 | Fe XXI   | C11242   | 1182.500 | 10.485    | 7.05 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.58 | 4.07 | 4.46 | 5.72 | 7.02 | -    | -    | -    | -    | -    | -    | -    |
| 3257 | Fe XX    | N02271   | 1182.600 | 10.484    | 6.99 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.09 | 5.54 | 4.69 | 5.62 | 7.31 | -    | -    | -    | -    | -    | -    | -    | -    |
| 2555 | Fe XIX   | O01331   | 1182.700 | 10.483    | 6.92 | 3.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.75 | 4.22 | 4.09 | 5.55 | 7.69 | -    | -    | -    | -    | -    | -    | -    | -    |
| 2554 | Fe XIX   | O06489   | 1182.800 | 10.482    | 6.93 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.51 | 4.74 | 4.48 | 5.88 | 7.97 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3256 | Fe XX    | N08374   | 1183.400 | 10.477    | 6.99 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.18 | 4.59 | 3.72 | 4.62 | 6.31 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3255 | Fe XX    | N08375   | 1183.500 | 10.476    | 6.99 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.18 | 4.59 | 3.72 | 4.62 | 6.31 | -    | -    | -    | -    | -    | -    | -    | -    |
| 5312 | Ni XXIII | C4C      | 1185.300 | 10.460    | 7.05 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.36 | 4.82 | 5.33 | 6.79 | 8.14 | -    | -    | -    | -    | -    | -    | -    |
| 3254 | Fe XX    | N07373   | 1186.100 | 10.453    | 6.99 | 3.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.81 | 4.22 | 3.35 | 4.25 | 5.94 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3252 | Fe XX    | N03272   | 1186.200 | 10.452    | 6.99 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.23 | 5.68 | 4.83 | 5.75 | 7.45 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3253 | Fe XX    | N07374   | 1186.200 | 10.452    | 6.99 | 3.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.07 | 4.48 | 3.61 | 4.51 | 6.20 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3251 | Fe XX    | N07375   | 1186.300 | 10.451    | 6.99 | 4.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.88 | 5.29 | 4.42 | 5.33 | 7.01 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3250 | Fe XX    | N10415   | 1186.600 | 10.449    | 6.99 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.19 | 5.59 | 4.71 | 5.61 | 7.30 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3249 | Fe XX    | N11483   | 1187.900 | 10.437    | 6.99 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.12 | 5.51 | 4.63 | 5.52 | 7.21 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3248 | Fe XX    | N14609   | 1188.400 | 10.433    | 6.99 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.37 | 5.71 | 4.80 | 5.68 | 7.36 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3247 | Fe XX    | N14610   | 1188.700 | 10.430    | 6.99 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.37 | 5.71 | 4.80 | 5.68 | 7.36 | -    | -    | -    | -    | -    | -    | -    | -    |
| 5203 | Ni XIX   | NE2      | 1190.200 | 10.417    | 6.68 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.89 | 3.95 | 4.06 | 5.27 | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 3246 | Fe XX    | N04285   | 1191.500 | 10.406    | 6.99 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.71 | 5.15 | 4.30 | 5.21 | 6.91 | -    | -    | -    | -    | -    | -    | -    |
| 3245 | Fe XX    | N03278   | 1191.800 | 10.403    | 6.99 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.95 | 5.40 | 4.55 | 5.47 | 7.17 | -    | -    | -    | -    | -    | -    | -    |
| 5311 | Ni XXIII | C4A      | 1192.200 | 10.400    | 7.05 | 2.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.91 | 2.37 | 2.88 | 4.34 | 5.69 | -    | -    | -    | -    | -    | -    | -    |
| 3243 | Fe XX    | N02274   | 1192.300 | 10.399    | 6.99 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.98 | 5.43 | 4.58 | 5.50 | 7.20 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3244 | Fe XX    | N05297   | 1192.300 | 10.399    | 6.99 | 4.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.53 | 4.97 | 4.12 | 5.03 | 6.73 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3241 | Fe XX    | N03279   | 1193.100 | 10.392    | 6.99 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.86 | 5.31 | 4.46 | 5.38 | 7.07 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3242 | Fe XX    | N05300   | 1193.100 | 10.392    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.83 | 5.27 | 4.41 | 5.33 | 7.02 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3240 | Fe XX    | N09432   | 1193.900 | 10.385    | 6.99 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.90 | 5.30 | 4.42 | 5.32 | 7.00 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3238 | Fe XX    | N06373   | 1194.200 | 10.382    | 6.99 | 3.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.06 | 4.48 | 3.60 | 4.51 | 6.20 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3239 | Fe XX    | N06374   | 1194.200 | 10.382    | 6.99 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.99 | 5.41 | 4.54 | 5.44 | 7.13 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3237 | Fe XX    | N06376   | 1194.500 | 10.380    | 6.99 | 2.98  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.44 | 3.86 | 2.98 | 3.89 | 5.58 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3236 | Fe XX    | N05302   | 1194.800 | 10.377    | 6.99 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.02 | 5.45 | 4.60 | 5.51 | 7.21 | -    | -    | -    | -    | -    | -    | -    | -    |
| 4998 | Fe XXV   | HE8      | 1196.800 | 10.360    | 7.82 | 3.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 6.74 | 4.38 | 3.63 | 3.32 | 3.21 | 3.30 | 3.57 | 3.91 | 4.27 | 4.63 | 4.97 |
| 4379 | Fe XXII  | B01111   | 1198.400 | 10.346    | 7.10 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.70 | 4.67 | 4.64 | 5.53 | 6.49 | 7.51 | -    | -    | -    | -    | -    | -    |
| 3235 | Fe XX    | N05305   | 1199.000 | 10.341    | 6.99 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.97 | 5.41 | 4.55 | 5.46 | 7.16 | -    | -    | -    | -    | -    | -    | -    | -    |
| 5369 | Ni XXV   | BE9      | 1199.100 | 10.340    | 7.16 | 2.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.96 | 3.71 | 3.00 | 3.54 | 4.19 | 4.84 | 5.56 | 6.37 | -    | -    | -    | -    |
| 3234 | Fe XX    | N01271   | 1200.100 | 10.331    | 6.98 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.29 | 4.94 | 4.21 | 5.19 | 6.91 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3233 | Fe XX    | N04297   | 1200.200 | 10.330    | 6.99 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.46 | 4.90 | 4.04 | 4.96 | 6.65 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3232 | Fe XX    | N05313   | 1200.500 | 10.328    | 6.99 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.94 | 5.38 | 4.52 | 5.44 | 7.13 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3231 | Fe XX    | N04299   | 1200.600 | 10.327    | 6.99 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.88 | 5.32 | 4.46 | 5.38 | 7.07 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3229 | Fe XX    | N05315   | 1201.300 | 10.321    | 6.99 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.03 | 5.47 | 4.61 | 5.52 | 7.22 | -    | -    | -    | -    | -    | -    | -    | -    |
| 3230 | Fe XX    | N05316   | 1201.300 | 10.321    | 6.99 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.02 | 5.45 | 4.59 | 5.51 | 7.20 | -    |      |      |      |      |      |      |      |





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### line list SPEX version 2.0

| Nr   | ion     | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|---------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 3892 | Fe XXI  | C08292   | 1259.200 | 9.846     | 7.05 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.92 | 4.39 | 4.77 | 6.03 | 7.32 | -    | -    | -    | -    | -    | -    | -    |
| 3161 | Fe XX   | N07534   | 1259.700 | 9.842     | 6.99 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.39 | 4.77 | 3.88 | 4.77 | 6.45 | -    | -    | -    | -    | -    | -    | -    |
| 3162 | Fe XX   | N07535   | 1259.700 | 9.842     | 6.99 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.76 | 5.14 | 4.25 | 5.14 | 6.82 | -    | -    | -    | -    | -    | -    | -    |
| 2524 | Fe XIX  | O04473   | 1262.300 | 9.822     | 6.93 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.78 | 5.02 | 4.75 | 6.14 | 8.24 | -    | -    | -    | -    | -    | -    | -    |
| 2523 | Fe XIX  | O04476   | 1263.600 | 9.812     | 6.93 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.88 | 5.11 | 4.85 | 6.24 | 8.33 | -    | -    | -    | -    | -    | -    | -    |
| 2522 | Fe XIX  | O04478   | 1263.700 | 9.811     | 6.93 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.54 | 4.78 | 4.51 | 5.90 | 8.00 | -    | -    | -    | -    | -    | -    | -    |
| 502  | Mg V    | O S      | 1263.900 | 9.810     | 5.96 | 9.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 9.90 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 4376 | Fe XXII | B08127   | 1264.000 | 9.809     | 7.11 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.71 | 4.50 | 4.37 | 5.20 | 6.13 | 7.13 | -    | -    | -    | -    | -    |
| 3890 | Fe XXI  | C07296   | 1264.500 | 9.805     | 7.05 | 2.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.27 | 2.73 | 3.12 | 4.37 | 5.67 | -    | -    | -    | -    | -    | -    |
| 3891 | Fe XXI  | C05248   | 1264.500 | 9.805     | 7.05 | 3.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.96 | 3.44 | 3.83 | 5.09 | 6.39 | -    | -    | -    | -    | -    | -    |
| 4375 | Fe XXII | B08128   | 1265.700 | 9.796     | 7.11 | 4.56  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 7.06 | 4.85 | 4.72 | 5.55 | 6.48 | 7.48 | -    | -    | -    | -    | -    |
| 3160 | Fe XX   | N06534   | 1267.700 | 9.780     | 6.99 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.13 | 5.51 | 4.62 | 5.51 | 7.19 | -    | -    | -    | -    | -    | -    | -    |
| 3159 | Fe XX   | N06536   | 1268.000 | 9.778     | 6.99 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.51 | 4.89 | 4.00 | 4.89 | 6.57 | -    | -    | -    | -    | -    | -    | -    |
| 3889 | Fe XXI  | C08311   | 1269.700 | 9.765     | 7.05 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.33 | 4.80 | 5.18 | 6.43 | 7.73 | -    | -    | -    | -    | -    | -    |
| 3158 | Fe XX   | N01359   | 1270.200 | 9.761     | 6.98 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.42 | 5.06 | 4.31 | 5.28 | 7.00 | -    | -    | -    | -    | -    | -    | -    |
| 3888 | Fe XXI  | C03238   | 1270.500 | 9.759     | 7.05 | 4.03  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.61 | 4.09 | 4.49 | 5.75 | 7.05 | -    | -    | -    | -    | -    | -    |
| 3887 | Fe XXI  | C15428   | 1271.400 | 9.752     | 7.05 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.32 | 4.77 | 5.14 | 6.39 | 7.68 | -    | -    | -    | -    | -    | -    |
| 3886 | Fe XXI  | C14409   | 1272.000 | 9.747     | 7.05 | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.20 | 4.65 | 5.03 | 6.28 | 7.57 | -    | -    | -    | -    | -    | -    |
| 2520 | Fe XIX  | O03477   | 1274.100 | 9.731     | 6.93 | 4.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.93 | 5.17 | 4.91 | 6.31 | 8.40 | -    | -    | -    | -    | -    | -    | -    |
| 517  | Mg VI   | N S      | 1274.200 | 9.730     | 6.00 | 7.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.33 | 7.64 | 8.80 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 3885 | Fe XXI  | C04245   | 1274.500 | 9.728     | 7.05 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.86 | 4.34 | 4.74 | 6.00 | 7.30 | -    | -    | -    | -    | -    | -    |
| 3156 | Fe XX   | N01363   | 1274.800 | 9.726     | 6.98 | 3.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.18 | 3.82 | 3.07 | 4.04 | 5.76 | -    | -    | -    | -    | -    | -    | -    |
| 3157 | Fe XX   | N01364   | 1274.800 | 9.726     | 6.98 | 2.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.01 | 3.65 | 2.90 | 3.87 | 5.59 | -    | -    | -    | -    | -    | -    | -    |
| 3155 | Fe XX   | N01365   | 1275.000 | 9.724     | 6.98 | 3.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.47 | 4.11 | 3.36 | 4.33 | 6.05 | -    | -    | -    | -    | -    | -    | -    |
| 3884 | Fe XXI  | C13407   | 1275.400 | 9.721     | 7.05 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.34 | 4.79 | 5.17 | 6.42 | 7.71 | -    | -    | -    | -    | -    | -    |
| 3883 | Fe XXI  | C06275   | 1275.700 | 9.719     | 7.05 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.79 | 4.27 | 4.65 | 5.91 | 7.21 | -    | -    | -    | -    | -    | -    |
| 3882 | Fe XXI  | C02237   | 1275.800 | 9.718     | 7.05 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.09 | 4.57 | 4.97 | 6.23 | 7.53 | -    | -    | -    | -    | -    | -    |
| 3881 | Fe XXI  | C02238   | 1276.200 | 9.715     | 7.05 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.19 | 4.68 | 5.08 | 6.34 | 7.64 | -    | -    | -    | -    | -    | -    |
| 3880 | Fe XXI  | C04246   | 1276.600 | 9.712     | 7.05 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.08 | 4.57 | 4.96 | 6.22 | 7.52 | -    | -    | -    | -    | -    | -    |
| 3879 | Fe XXI  | C04247   | 1276.700 | 9.711     | 7.05 | 4.09  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.67 | 4.15 | 4.55 | 5.81 | 7.11 | -    | -    | -    | -    | -    | -    |
| 417  | Ne X    | H3       | 1276.900 | 9.710     | 6.79 | 2.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.48 | 3.04 | 2.70 | 2.86 | 3.09 | 3.33 | 3.55 | 3.76 | 3.97 | 4.16 | 4.34 | 4.50 | 4.62 | 4.71 |
| 3878 | Fe XXI  | C13410   | 1277.300 | 9.707     | 7.05 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.10 | 3.55 | 3.93 | 5.18 | 6.47 | -    | -    | -    | -    | -    | -    |
| 3877 | Fe XXI  | C04248   | 1277.400 | 9.706     | 7.05 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.22 | 4.70 | 5.09 | 6.35 | 7.65 | -    | -    | -    | -    | -    | -    |
| 3876 | Fe XXI  | C05266   | 1278.800 | 9.695     | 7.05 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.05 | 3.53 | 3.92 | 5.17 | 6.47 | -    | -    | -    | -    | -    | -    |
| 2516 | Fe XIX  | O01473   | 1283.500 | 9.660     | 6.92 | 4.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.02 | 4.47 | 4.33 | 5.78 | 7.90 | -    | -    | -    | -    | -    | -    |
| 2515 | Fe XIX  | O01476   | 1284.800 | 9.650     | 6.92 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.26 | 4.70 | 4.56 | 6.01 | 8.13 | -    | -    | -    | -    | -    | -    |
| 5391 | Ni XXVI | LI7      | 1284.800 | 9.650     | 7.26 | 2.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.26 | 2.91 | 2.97 | 3.25 | 3.61 | 4.07 | 4.67 | 5.33 | 6.00 | 6.63 |
| 2514 | Fe XIX  | O01478   | 1284.900 | 9.649     | 6.92 | 3.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.69 | 4.13 | 3.99 | 5.44 | 7.56 | -    | -    | -    | -    | -    | -    | -    |
| 3875 | Fe XXI  | C01238   | 1285.100 | 9.648     | 7.04 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.57 | 4.21 | 4.69 | 5.99 | 7.32 | -    | -    | -    | -    | -    | -    |
| 534  | Mg VII  | C S      | 1286.100 | 9.640     | 6.04 | 6.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.19 | 6.64 | 7.15 | 8.15 | 9.06 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 5006 | Fe XXVI | H6       | 1287.500 | 9.630     | 8.15 | 3.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 5.80 | 4.50 | 3.70 | 3.32 | 3.25 | 3.35 | 3.51 | 3.70 | 3.88 |
| 3874 | Fe XXI  | C03245   | 1290.400 | 9.608     | 7.05 | 3.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.37 | 3.85 | 4.24 | 5.50 | 6.80 | -    | -    | -    | -    | -    | -    |
| 3873 | Fe XXI  | C04262   | 1291.200 | 9.602     | 7.05 | 4.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.22 | 4.70 | 5.09 | 6.35 | 7.65 | -    | -    | -    | -    | -    | -    |
| 3872 | Fe XXI  | C13428   | 1292.000 | 9.596     | 7.05 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.15 | 4.60 | 4.97 | 6.22 | 7.51 | -    | -    | -    | -    | -    | -    |
| 3871 | Fe XXI  | C03246   | 1292.400 | 9.593     | 7.05 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.79 | 4.27 | 4.66 | 5.92 | 7.22 | -    | -    | -    | -    | -    | -    |
| 3153 | Fe XX   | N03409   | 1292.400 | 9.593     | 6.99 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.38 | 5.78 | 4.90 | 5.80 | 7.48 | -    | -    | -    | -    | -    | -    | -    |
| 3152 | Fe XX   | N02399   | 1292.600 | 9.592     | 6.99 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 7.78 | 5.19 | 4.31 | 5.21 | 6.90 | -    | -    | -    | -    | -    | -    |
| 3151 | Fe XX   | N02401   | 1293.300 | 9.587     | 6.99 | 4.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 8.35 | 5.76 | 4.88 | 5.78 | 7.47 | -    | -    | -    | -    | -    | -    |
| 3869 | Fe XXI  | C03248   | 1293.300 | 9.587     | 7.05 | 3.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.43 | 3.91 | 4.30 | 5.56 | 6.86 | -    | -    | -    | -    | -    | -    |
| 3870 | Fe XXI  | C03247   | 1293.300 | 9.587     | 7.05 | 3.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.83 | 3.31 | 3.70 | 4.96 | 6.26 | -    | -    | -    | -    | -    | -    |
| 3868 | Fe XXI  | C04265   | 1293.700 | 9.584     | 7.05 | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.87 | 4.35 | 4.74 | 6.00 | 7.29 | -    | -    | -    | -    | -    | -    |
| 660  | Mg X    | *2LI o   | 1293.700 | 9.584     | 6.66 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 7.91 | 5.92 | 5.11 | 4.76 | 4.88 | 5.59 | 6.60 | 7.59 | 8.54 | -    | -    |
| 3867 | Fe XXI  | C04266   | 1293.900 | 9.582     | 7.05 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 6.39 | 4.87 | 5.26 | 6.52 | 7.81 | -    | -    | -    | -    | -    | -    |
| 659  | Mg X    | *2LI p   | 1294.300 | 9.579     | 6.66 |       |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6  | 5.8  | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 3865 | Fe XXI   | C06290   | 1296.100 | 9.566     | 7.05 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.60 | 4.06 | 4.45 | 5.70 | 7.00 | -    | -    | -    | -    | -    | -    |      |
| 3863 | Fe XXI   | C02245   | 1296.200 | 9.565     | 7.05 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.20 | 4.68 | 5.07 | 6.33 | 7.63 | -    | -    | -    | -    | -    | -    |      |
| 3864 | Fe XXI   | C07358   | 1296.200 | 9.565     | 7.05 | 4.09  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.70 | 4.16 | 4.53 | 5.78 | 7.08 | -    | -    | -    | -    | -    | -    |      |
| 3862 | Fe XXI   | C12409   | 1296.500 | 9.563     | 7.05 | 4.23  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.84 | 4.30 | 4.67 | 5.92 | 7.21 | -    | -    | -    | -    | -    | -    |      |
| 3861 | Fe XXI   | C06292   | 1297.300 | 9.557     | 7.05 | 3.53  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.13 | 3.59 | 3.98 | 5.23 | 6.53 | -    | -    | -    | -    | -    | -    |      |
| 3860 | Fe XXI   | C12410   | 1297.600 | 9.555     | 7.05 | 4.52  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.13 | 4.59 | 4.96 | 6.21 | 7.50 | -    | -    | -    | -    | -    | -    |      |
| 3858 | Fe XXI   | C11408   | 1298.400 | 9.549     | 7.05 | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.90 | 4.36 | 4.73 | 5.98 | 7.27 | -    | -    | -    | -    | -    | -    |      |
| 3859 | Fe XXI   | C02246   | 1298.500 | 9.548     | 7.05 | 3.10  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.68 | 3.16 | 3.55 | 4.81 | 6.11 | -    | -    | -    | -    | -    | -    |      |
| 3857 | Fe XXI   | C02248   | 1299.400 | 9.542     | 7.05 | 2.86  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 4.44 | 2.92 | 3.31 | 4.57 | 5.87 | -    | -    | -    | -    | -    | -    |      |
| 550  | Mg VIII  | B S      | 1299.600 | 9.540     | 6.12 | 5.99  | -   | -   | -   | -   | -   | -   | -   | -   | 9.95 | 6.35 | 6.07 | 6.46 | 6.88 | -    | -    | 7.53 | 8.72 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3856 | Fe XXI   | C11410   | 1299.900 | 9.538     | 7.05 | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.31 | 4.77 | 5.14 | 6.39 | 7.68 | -    | -    | -    | -    | -    | -    |      |
| 3855 | Fe XXI   | C05283   | 1302.900 | 9.516     | 7.05 | 4.58  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.17 | 4.64 | 5.02 | 6.28 | 7.58 | -    | -    | -    | -    | -    | -    |      |
| 3854 | Fe XXI   | C06304   | 1303.200 | 9.514     | 7.05 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.87 | 4.34 | 4.72 | 5.98 | 7.27 | -    | -    | -    | -    | -    | -    |      |
| 3853 | Fe XXI   | C06307   | 1303.500 | 9.512     | 7.05 | 4.82  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.41 | 4.88 | 5.26 | 6.52 | 7.81 | -    | -    | -    | -    | -    | -    |      |
| 4374 | Fe XXII  | B08135   | 1304.700 | 9.503     | 7.11 | 3.39  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.90 | 3.68 | 3.54 | 4.37 | 5.29 | 6.29 | -    | -    | -    | -    | -    |      |
| 4373 | Fe XXII  | B10156   | 1305.800 | 9.495     | 7.11 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.25 | 5.02 | 4.88 | 5.70 | 6.63 | 7.63 | -    | -    | -    | -    | -    |      |
| 3850 | Fe XXI   | C03262   | 1307.200 | 9.485     | 7.05 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.00 | 4.48 | 4.87 | 6.12 | 7.42 | -    | -    | -    | -    | -    | -    |      |
| 3851 | Fe XXI   | C03263   | 1307.200 | 9.485     | 7.05 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.42 | 4.90 | 5.29 | 6.55 | 7.84 | -    | -    | -    | -    | -    | -    |      |
| 3852 | Fe XXI   | C03261   | 1307.600 | 9.482     | 7.05 | 3.98  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.57 | 4.05 | 4.44 | 5.70 | 6.99 | -    | -    | -    | -    | -    | -    |      |
| 416  | Ne X     | H4       | 1307.700 | 9.481     | 6.80 | 3.08  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.90 | 3.43 | 3.08 | 3.22 | 3.45 | 3.68 | 3.90 | 4.11 | 4.30 | 4.49 | 4.67 | 4.83 | 4.95 | 5.04 | -    |      |
| 3849 | Fe XXI   | C01248   | 1308.400 | 9.476     | 7.04 | 1.86  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 3.27 | 1.90 | 2.38 | 3.68 | 5.00 | -    | -    | -    | -    | -    | -    |      |
| 3848 | Fe XXI   | C02260   | 1311.300 | 9.455     | 7.05 | 4.72  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.31 | 4.78 | 5.17 | 6.43 | 7.73 | -    | -    | -    | -    | -    | -    |      |
| 3846 | Fe XXI   | C02263   | 1313.000 | 9.443     | 7.05 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.05 | 4.53 | 4.92 | 6.18 | 7.48 | -    | -    | -    | -    | -    | -    |      |
| 3847 | Fe XXI   | C02264   | 1313.000 | 9.443     | 7.05 | 4.72  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.30 | 4.78 | 5.17 | 6.43 | 7.72 | -    | -    | -    | -    | -    | -    |      |
| 4695 | Fe XXIII | BE10052  | 1313.100 | 9.442     | 7.19 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.97 | 4.98 | 4.25 | 4.61 | 5.16 | 5.82 | 6.70 | 7.83 | -    | -    | -    |      |
| 4372 | Fe XXII  | B06133   | 1313.500 | 9.439     | 7.11 | 4.72  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.23 | 5.01 | 4.87 | 5.70 | 6.62 | 7.62 | -    | -    | -    | -    | -    |      |
| 3844 | Fe XXI   | C07408   | 1316.700 | 9.416     | 7.05 | 3.69  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.31 | 3.76 | 4.14 | 5.38 | 6.68 | -    | -    | -    | -    | -    | -    |      |
| 3845 | Fe XXI   | C08408   | 1316.700 | 9.416     | 7.05 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.46 | 4.91 | 5.29 | 6.53 | 7.82 | -    | -    | -    | -    | -    | -    |      |
| 3843 | Fe XXI   | C08409   | 1317.200 | 9.413     | 7.05 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.96 | 4.41 | 4.79 | 6.04 | 7.33 | -    | -    | -    | -    | -    | -    |      |
| 658  | Mg X     | *2LI v   | 1319.000 | 9.400     | 6.77 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.31 | 6.23 | 5.29 | 4.68 | 4.48 | 4.94 | 5.78 | 6.65 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 657  | Mg X     | *2LI u   | 1319.100 | 9.399     | 6.77 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.15 | 6.07 | 5.13 | 4.52 | 4.32 | 4.78 | 5.62 | 6.49 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 3149 | Fe XX    | N04525   | 1319.400 | 9.397     | 6.99 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 8.22 | 5.60 | 4.71 | 5.61 | 7.29 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 5390 | Ni XXVI  | LI6      | 1320.200 | 9.391     | 7.28 | 2.77  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | 4.28 | 2.84 | 2.83 | 3.05 | 3.36 | 3.78 | 4.34 | 4.96 | 5.60 | 6.20 | 6.75 |
| 573  | Mg IX    | BE S2    | 1320.200 | 9.391     | 6.58 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.10 | 4.98 | 4.74 | 4.67 | 4.93 | 5.79 | 7.00 | 8.21 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 5237 | Ni XX    | F5       | 1320.200 | 9.391     | 6.82 | 2.55  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.64 | 3.35 | 2.56 | 3.11 | 5.22 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4371 | Fe XXII  | B06135   | 1320.200 | 9.391     | 7.11 | 3.00  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.51 | 3.29 | 3.14 | 3.97 | 4.90 | 5.90 | -    | -    | -    | -    | -    | -    |
| 4370 | Fe XXII  | B14246   | 1320.800 | 9.387     | 7.11 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.16 | 4.92 | 4.76 | 5.57 | 6.49 | 7.48 | -    | -    | -    | -    | -    | -    |
| 4369 | Fe XXII  | B14247   | 1321.800 | 9.380     | 7.11 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.74 | 4.50 | 4.33 | 5.15 | 6.07 | 7.06 | -    | -    | -    | -    | -    | -    |
| 4368 | Fe XXII  | B08153   | 1322.500 | 9.375     | 7.11 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 5.66 | 3.44 | 3.29 | 4.12 | 5.04 | 6.04 | -    | -    | -    | -    | -    | -    |
| 5365 | Ni XXV   | BE5      | 1323.200 | 9.370     | 7.16 | 2.80  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.80 | 3.55 | 2.82 | 3.33 | 3.91 | 4.49 | 5.14 | 5.89 | 6.69 | -    | -    | -    |
| 415  | Ne X     | H5       | 1324.500 | 9.361     | 6.80 | 3.39  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.24 | 3.76 | 3.39 | 3.53 | 3.75 | 3.98 | 4.19 | 4.40 | 4.59 | 4.78 | 4.95 | 5.10 | 5.23 | 5.32 |      |
| 655  | Mg X     | *2LI l   | 1330.200 | 9.321     | 6.66 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.78 | 5.74 | 4.90 | 4.53 | 4.64 | 5.35 | 6.36 | 7.36 | 8.28 | -    | -    | -    | -    | -    | -    | -    |      |
| 656  | Mg X     | *2LI j   | 1330.300 | 9.320     | 6.66 | 3.16  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.43 | 4.38 | 3.54 | 3.18 | 3.29 | 4.00 | 5.01 | 6.01 | 6.93 | -    | -    | -    | -    | -    | -    | -    |      |
| 654  | Mg X     | *2LI k   | 1330.600 | 9.318     | 6.66 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.63 | 4.58 | 3.74 | 3.38 | 3.49 | 4.19 | 5.21 | 6.21 | 7.13 | -    | -    | -    | -    | -    | -    | -    |      |
| 4367 | Fe XXII  | B06144   | 1330.600 | 9.318     | 7.11 | 4.60  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 7.11 | 4.89 | 4.75 | 5.57 | 6.50 | 7.50 | -    | -    | -    | -    | -    | -    |
| 653  | Mg X     | *3LI B13 | 1331.000 | 9.315     | 6.70 | 4.77  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.45 | 5.36 | 4.84 | 4.85 | 5.49 | 6.46 | 7.44 | 8.34 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 692  | Mg XI    | HE6      | 1331.000 | 9.315     | 6.81 | 1.91  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.71 | 3.18 | 2.27 | 1.91 | 2.19 | 2.80 | 3.43 | 3.99 | 4.51 | 4.98 | 5.41 | 5.81 | -    | -    | -    | -    | -    |
| 4366 | Fe XXII  | B07147   | 1331.900 | 9.309     | 7.11 | 4.37  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.89 | 4.67 | 4.52 | 5.34 | 6.27 | 7.27 | -    | -    | -    | -    | -    | -    |
| 4365 | Fe XXII  | B06146   | 1332.000 | 9.308     | 7.11 | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.84 | 4.61 | 4.47 | 5.29 | 6.22 | 7.22 | -    | -    | -    | -    | -    | -    |
| 3842 | Fe XXI   | C04308   | 1332.000 | 9.308     | 7.05 | 4.74  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 6.34 | 4.80 | 5.18 | 6.44 | 7.73 | -    | -    | -    | -    | -    | -    |      |
| 652  | Mg X     | *3LI B14 | 1332.000 | 9.308     | 6.70 | 5.05  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.73 | 5.64 | 5.12 | 5.13 | 5.77 | 6.74 | 7.72 | 8.62 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3148 | Fe XX    | N02523   | 1332.300 | 9.306     | 6.99 | 4.76  | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | 8.27 | 5.65 | 4.76 | 5.66 | 7.34 | -    | -    | -    | -    | -    | -    |      |
| 43   |          |          |          |           |      |       |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |





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| Nr   | ion | Transit. | E(eV)    | Lambda(A) | Tmax  | -Qmax | 4.0  | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|-----|----------|----------|-----------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 4354 | Fe  | XXII     | B08186   | 1350.100  | 9.183 | 7.11  | 4.70 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 7.22 | 4.99 | 4.84 | 5.66 | 6.59 | 7.58 | -    | -    | -    | -    | -    |
| 623  | Mg  | X        | *4LI C9  | 1350.600  | 9.180 | 6.72  | 3.63 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.58 | 4.35 | 3.73 | 3.68 | 4.29 | 5.24 | 6.20 | 7.09 | -    | -    | -    | -    | -    | -    |      |
| 622  | Mg  | X        | *4LI C7  | 1350.600  | 9.180 | 6.72  | 4.97 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.93 | 5.69 | 5.08 | 5.03 | 5.64 | 6.59 | 7.55 | 8.44 | -    | -    | -    | -    | -    | -    |      |
| 617  | Mg  | X        | *3LI B18 | 1350.600  | 9.180 | 6.70  | 3.41 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.13 | 4.02 | 3.49 | 3.49 | 4.13 | 5.10 | 6.07 | 6.97 | -    | -    | -    | -    | -    | -    |      |
| 621  | Mg  | X        | *4LI C8  | 1350.700  | 9.179 | 6.72  | 3.82 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.77 | 4.54 | 3.92 | 3.87 | 4.48 | 5.43 | 6.39 | 7.28 | -    | -    | -    | -    | -    | -    |      |
| 620  | Mg  | X        | *4LI C10 | 1350.700  | 9.179 | 6.72  | 5.08 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.03 | 5.80 | 5.18 | 5.13 | 5.74 | 6.69 | 7.65 | 8.54 | -    | -    | -    | -    | -    | -    |      |
| 3830 | Fe  | XXI      | C01284   | 1350.900  | 9.178 | 7.04  | 4.46 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.90 | 5.69 | 5.08 | 5.03 | 5.64 | 6.59 | 7.55 | 8.44 | -    | -    | -    | -    | -    | -    |      |
| 4353 | Fe  | XXII     | B10196   | 1351.200  | 9.176 | 7.11  | 3.77 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.31 | 4.07 | 3.92 | 4.74 | 5.66 | 6.66 | -    | -    | -    | -    | -    |      |
| 618  | Mg  | X        | *4LI C1  | 1351.200  | 9.176 | 6.72  | 4.70 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.66 | 5.42 | 4.80 | 4.75 | 5.36 | 6.31 | 7.27 | 8.16 | -    | -    | -    | -    | -    | -    |      |
| 619  | Mg  | X        | *4LI C2  | 1351.200  | 9.176 | 6.72  | 4.86 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.82 | 5.58 | 4.97 | 4.92 | 5.53 | 6.48 | 7.44 | 8.33 | -    | -    | -    | -    | -    | -    |      |
| 615  | Mg  | X        | *3LI B19 | 1351.500  | 9.174 | 6.70  | 4.50 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.22 | 5.11 | 4.57 | 4.57 | 5.21 | 6.18 | 7.15 | 8.06 | -    | -    | -    | -    | -    | -    |      |
| 616  | Mg  | X        | *3LI B20 | 1351.500  | 9.174 | 6.70  | 3.59 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.31 | 4.20 | 3.67 | 3.67 | 4.31 | 5.28 | 6.25 | 7.15 | -    | -    | -    | -    | -    | -    |      |
| 614  | Mg  | X        | *4LI C14 | 1351.600  | 9.173 | 6.72  | 3.69 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.65 | 4.42 | 3.80 | 3.75 | 4.36 | 5.31 | 6.27 | 7.16 | -    | -    | -    | -    | -    | -    |      |
| 3141 | Fe  | XX       | N01525   | 1351.600  | 9.173 | 6.98  | 4.64 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.79 | 5.41 | 4.65 | 5.61 | 7.33 | -    | -    | -    | -    | -    | -    |      |
| 613  | Mg  | X        | *4LI C16 | 1351.800  | 9.172 | 6.72  | 3.88 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.84 | 4.60 | 3.99 | 3.93 | 4.54 | 5.49 | 6.45 | 7.34 | -    | -    | -    | -    | -    | -    |      |
| 612  | Mg  | X        | *4LI C15 | 1351.800  | 9.172 | 6.72  | 4.71 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.66 | 5.43 | 4.81 | 4.76 | 5.37 | 6.32 | 7.28 | 8.17 | -    | -    | -    | -    | -    | -    |      |
| 610  | Mg  | X        | *4LI C5  | 1351.900  | 9.171 | 6.72  | 4.61 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.57 | 5.33 | 4.72 | 4.67 | 5.27 | 6.22 | 7.18 | 8.08 | -    | -    | -    | -    | -    | -    |      |
| 611  | Mg  | X        | *4LI C6  | 1351.900  | 9.171 | 6.72  | 4.99 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.95 | 5.71 | 5.10 | 5.05 | 5.65 | 6.61 | 7.56 | 8.46 | -    | -    | -    | -    | -    | -    |      |
| 690  | Mg  | XI       | HE4      | 1352.100  | 9.170 | 6.81  | 1.70 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.59 | 3.01 | 2.08 | 1.70 | 1.98 | 2.61 | 3.25 | 3.83 | 4.37 | 4.87 | 5.33 | -    | -    | -    |      |
| 609  | Mg  | X        | *3LI B5  | 1352.400  | 9.168 | 6.70  | 4.22 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.94 | 4.83 | 4.30 | 4.30 | 4.93 | 5.91 | 6.88 | 7.78 | -    | -    | -    | -    | -    | -    |      |
| 606  | Mg  | X        | *3LI B6  | 1352.500  | 9.167 | 6.70  | 4.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.34 | 5.23 | 4.69 | 4.69 | 5.33 | 6.30 | 7.27 | 8.17 | -    | -    | -    | -    | -    | -    |      |
| 607  | Mg  | X        | *4LI C17 | 1352.500  | 9.167 | 6.72  | 4.77 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.73 | 5.49 | 4.88 | 4.83 | 5.43 | 6.38 | 7.34 | 8.23 | -    | -    | -    | -    | -    | -    |      |
| 608  | Mg  | X        | *4LI C18 | 1352.500  | 9.167 | 6.72  | 4.88 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.84 | 5.60 | 4.99 | 4.94 | 5.54 | 6.50 | 7.45 | 8.35 | -    | -    | -    | -    | -    | -    |      |
| 605  | Mg  | X        | *4LI C13 | 1352.700  | 9.166 | 6.72  | 5.43 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.40 | 6.16 | 5.54 | 5.49 | 6.10 | 7.05 | 8.01 | 8.90 | -    | -    | -    | -    | -    | -    |      |
| 4352 | Fe  | XXII     | B10198   | 1352.700  | 9.166 | 7.11  | 4.18 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.72 | 4.48 | 4.33 | 5.15 | 6.07 | 7.06 | -    | -    | -    | -    | -    |      |
| 4351 | Fe  | XXII     | B09193   | 1353.100  | 9.163 | 7.11  | 4.29 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.82 | 4.58 | 4.43 | 5.25 | 6.17 | 7.17 | -    | -    | -    | -    | -    |      |
| 4350 | Fe  | XXII     | B09198   | 1355.200  | 9.149 | 7.11  | 4.29 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.83 | 4.59 | 4.44 | 5.26 | 6.18 | 7.17 | -    | -    | -    | -    | -    |      |
| 4349 | Fe  | XXII     | B04135   | 1355.900  | 9.144 | 7.11  | 4.07 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.57 | 4.36 | 4.21 | 5.04 | 5.97 | 6.96 | -    | -    | -    | -    | -    |      |
| 4348 | Fe  | XXII     | B03133   | 1356.400  | 9.141 | 7.11  | 4.46 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.96 | 4.75 | 4.61 | 5.43 | 6.36 | 7.36 | -    | -    | -    | -    | -    |      |
| 3829 | Fe  | XXI      | C05374   | 1357.100  | 9.136 | 7.05  | 4.31 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.92 | 4.38 | 4.75 | 6.00 | 7.29 | -    | -    | -    | -    | -    | -    |      |
| 4347 | Fe  | XXII     | B12271   | 1357.200  | 9.135 | 7.11  | 4.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.88 | 4.63 | 4.47 | 5.28 | 6.20 | 7.20 | -    | -    | -    | -    | -    |      |
| 5196 | Ni  | XIX      | NE1A1    | 1358.000  | 9.130 | 6.70  | 3.21 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.40 | 3.32 | -    | 3.33 | 4.47 | 7.07 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 3828 | Fe  | XXI      | C05387   | 1359.300  | 9.121 | 7.05  | 4.09 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.70 | 4.16 | 4.53 | 5.78 | 7.07 | -    | -    | -    | -    | -    | -    |      |
| 4346 | Fe  | XXII     | B03134   | 1360.100  | 9.116 | 7.11  | 4.37 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.88 | 4.66 | 4.52 | 5.35 | 6.28 | 7.27 | -    | -    | -    | -    | -    |      |
| 4345 | Fe  | XXII     | B01126   | 1361.900  | 9.104 | 7.10  | 4.00 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.28 | 4.23 | 4.19 | 5.06 | 6.02 | 7.03 | -    | -    | -    | -    | -    |      |
| 4344 | Fe  | XXII     | B05147   | 1364.000  | 9.090 | 7.11  | 4.00 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.52 | 4.30 | 4.15 | 4.97 | 5.90 | 6.90 | -    | -    | -    | -    | -    |      |
| 4343 | Fe  | XXII     | B05148   | 1364.600  | 9.086 | 7.11  | 3.58 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.10 | 3.88 | 3.73 | 4.55 | 5.48 | 6.48 | -    | -    | -    | -    | -    |      |
| 4342 | Fe  | XXII     | B06186   | 1365.200  | 9.082 | 7.11  | 4.01 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.54 | 4.31 | 4.16 | 4.98 | 5.90 | 6.90 | -    | -    | -    | -    | -    |      |
| 5389 | Ni  | XXVI     | LI5      | 1366.400  | 9.074 | 7.28  | 2.78 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 4.25 | 2.84 | 2.85 | 3.07 | 3.36 | 3.76 | 4.28 | 4.88 | 5.48 | 6.06 | 6.60 |
| 4341 | Fe  | XXII     | B02129   | 1366.400  | 9.074 | 7.11  | 3.00 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.50 | 3.29 | 3.15 | 3.98 | 4.91 | 5.91 | -    | -    | -    | -    | -    |      |
| 4340 | Fe  | XXII     | B02130   | 1366.500  | 9.073 | 7.11  | 3.02 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.52 | 3.31 | 3.17 | 4.00 | 4.93 | 5.93 | -    | -    | -    | -    | -    |      |
| 4339 | Fe  | XXII     | B04144   | 1366.700  | 9.072 | 7.11  | 4.25 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.77 | 4.55 | 4.40 | 5.22 | 6.15 | 7.15 | -    | -    | -    | -    | -    |      |
| 4338 | Fe  | XXII     | B05156   | 1367.700  | 9.065 | 7.11  | 4.66 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.18 | 4.95 | 4.81 | 5.63 | 6.56 | 7.55 | -    | -    | -    | -    | -    |      |
| 4336 | Fe  | XXII     | B04146   | 1368.200  | 9.062 | 7.11  | 3.53 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.05 | 3.82 | 3.68 | 4.50 | 5.43 | 6.43 | -    | -    | -    | -    | -    |      |
| 4337 | Fe  | XXII     | B08193   | 1368.200  | 9.062 | 7.11  | 4.30 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.83 | 4.60 | 4.44 | 5.26 | 6.19 | 7.18 | -    | -    | -    | -    | -    |      |
| 4335 | Fe  | XXII     | B04147   | 1370.900  | 9.044 | 7.11  | 3.66 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.18 | 3.95 | 3.81 | 4.63 | 5.56 | 6.55 | -    | -    | -    | -    | -    |      |
| 4334 | Fe  | XXII     | B04149   | 1371.800  | 9.038 | 7.11  | 4.44 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.96 | 4.73 | 4.59 | 5.41 | 6.34 | 7.33 | -    | -    | -    | -    | -    |      |
| 3826 | Fe  | XXI      | C05412   | 1372.600  | 9.033 | 7.05  | 4.58 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.19 | 4.64 | 5.02 | 6.26 | 7.56 | -    | -    | -    | -    | -    | -    |      |
| 4333 | Fe  | XXII     | B03144   | 1373.300  | 9.028 | 7.11  | 4.04 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.55 | 4.33 | 4.19 | 5.01 | 5.94 | 6.94 | -    | -    | -    | -    | -    |      |
| 3825 | Fe  | XXI      | C05418   | 1374.100  | 9.023 | 7.05  | 4.50 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.11 | 4.56 | 4.94 | 6.19 | 7.48 | -    | -    | -    | -    | -    | -    |      |
| 4332 | Fe  | XXII     | B04156   | 1374.700  | 9.019 | 7.11  | 3.58 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.10 | 3.87 | 3.73 | 4.55 | 5.48 | 6.47 | -    | -    | -    | -    | -    |      |
| 5407 | Ni  | XXVII    | HE9      | 1377.600  | 9.000 | 7.80  | 4.69 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.97 | 5.10 | 4.77 | 4.69 | 4.77 | 5.00 | 5.32 | 5.68 | 6.04 | 6.40 |
| 4331 | Fe  | XXII     | B03149   | 1378.500  | 8.994 | 7.11  | 3.84 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.35 | 4.13 | 3.98 | 4.81 | 5.74 | 6.73 | -    | -    |      |      |      |      |



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| Nr   | ion | Transit. | E(eV)   | Lambda(A) | Tmax  | -Qmax | 4.0   | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |      |
|------|-----|----------|---------|-----------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 4307 | Fe  | XXII     | B02192  | 1454.700  | 8.523 | 7.11  | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.11 | 4.87 | 4.72 | 5.54 | 6.46 | 7.46 | -    | -    | -    | -    | -    | -    |      |
| 5285 | Ni  | XXII     | N7      | 1458.600  | 8.500 | 6.99  | 2.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.11 | 3.36 | 2.53 | 3.59 | 5.49 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 5405 | Ni  | XXVII    | HE7     | 1458.600  | 8.500 | 7.79  | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | 5.85 | 4.94 | 4.57 | 4.46 | 4.58 | 4.89 | 5.31 | 5.76 | 6.18 | 6.58 |      |
| 4668 | Fe  | XXIII    | BE25211 | 1459.200  | 8.497 | 7.21  | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.19 | 4.27 | 4.51 | 4.97 | 5.58 | 6.42 | 7.53 | -    | -    | -    | -    |      |
| 4306 | Fe  | XXII     | B08304  | 1463.500  | 8.472 | 7.11  | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.49 | 4.23 | 4.06 | 4.87 | 5.79 | 6.78 | -    | -    | -    | -    | -    | -    |      |
| 689  | Mg  | XI       | HE S2   | 1463.800  | 8.470 | 6.89  | 3.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.00 | 4.08 | 3.20 | 3.22 | 3.72 | 4.30 | 4.87 | 5.41 | 5.94 | 6.45 | 6.95 | -    | -    | -    |      |
| 4667 | Fe  | XXIII    | BE24210 | 1464.300  | 8.467 | 7.21  | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.14 | 4.22 | 4.45 | 4.92 | 5.52 | 6.37 | 7.48 | -    | -    | -    | -    |      |
| 4666 | Fe  | XXIII    | BE05081 | 1465.000  | 8.463 | 7.19  | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.36 | 5.36 | 4.62 | 4.97 | 5.51 | 6.17 | 7.04 | 8.17 | -    | -    | -    | -    |      |
| 4665 | Fe  | XXIII    | BE31244 | 1465.700  | 8.459 | 7.22  | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.62 | 4.68 | 4.92 | 5.37 | 5.98 | 6.83 | 7.93 | -    | -    | -    | -    |      |
| 461  | Na  | XI       | H2      | 1467.300  | 8.450 | 6.90  | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.76 | 4.75 | 3.89 | 3.86 | 4.08 | 4.33 | 4.57 | 4.79 | 5.01 | 5.21 | 5.41 | 5.58 | 5.72 | 5.81 |
| 4305 | Fe  | XXII     | B01191  | 1468.300  | 8.444 | 7.10  | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.58 | 4.52 | 4.46 | 5.33 | 6.29 | 7.30 | -    | -    | -    | -    | -    | -    |      |
| 4664 | Fe  | XXIII    | BE05085 | 1468.500  | 8.443 | 7.19  | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 8.31 | 5.30 | 4.56 | 4.91 | 5.45 | 6.11 | 6.98 | 8.11 | -    | -    | -    | -    |      |
| 4304 | Fe  | XXII     | B01192  | 1469.400  | 8.438 | 7.10  | 4.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.54 | 4.48 | 4.42 | 5.30 | 6.25 | 7.26 | -    | -    | -    | -    | -    | -    |      |
| 702  | Mg  | XII      | H1B     | 1471.800  | 8.424 | 7.01  | 2.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.78 | 2.44 | 2.07 | 2.20 | 2.43 | 2.66 | 2.87 | 3.07 | 3.26 | 3.45 | 3.62 | 3.77 | 3.88 |      |
| 4663 | Fe  | XXIII    | BE32268 | 1472.100  | 8.422 | 7.22  | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.45 | 4.51 | 4.74 | 5.20 | 5.81 | 6.65 | 7.76 | -    | -    | -    | -    |      |
| 688  | Mg  | XI       | HE S4   | 1472.500  | 8.420 | 6.91  | 2.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.33 | 4.14 | 3.09 | 3.01 | 3.44 | 3.97 | 4.51 | 5.04 | 5.56 | 6.07 | 6.56 | -    | -    | -    |      |
| 687  | Mg  | XI       | HE S3   | 1472.500  | 8.420 | 6.91  | 3.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.28 | 4.18 | 3.18 | 3.14 | 3.59 | 4.14 | 4.69 | 5.22 | 5.74 | 6.25 | 6.75 | -    | -    | -    |      |
| 701  | Mg  | XII      | H1A     | 1472.700  | 8.419 | 7.00  | 1.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 3.49 | 2.16 | 1.80 | 1.94 | 2.18 | 2.42 | 2.65 | 2.87 | 3.08 | 3.28 | 3.46 | 3.61 | 3.72 |      |      |
| 4303 | Fe  | XXII     | B08321  | 1475.100  | 8.405 | 7.11  | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.22 | 3.95 | 3.78 | 4.59 | 5.51 | 6.49 | -    | -    | -    | -    | -    | -    |      |
| 4662 | Fe  | XXIII    | BE22209 | 1476.900  | 8.395 | 7.22  | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.43 | 4.50 | 4.74 | 5.20 | 5.81 | 6.65 | 7.76 | -    | -    | -    | -    |      |
| 4302 | Fe  | XXII     | B06304  | 1478.300  | 8.387 | 7.11  | 3.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.12 | 3.86 | 3.69 | 4.50 | 5.42 | 6.41 | -    | -    | -    | -    | -    | -    |      |
| 4661 | Fe  | XXIII    | BE10104 | 1479.300  | 8.381 | 7.19  | 4.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.11 | 5.08 | 4.32 | 4.66 | 5.20 | 5.85 | 6.73 | 7.85 | -    | -    | -    | -    |
| 4903 | Fe  | XXIV     | LI03009 | 1480.200  | 8.376 | 7.31  | 2.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.32 | 3.06 | 3.00 | 3.18 | 3.51 | 4.06 | 4.83 | 5.74 | 6.73 | -    | -    | -    |
| 4301 | Fe  | XXII     | B06310  | 1482.700  | 8.362 | 7.11  | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.95 | 4.69 | 4.52 | 5.33 | 6.25 | 7.23 | -    | -    | -    | -    | -    | -    |
| 4300 | Fe  | XXII     | B07319  | 1483.600  | 8.357 | 7.11  | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.27 | 5.01 | 4.84 | 5.65 | 6.56 | 7.55 | -    | -    | -    | -    | -    | -    |      |
| 4299 | Fe  | XXII     | B06321  | 1487.300  | 8.336 | 7.11  | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.86 | 4.60 | 4.43 | 5.23 | 6.15 | 7.14 | -    | -    | -    | -    | -    | -    |      |
| 4298 | Fe  | XXII     | B06322  | 1487.700  | 8.334 | 7.11  | 3.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.02 | 3.76 | 3.59 | 4.39 | 5.31 | 6.30 | -    | -    | -    | -    | -    | -    |      |
| 710  | Al  | V        | F S     | 1488.400  | 8.330 | 6.03  | 11.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4902 | Fe  | XXIV     | LI03012 | 1490.200  | 8.320 | 7.32  | 3.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.92 | 3.64 | 3.58 | 3.75 | 4.07 | 4.60 | 5.34 | 6.22 | 7.17 | -    | -    | -    |
| 4901 | Fe  | XXIV     | LI03013 | 1490.700  | 8.317 | 7.32  | 2.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 3.96 | 2.69 | 2.62 | 2.79 | 3.11 | 3.64 | 4.39 | 5.27 | 6.22 | -    | -    | -    |
| 4660 | Fe  | XXIII    | BE01050 | 1490.700  | 8.317 | 7.19  | 3.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.81 | 3.80 | 3.04 | 3.36 | 3.86 | 4.46 | 5.26 | 6.28 | -    | -    | -    | -    | -    |
| 4659 | Fe  | XXIII    | BE01052 | 1493.100  | 8.304 | 7.19  | 2.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.10 | 3.11 | 2.38 | 2.74 | 3.28 | 3.93 | 4.81 | 5.92 | -    | -    | -    | -    |
| 4658 | Fe  | XXIII    | BE03065 | 1495.600  | 8.290 | 7.19  | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.30 | 5.29 | 4.56 | 4.91 | 5.45 | 6.11 | 6.99 | 8.12 | -    | -    | -    | -    |
| 4657 | Fe  | XXIII    | BE03066 | 1495.900  | 8.288 | 7.19  | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.47 | 5.47 | 4.73 | 5.09 | 5.63 | 6.29 | 7.17 | 8.30 | -    | -    | -    | -    |
| 4900 | Fe  | XXIV     | LI02009 | 1496.500  | 8.285 | 7.31  | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.62 | 3.36 | 3.30 | 3.49 | 3.82 | 4.36 | 5.13 | 6.04 | 7.03 | -    | -    | -    |
| 4655 | Fe  | XXIII    | BE04078 | 1498.500  | 8.274 | 7.19  | 4.39  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.14 | 5.13 | 4.40 | 4.75 | 5.29 | 5.85 | 6.82 | 7.95 | -    | -    | -    | -    |
| 4656 | Fe  | XXIII    | BE04079 | 1498.500  | 8.274 | 7.19  | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.34 | 5.33 | 4.60 | 4.95 | 5.49 | 6.15 | 7.02 | 8.15 | -    | -    | -    | -    |
| 711  | Al  | VI       | O S     | 1499.200  | 8.270 | 6.07  | 10.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4654 | Fe  | XXIII    | BE02064 | 1499.400  | 8.269 | 7.19  | 4.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 8.45 | 5.44 | 4.70 | 5.06 | 5.60 | 6.26 | 7.14 | 8.27 | -    | -    | -    | -    |
| 4297 | Fe  | XXII     | B10382  | 1501.600  | 8.257 | 7.11  | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.81 | 4.54 | 4.36 | 5.16 | 6.07 | 7.06 | -    | -    | -    | -    | -    | -    |
| 4296 | Fe  | XXII     | B10384  | 1502.500  | 8.252 | 7.11  | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.26 | 4.98 | 4.81 | 5.61 | 6.52 | 7.51 | -    | -    | -    | -    | -    | -    |
| 4899 | Fe  | XXIV     | LI02012 | 1506.100  | 8.232 | 7.32  | 2.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.21 | 2.93 | 2.86 | 3.04 | 3.36 | 3.89 | 4.63 | 5.51 | 6.47 | -    | -    | -    |
| 4295 | Fe  | XXII     | B02260  | 1507.600  | 8.224 | 7.11  | 4.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.15 | 4.90 | 4.73 | 5.55 | 6.47 | 7.46 | -    | -    | -    | -    | -    |      |

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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0  | 6.2  | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 4285 | Fe XXII  | B04322   | 1523.900 | 8.136     | 7.11 | 4.06  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.63 | 4.37 | 4.19 | 5.00 | 5.92 | 6.91 | -    | -    | -    | -    | -    |      |
| 4284 | Fe XXII  | B03307   | 1524.800 | 8.131     | 7.11 | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.95 | 4.69 | 4.52 | 5.32 | 6.24 | 7.23 | -    | -    | -    | -    | -    |      |
| 716  | Al VIII  | C S      | 1525.000 | 8.130     | 6.14 | 7.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.17 | 7.33 | 8.25 | 9.21 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4283 | Fe XXII  | B03318   | 1529.200 | 8.108     | 7.11 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.85 | 4.58 | 4.41 | 5.22 | 6.14 | 7.13 | -    | -    | -    | -    | -    |      |
| 4282 | Fe XXII  | B03320   | 1529.500 | 8.106     | 7.11 | 4.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.03 | 4.76 | 4.59 | 5.40 | 6.32 | 7.31 | -    | -    | -    | -    | -    |      |
| 4652 | Fe XXIII | BE11207  | 1530.300 | 8.102     | 7.22 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.47 | 4.54 | 4.77 | 5.23 | 5.84 | 6.69 | 7.79 | -    | -    | -    |      |
| 4281 | Fe XXII  | B07381   | 1531.200 | 8.097     | 7.11 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.22 | 4.94 | 4.76 | 5.56 | 6.48 | 7.46 | -    | -    | -    | -    | -    |      |
| 4280 | Fe XXII  | B01271   | 1532.400 | 8.091     | 7.10 | 2.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.95 | 2.87 | 2.81 | 3.68 | 4.63 | 5.64 | -    | -    | -    | -    | -    |      |
| 4279 | Fe XXII  | B06380   | 1534.100 | 8.082     | 7.11 | 4.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.94 | 4.67 | 4.49 | 5.29 | 6.20 | 7.19 | -    | -    | -    | -    | -    |      |
| 720  | Al IX    | B S      | 1540.200 | 8.050     | 6.22 | 6.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.45 | 6.70 | 6.95 | 7.37 | 7.87 | 8.79 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4651 | Fe XXIII | BE10166  | 1548.400 | 8.007     | 7.19 | 4.21  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.04 | 4.98 | 4.21 | 4.55 | 5.07 | 5.72 | 6.60 | 7.72 | -    | -    | -    |      |
| 4898 | Fe XXIV  | LI01010  | 1550.600 | 7.996     | 7.28 | 2.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.99 | 2.83 | 2.82 | 3.04 | 3.39 | 3.94 | 4.70 | 5.61 | 6.59 | -    |      |
| 4897 | Fe XXIV  | LI01011  | 1552.500 | 7.986     | 7.28 | 2.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 3.72 | 2.55 | 2.55 | 2.77 | 3.11 | 3.67 | 4.43 | 5.33 | 6.31 | -    |      |
| 724  | Al X     | BE S2    | 1557.600 | 7.960     | 6.65 | 5.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.77 | 6.07 | 5.62 | 5.51 | 5.60 | 6.16 | 7.23 | 8.43 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 4278 | Fe XXII  | B02306   | 1559.200 | 7.952     | 7.11 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.08 | 4.82 | 4.64 | 5.45 | 6.37 | 7.36 | -    | -    | -    | -    | -    |      |
| 4648 | Fe XXIII | BE05100  | 1562.700 | 7.934     | 7.19 | 3.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.94 | 3.90 | 3.15 | 3.49 | 4.02 | 4.68 | 5.55 | 6.68 | -    | -    | -    |      |
| 4647 | Fe XXIII | BE05108  | 1569.000 | 7.902     | 7.19 | 2.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.69 | 3.65 | 2.90 | 3.24 | 3.77 | 4.42 | 5.30 | 6.43 | -    | -    | -    |      |
| 4277 | Fe XXII  | B01303   | 1569.800 | 7.898     | 7.10 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.42 | 4.34 | 4.27 | 5.14 | 6.09 | 7.09 | -    | -    | -    | -    | -    |      |
| 4276 | Fe XXII  | B01305   | 1571.000 | 7.892     | 7.10 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.21 | 4.13 | 4.06 | 4.93 | 5.88 | 6.88 | -    | -    | -    | -    | -    |      |
| 4275 | Fe XXII  | B01306   | 1573.600 | 7.879     | 7.10 | 3.82  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.15 | 4.07 | 4.00 | 4.87 | 5.81 | 6.82 | -    | -    | -    | -    | -    |      |
| 4274 | Fe XXII  | B01311   | 1574.800 | 7.873     | 7.10 | 3.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.71 | 3.63 | 3.56 | 4.43 | 5.37 | 6.38 | -    | -    | -    | -    | -    |      |
| 739  | Al XII   | HE6      | 1574.900 | 7.872     | 6.91 | 2.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.75 | 4.79 | 3.68 | -    | -    | 3.08 | 3.05 | 3.52 | 4.14 | 4.71 | 5.24 | 5.71 | 6.15 | 6.55 | 6.91 | -    |      |
| 4273 | Fe XXII  | B01312   | 1575.200 | 7.871     | 7.10 | 3.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 5.55 | 3.47 | 3.40 | 4.27 | 5.21 | 6.22 | -    | -    | -    | -    | -    |      |
| 686  | Mg XI    | HE3      | 1579.300 | 7.851     | 6.81 | 2.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.22 | 3.74 | 2.85 | -    | -    | 2.50 | 2.79 | 3.42 | 4.06 | 4.63 | 5.16 | 5.64 | 6.08 | 6.49 | -    | -    |      |
| 729  | Al XI    | LI S2    | 1586.900 | 7.813     | 6.77 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.56 | 4.37 | 3.82 | -    | -    | 3.67 | 4.03 | 4.86 | 5.80 | 6.70 | -    | -    | -    | -    | -    | -    |      |
| 723  | Al X     | BE S4    | 1586.900 | 7.813     | 6.75 | 5.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.19 | 6.27 | 5.87 | -    | -    | 5.77 | 6.22 | 7.21 | 8.36 | 9.49 | -    | -    | -    | -    | -    | -    |      |
| 722  | Al X     | BE S3    | 1586.900 | 7.813     | 6.73 | 5.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.87 | 6.10 | 5.79 | -    | -    | 5.75 | 6.24 | 7.25 | 8.42 | 9.56 | -    | -    | -    | -    | -    | -    |      |
| 738  | Al XII   | HE5      | 1588.100 | 7.807     | 6.89 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.07 | 5.14 | 4.06 | 3.51 | 3.53 | 4.04 | 4.68 | 5.28 | 5.83 | 6.33 | 6.79 | 7.23 |
| 4646 | Fe XXIII | BE06126  | 1590.800 | 7.794     | 7.19 | 4.28  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.10 | 5.05 | 4.28 | 4.62 | 5.14 | 5.80 | 6.67 | 7.80 | -    | -    | -    |      |
| 4645 | Fe XXIII | BE04099  | 1595.300 | 7.772     | 7.19 | 4.45  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.24 | 5.20 | 4.45 | 4.79 | 5.32 | 5.98 | 6.85 | 7.98 | -    | -    | -    |      |
| 728  | Al XI    | LI S3    | 1597.300 | 7.762     | 6.79 | 3.72  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.19 | 4.69 | 3.96 | 3.72 | 4.05 | 4.87 | 5.83 | 6.75 | 7.60 | -    | -    |      |
| 737  | Al XII   | HE4      | 1598.300 | 7.757     | 6.91 | 2.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.63 | 4.63 | 3.48 | 2.86 | 2.81 | 3.29 | 3.92 | 4.51 | 5.06 | 5.57 | 6.04 | 6.48 |
| 727  | Al XI    | LI S4    | 1599.400 | 7.752     | 6.81 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.53 | 4.88 | 4.05 | -    | -    | 3.75 | 4.03 | 4.84 | 5.78 | 6.68 | 7.53 | -    | -    | -    | -    | -    |      |
| 4644 | Fe XXIII | BE04106  | 1602.500 | 7.737     | 7.19 | 4.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.01 | 4.96 | 4.18 | 4.49 | 4.99 | 5.60 | 6.41 | 7.44 | -    | -    | -    |      |
| 4643 | Fe XXIII | BE04107  | 1603.300 | 7.733     | 7.20 | 3.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.26 | 4.20 | 3.41 | 3.72 | 4.20 | 4.80 | 5.59 | 6.61 | -    | -    | -    |      |
| 4642 | Fe XXIII | BE03099  | 1606.400 | 7.718     | 7.19 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.47 | 5.43 | 4.67 | 5.02 | 5.55 | 6.20 | 7.08 | 8.21 | -    | -    | -    |      |
| 4272 | Fe XXII  | B02374   | 1607.300 | 7.714     | 7.11 | 4.68  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.27 | 4.99 | 4.81 | 5.61 | 6.53 | 7.52 | -    | -    | -    | -    | -    |      |
| 4271 | Fe XXII  | B02377   | 1608.100 | 7.710     | 7.11 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.09 | 4.82 | 4.64 | 5.44 | 6.36 | 7.34 | -    | -    | -    | -    | -    |      |
| 5284 | Ni XXII  | N8       | 1610.200 | 7.700     | 6.99 | 5.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 8.68 | 5.90 | 5.04 | 6.09 | 7.97 | -    | -    | -    | -    | -    | -    |      |
| 4641 | Fe XXIII | BE03105  | 1614.000 | 7.682     | 7.19 | 4.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.95 | 4.90 | 4.11 | 4.43 | 4.92 | 5.52 | 6.32 | 7.35 | -    | -    | -    |      |
| 4640 | Fe XXIII | BE03106  | 1614.200 | 7.681     | 7.20 | 3.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.48 | 4.42 | 3.63 | 3.93 | 4.40 | 4.99 | 5.78 | 6.78 | -    | -    | -    |      |
| 4639 | Fe XXIII | BE02105  | 1617.700 | 7.664     | 7.19 | 3.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.80 | 4.74 | 3.96 | 4.27 | 4.76 | 5.36 | 6.16 | 7.18 | -    | -    | -    |      |
| 5338 | Ni XXIV  | B2C      | 1622.800 | 7.640     | 7.09 | 3.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.41 | 4.08 | 4.08 | 5.21 | 6.34 | 7.41 | -    | -    | -    | -    | -    |      |
| 5337 | Ni XXIV  | B2B      | 1622.800 | 7.640     | 7.11 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.99 | 4.52 | 4.36 | 5.31 | 6.26 | 7.14 | 8.04 | -    | -    | -    | -    |      |
| 5336 | Ni XXIV  | B2A      | 1639.800 | 7.561     | 7.11 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.26 | 3.79 | 3.64 | 4.58 | 5.53 | 6.41 | 7.31 | -    | -    | -    | -    |      |
| 4638 | Fe XXIII | BE01102  | 1658.000 | 7.478     | 7.20 | 3.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 7.49 | 4.40 | 3.59 | 3.86 | 4.31 | 4.86 | 5.62 | 6.60 | -    | -    | -    |      |
| 685  | Mg XI    | HE2      | 1659.100 | 7.473     | 6.82 | 2.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.84 | 4.29 | 3.35 | -    | -    | 2.97 | 3.23 | 3.85 | 4.48 | 5.05 | 5.56 | 6.04 | 6.48 | 6.89 | -    | -    |      |
| 4637 | Fe XXIII | BE01104  | 1659.100 | 7.473     | 7.19 | 2.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 6.59 | 3.55 | 2.79 | 3.13 | 3.66 | 4.30 | 5.16 | 6.27 | -    | -    | -    |      |
| 4896 | Fe XXIV  | LI03016  | 1663.300 | 7.454     | 7.31 | 3.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | 4.87 | 3.58 | 3.52 | 3.70 | 4.04 | 4.61 | 5.40 | 6.38 | 7.46 | -    | -    |      |
| 4895 | Fe XXIV  | LI03019  | 1666.900 | 7.438     | 7.34 | 3.88  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 5.34 | 4.00 | 3.89 | 4.03 | 4.42 | 4.81 | 5.50 | 6.32 | 7.22 | -    | -    |
| 4894 | Fe XXIV  | LI03020  | 1667.100 | 7.437     | 7.33 | 3.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | 4.44 | 3.12 | 3.03 | 3.19 | 3.49 | 4.00 | 4.72 | 5.57 |      |      |      |



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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4  | 6.6  | 6.8  | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |   |   |   |   |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|---|---|---|
| 1076 | S XII    | B S      | 2384.300 | 5.200     | 6.48 | 5.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.27 | 5.38 | 5.36 | 5.74 | 6.16 | 6.82 | 7.91 | 9.17 | -    | -    | -    | -    | -    | -    | -    | - |   |   |   |
| 1095 | S XIII   | BE S2    | 2407.500 | 5.150     | 6.81 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.01 | 4.27 | 4.17 | 4.27 | 4.69 | 5.56 | 6.66 | 7.83 | -    | -    | -    | -    | -    | -    | - | - |   |   |
| 1150 | S XV     | HE6      | 2426.300 | 5.110     | 7.18 | 2.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.21 | 3.08 | 2.44 | 2.25 | 2.53 | 3.05 | 3.59 | 4.08 | 4.52 | 4.93 | 5.31 | 5.64 | 5.92 | - | - |   |   |
| 1094 | S XIII   | BE S4    | 2440.200 | 5.081     | 6.95 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.28 | 5.09 | 4.71 | 4.62 | 4.94 | 5.75 | 6.82 | 7.91 | -    | -    | -    | -    | -    | -    | - | - |   |   |
| 1121 | S XIV    | LI S2    | 2440.200 | 5.081     | 7.01 | 2.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.90 | 3.42 | 2.85 | 2.66 | 2.85 | 3.48 | 4.33 | 5.18 | 5.98 | -    | -    | -    | -    | -    | - | - |   |   |
| 1093 | S XIII   | BE S3    | 2440.200 | 5.081     | 6.92 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.92 | 4.87 | 4.58 | 4.56 | 4.92 | 5.75 | 6.83 | 7.93 | -    | -    | -    | -    | -    | -    | - | - |   |   |
| 1149 | S XV     | HE5      | 2447.000 | 5.067     | 7.16 | 2.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.38 | 3.29 | 2.70 | 2.56 | 2.89 | 3.44 | 4.00 | 4.52 | 5.00 | 5.44 | 5.85 | 6.23 | -    | - | - |   |   |
| 1120 | S XIV    | LI S3    | 2455.100 | 5.050     | 7.04 | 2.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.66 | 3.88 | 3.13 | 2.85 | 3.01 | 3.63 | 4.49 | 5.36 | 6.19 | -    | -    | -    | -    | -    | - | - |   |   |
| 1119 | S XIV    | LI S4    | 2459.000 | 5.042     | 7.05 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.03 | 4.10 | 3.26 | 2.92 | 3.04 | 3.64 | 4.48 | 5.35 | 6.17 | -    | -    | -    | -    | -    | - | - | - |   |
| 1148 | S XV     | HE4      | 2460.500 | 5.039     | 7.18 | 1.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 3.94 | 2.79 | 2.13 | 1.92 | 2.20 | 2.73 | 3.29 | 3.81 | 4.30 | 4.75 | 5.17 | 5.55 | 5.88 | - | - | - |   |
| 954  | Si XIV   | H3       | 2504.700 | 4.950     | 7.24 | 3.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.90 | 4.68 | 3.45 | 3.06 | 3.13 | 3.33 | 3.55 | 3.76 | 3.96 | 4.16 | 4.34 | 4.51 | 4.65 | - | - | - |   |
| 953  | Si XIV   | H4       | 2567.000 | 4.830     | 7.24 | 3.42  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.34 | 5.09 | 3.83 | 3.43 | 3.50 | 3.69 | 3.90 | 4.10 | 4.30 | 4.49 | 4.67 | 4.84 | 4.98 | - | - | - |   |
| 1147 | S XV     | HE S2    | 2591.500 | 4.784     | 7.26 | 3.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.07 | 3.76 | 3.21 | 3.32 | 3.77 | 4.30 | 4.83 | 5.35 | 5.87 | 6.37 | 6.85 | -    | - | - |   |   |
| 952  | Si XIV   | H5       | 2599.300 | 4.770     | 7.25 | 3.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.68 | 5.42 | 4.15 | 3.74 | 3.80 | 3.99 | 4.19 | 4.39 | 4.59 | 4.78 | 4.95 | 5.12 | 5.26 | - | - | - |   |
| 1160 | S XVI    | H1B      | 2619.600 | 4.733     | 7.41 | 2.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.37 | 3.58 | 2.63 | 2.36 | 2.45 | 2.64 | 2.84 | 3.04 | 3.23 | 3.41 | 3.59 | 3.74 | - | - | - |   |
| 1145 | S XV     | HE S3    | 2621.200 | 4.730     | 7.28 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.38 | 3.94 | 3.31 | 3.37 | 3.79 | 4.30 | 4.82 | 5.33 | 5.84 | 6.34 | 6.82 | 7.25 | - | - | - |   |
| 1146 | S XV     | HE S4    | 2621.200 | 4.730     | 7.28 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.43 | 3.92 | 3.26 | 3.29 | 3.69 | 4.19 | 4.70 | 5.22 | 5.72 | 6.22 | 6.70 | 7.13 | - | - | - |   |
| 1159 | S XVI    | H1A      | 2621.800 | 4.729     | 7.41 | 2.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.08 | 3.30 | 2.35 | 2.10 | 2.21 | 2.41 | 2.62 | 2.83 | 3.04 | 3.24 | 3.42 | 3.58 | - | - | - |   |
| 1144 | S XV     | HE3      | 2876.700 | 4.310     | 7.17 | 2.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.41 | 4.41 | 3.43 | 2.87 | 2.71 | 3.01 | 3.54 | 4.09 | 4.60 | 5.07 | 5.51 | 5.91 | 6.28 | 6.59 | - | - | - |   |
| 1182 | Ar X     | F S      | 2973.200 | 4.170     | 6.44 | 8.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.91 | 9.76 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - | - | - |   |
| 1195 | Ar XI    | O S      | 2987.600 | 4.150     | 6.49 | 8.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.64 | 8.87 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - | - | - |   |
| 1204 | Ar XII   | N S      | 3009.300 | 4.120     | 6.53 | 6.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.38 | 6.94 | 8.32 | 9.73 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | - | - | - |   |
| 1143 | S XV     | HE2      | 3024.000 | 4.100     | 7.17 | 3.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.05 | 4.96 | 3.93 | 3.34 | 3.16 | 3.44 | 3.96 | 4.51 | 5.01 | 5.47 | 5.90 | 6.31 | 6.67 | 6.98 | - | - | - |   |
| 1211 | Ar XIII  | C S      | 3031.400 | 4.090     | 6.57 | 6.05  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.23 | 6.08 | 6.90 | 7.86 | 8.85 | -    | -    | -    | -    | -    | -    | -    | -    | -    | - | - | - | - |
| 1220 | Ar XIV   | B S      | 3053.800 | 4.060     | 6.64 | 5.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.63 | 5.66 | 5.86 | 6.33 | 6.91 | 7.78 | 8.94 | -    | -    | -    | -    | -    | -    | -    | - | - | - |   |
| 1232 | Ar XV    | BE S2    | 3076.500 | 4.030     | 6.91 | 4.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.95 | 5.12 | 4.70 | 4.69 | 4.89 | 5.43 | 6.35 | 7.45 | 8.52 | -    | -    | -    | -    | -    | - | - | - |   |
| 1142 | S XV     | HE1      | 3091.900 | 4.010     | 7.18 | 3.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.49 | 5.36 | 4.30 | 3.69 | 3.50 | 3.78 | 4.30 | 4.83 | 5.33 | 5.79 | 6.22 | 6.62 | 6.98 | 7.29 | - | - | - |   |
| 1258 | Ar XVII  | HE6      | 3107.400 | 3.990     | 7.33 | 3.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.24 | 4.52 | 3.62 | 3.13 | 3.06 | 3.38 | 3.86 | 4.34 | 4.79 | 5.20 | 5.58 | 5.93 | 6.23 | - | - | - |   |
| 1158 | S XVI    | H2       | 3107.400 | 3.990     | 7.41 | 2.79  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.79 | 4.02 | 3.06 | 2.79 | 2.89 | 3.09 | 3.31 | 3.52 | 3.73 | 3.92 | 4.11 | 4.27 | - | - | - |   |
| 1231 | Ar XV    | BE S4    | 3113.600 | 3.982     | 7.07 | 5.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.27 | 5.48 | 5.24 | 5.30 | 5.76 | 6.62 | 7.66 | 8.70 | -    | -    | -    | -    | -    | - | - | - |   |
| 1230 | Ar XV    | BE S3    | 3113.600 | 3.982     | 7.03 | 5.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.96 | 5.29 | 5.13 | 5.24 | 5.72 | 6.60 | 7.65 | 8.70 | -    | -    | -    | -    | -    | - | - | - |   |
| 1245 | Ar XVI   | LI S2    | 3113.600 | 3.982     | 7.15 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 4.86 | 3.81 | 3.41 | 3.34 | 3.63 | 4.28 | 5.09 | 5.89 | 6.64 | -    | -    | -    | -    | - | - | - |   |
| 1257 | Ar XVII  | HE5      | 3123.000 | 3.970     | 7.31 | 3.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.27 | 4.59 | 3.74 | 3.30 | 3.27 | 3.63 | 4.14 | 4.66 | 5.14 | 5.59 | 6.01 | 6.39 | 6.74 | - | - | - |   |
| 1244 | Ar XVI   | LI S3    | 3134.100 | 3.956     | 7.17 | 3.59  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.55 | 4.27 | 3.73 | 3.60 | 3.87 | 4.52 | 5.35 | 6.17 | 6.96 | -    | -    | -    | -    | - | - | - |   |
| 1243 | Ar XVI   | LI S4    | 3138.000 | 3.951     | 7.19 | 3.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.87 | 4.46 | 3.86 | 3.67 | 3.91 | 4.55 | 5.36 | 6.18 | 6.96 | -    | -    | -    | -    | - | - | - |   |
| 1256 | Ar XVII  | HE4      | 3138.800 | 3.950     | 7.34 | 2.67  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.94 | 4.21 | 3.28 | 2.78 | 2.70 | 3.02 | 3.52 | 4.04 | 4.53 | 4.98 | 5.41 | 5.81 | 6.16 | - | - | - |   |
| 1157 | S XVI    | H3       | 3280.000 | 3.780     | 7.42 | 3.36  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.48 | 4.65 | 3.65 | 3.36 | 3.44 | 3.63 | 3.83 | 4.04 | 4.23 | 4.42 | 4.60 | 4.76 | - | - | - |   |
| 1255 | Ar XVII  | HE S2    | 3306.200 | 3.750     | 7.41 | 3.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.08 | 5.25 | 4.25 | 3.90 | 4.09 | 4.54 | 5.05 | 5.57 | 6.09 | 6.59 | 7.08 | 7.55 | -    | - | - |   |   |
| 1261 | Ar XVIII | H1B      | 3317.700 | 3.737     | 7.59 | 3.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.47 | 4.03 | 3.30 | 3.13 | 3.23 | 3.40 | 3.59 | 3.78 | 3.97 | 4.14 | 4.31 | -    | - | - | - |   |
| 1254 | Ar XVII  | HE S4    | 3323.100 | 3.731     | 7.44 | 4.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 7.69 | 5.61 | 4.46 | 4.02 | 4.15 | 4.56 | 5.05 | 5.56 | 6.06 | 6.56 | 7.05 | 7.51 | -    | - | - | - |   |





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| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8 | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1544 | Ca XX    | H1A Lall | 4107.500 | 3.019     | 7.74 | 2.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.44 | 4.59 | 3.48 | 2.98 | 2.91 | 3.03 | 3.22 | 3.41 | 3.61 | 3.81 | 3.99 |      |
| 1522 | Ca XIX   | HE3      | 4592.000 | 2.700     | 7.45 | 3.46  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.31 | 4.29 | 3.73 | 3.47 | 3.56 | 3.93 | 4.40 | 4.88 | 5.33 | 5.74 | 6.14 | 6.49 |
| 1521 | Ca XIX   | HE2      | 4768.600 | 2.600     | 7.46 | 3.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.82 | 4.76 | 4.18 | 3.91 | 3.98 | 4.34 | 4.81 | 5.28 | 5.72 | 6.14 | 6.53 | 6.88 |
| 1543 | Ca XX    | H2       | 4881.300 | 2.540     | 7.74 | 3.58  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.05 | 5.26 | 4.16 | 3.66 | 3.59 | 3.72 | 3.90 | 4.10 | 4.30 | 4.49 | 4.68 |
| 1519 | Ca XIX   | HE1      | 4959.400 | 2.500     | 7.47 | 4.24  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.26 | 5.16 | 4.56 | 4.27 | 4.32 | 4.68 | 5.14 | 5.61 | 6.04 | 6.46 | 6.84 | 7.20 |
| 1542 | Ca XX    | H3       | 5166.000 | 2.400     | 7.76 | 4.14  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.74 | 5.90 | 4.76 | 4.23 | 4.14 | 4.25 | 4.43 | 4.62 | 4.81 | 4.99 | 5.17 |
| 1541 | Ca XX    | H4       | 5390.600 | 2.300     | 7.77 | 4.50  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.20 | 6.32 | 5.16 | 4.61 | 4.51 | 4.61 | 4.78 | 4.96 | 5.14 | 5.32 | 5.49 |
| 1540 | Ca XX    | H5       | 5535.000 | 2.240     | 7.77 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.57 | 6.67 | 5.49 | 4.92 | 4.81 | 4.91 | 5.07 | 5.25 | 5.43 | 5.60 | 5.77 |
| 1793 | Fe XII   | P S      | 6390.900 | 1.940     | 6.57 | 17.77 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1724 | Fe XI    | S S      | 6390.900 | 1.940     | 6.48 | 20.11 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1659 | Fe X     | CL S     | 6390.900 | 1.940     | 6.41 | 22.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2185 | Fe XVIII | *2F Kal2 | 6423.100 | 1.930     | 7.00 | 6.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.14 | 6.02 | 6.97 | 8.92 | -    | -    | -    | -    | -    | -    | -    |      |
| 1867 | Fe XIII  | SI S     | 6424.100 | 1.930     | 6.69 | 15.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2059 | Fe XVII  | NE S     | 6424.100 | 1.930     | 6.97 | 8.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.93 | 8.15 | 9.50 | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2006 | Fe XVI   | NA S     | 6424.100 | 1.930     | 6.93 | 9.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 9.73 | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1926 | Fe XIV   | AL S     | 6424.100 | 1.930     | 6.83 | 13.13 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 1969 | Fe XV    | MG S     | 6424.100 | 1.930     | 6.90 | 11.43 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| 2184 | Fe XVIII | *2F Kal1 | 6436.100 | 1.926     | 7.00 | 5.74  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.86 | 5.74 | 6.69 | 8.62 | -    | -    | -    | -    | -    | -    | -    |      |
| 2509 | Fe XIX   | *2O **   | 6454.200 | 1.921     | 7.05 | 6.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.97 | 6.24 | 6.72 | 8.26 | -    | -    | -    | -    | -    | -    | -    |      |
| 2508 | Fe XIX   | *2O **   | 6467.600 | 1.917     | 7.05 | 5.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.44 | 5.70 | 6.17 | 7.68 | -    | -    | -    | -    | -    | -    | -    |      |
| 2507 | Fe XIX   | *2O 21** | 6471.000 | 1.916     | 7.05 | 6.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.88 | 6.15 | 6.62 | 8.16 | 9.90 | -    | -    | -    | -    | -    | -    |      |
| 2506 | Fe XIX   | *2O      | 6471.000 | 1.916     | 7.05 | 6.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.19 | 6.42 | 6.89 | 8.42 | -    | -    | -    | -    | -    | -    | -    |      |
| 3138 | Fe XX    | *2N      | 6476.400 | 1.914     | 7.09 | 5.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.14 | 5.80 | 5.79 | 6.92 | 8.34 | -    | -    | -    | -    | -    | -    |      |
| 3137 | Fe XX    | *2N      | 6481.100 | 1.913     | 7.09 | 5.60  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.18 | 5.84 | 5.84 | 6.97 | 8.40 | -    | -    | -    | -    | -    | -    |      |
| 3136 | Fe XX    | *2N **   | 6484.500 | 1.912     | 7.09 | 6.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.68 | 6.31 | 6.33 | 7.52 | 9.65 | -    | -    | -    | -    | -    | -    |      |
| 3135 | Fe XX    | *2N      | 6491.300 | 1.910     | 7.09 | 5.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.35 | 6.00 | 6.00 | 7.14 | 8.64 | -    | -    | -    | -    | -    | -    |      |
| 3134 | Fe XX    | *2N 14** | 6496.100 | 1.909     | 7.10 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.22 | 4.88 | 4.86 | 5.97 | 7.28 | -    | -    | -    | -    | -    | -    |      |
| 3133 | Fe XX    | *2N      | 6498.500 | 1.908     | 7.09 | 5.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.36 | 6.00 | 6.00 | 7.14 | 8.64 | -    | -    | -    | -    | -    | -    |      |
| 3132 | Fe XX    | *2N      | 6498.800 | 1.908     | 7.09 | 5.70  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.30 | 5.95 | 5.94 | 7.08 | 8.54 | -    | -    | -    | -    | -    | -    |      |
| 3131 | Fe XX    | *2N      | 6499.100 | 1.908     | 7.09 | 5.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.36 | 6.00 | 6.00 | 7.14 | 8.64 | -    | -    | -    | -    | -    | -    |      |
| 3130 | Fe XX    | *2N 13** | 6503.600 | 1.906     | 7.10 | 5.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.71 | 5.37 | 5.36 | 6.47 | 7.81 | -    | -    | -    | -    | -    | -    |      |
| 3129 | Fe XX    | *2N 13   | 6504.600 | 1.906     | 7.10 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.56 | 5.21 | 5.19 | 6.29 | 7.61 | -    | -    | -    | -    | -    | -    |      |
| 3128 | Fe XX    | *2N **   | 6504.900 | 1.906     | 7.09 | 6.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.74 | 6.36 | 6.38 | 7.58 | -    | -    | -    | -    | -    | -    | -    |      |
| 3127 | Fe XX    | *2N **   | 6507.300 | 1.905     | 7.10 | 5.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.09 | 5.74 | 5.73 | 6.85 | 8.24 | -    | -    | -    | -    | -    | -    |      |
| 3126 | Fe XX    | *2N **   | 6508.400 | 1.905     | 7.09 | 6.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.76 | 6.37 | 6.39 | 7.59 | -    | -    | -    | -    | -    | -    | -    |      |
| 3125 | Fe XX    | *2N **   | 6510.400 | 1.904     | 7.10 | 5.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.00 | 5.65 | 5.64 | 6.76 | 8.13 | -    | -    | -    | -    | -    | -    |      |
| 3124 | Fe XX    | *2N      | 6514.200 | 1.903     | 7.09 | 5.76  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.37 | 6.01 | 6.01 | 7.15 | 8.64 | -    | -    | -    | -    | -    | -    |      |
| 3804 | Fe XXI   | *2C **   | 6518.300 | 1.902     | 7.15 | 5.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.62 | 5.64 | 5.12 | 5.83 | 6.80 | 7.97 | -    | -    | -    | -    | -    |      |
| 3803 | Fe XXI   | *2C      | 6526.500 | 1.900     | 7.15 | 4.84  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.42 | 5.42 | 4.89 | 5.58 | 6.52 | 7.64 | -    | -    | -    | -    | -    |      |
| 3802 | Fe XXI   | *2C      | 6530.000 | 1.899     | 7.15 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.57 | 5.59 | 5.07 | 5.77 | 6.74 | 7.90 | -    | -    | -    | -    | -    |      |
| 4882 | Fe XXIV  | *2LI o   | 6533.100 | 1.898     | 7.57 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.72 | 4.56 | 3.97 | 3.87 | 4.03 | 4.49 | 5.20 | 6.09 | 7.09 | -    |      |
| 3801 | Fe XXI   | *2C 12** | 6533.400 | 1.898     | 7.15 | 4.73  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.29 | 5.30 | 4.78 | 5.48 | 6.43 | 7.57 | -    | -    | -    | -    | -    |      |
| 3800 | Fe XXI   | *2C 12** | 6534.100 | 1.898     | 7.15 | 4.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.88 | 4.90 | 4.37 | 5.06 | 6.01 | 7.13 | -    | -    | -    | -    | -    |      |
| 3799 | Fe XXI   | *2C      | 6535.800 | 1.897     | 7.15 | 5.35  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.90 | 5.91 | 5.40 | 6.12 | 7.11 | 8.35 | -    | -    | -    | -    | -    |      |
| 3798 | Fe XXI   | *2C      | 6538.900 | 1.896     | 7.14 | 5.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.09 | 6.09 | 5.59 | 6.33 | 7.34 | 8.72 | -    | -    | -    | -    | -    |      |
| 3797 | Fe XXI   | *2C 11** | 6541.000 | 1.895     | 7.15 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.81 | 4.80 | 4.26 | 4.94 | 5.87 | 6.97 | -    | -    | -    | -    | -    |      |
| 3796 | Fe XXI   | *2C **   | 6542.700 | 1.895     | 7.15 | 5.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.78 | 5.79 | 5.27 | 5.98 | 6.96 | 8.16 | -    | -    | -    | -    | -    |      |
| 3795 | Fe XXI   | *2C      | 6544.100 | 1.895     | 7.15 | 5.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.67 | 5.66 | 5.13 | 5.82 | 6.77 | 7.92 | -    | -    | -    | -    | -    |      |
| 3794 | Fe XXI   | *2C 10   | 6544.800 | 1.894     | 7.15 | 4.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.14 | 5.15 | 4.62 | 5.31 | 6.26 | 7.39 | -    | -    | -    | -    | -    |      |
| 3793 | Fe XXI   | *2C **   | 6548.600 | 1.893     | 7.15 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.57 | 5.58 | 5.06 | 5.76 | 6.72 | 7.88 | -    | -    | -    | -    | -    |      |
| 4881 | Fe XXIV  | *2LI p   | 6548.900 | 1.893     | 7.58 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.73 | 4.56 | 3.98 | 3.87 | 4.03 | 4.49 | 5.20 | 6.09 | 7.09 | -    |      |
| 3792 | Fe XXI   | *2C      | 6550.000 | 1.893     | 7.15 | 5.32  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.88 | 5.88 | 5.37 | 6.09 | 7.07 | 8.30 | -    | -    | -    | -    | -    |      |
| 4270 | Fe XXII  | *2B      | 6552.000 | 1.892     | 7.22 | 4.77  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.83 | 4.78 | 5.05 | 5.64 | 6.44 | 7.55 | -    | -    | -    | -    |      |
| 3791 | Fe XXI   | *2C **   | 6553.100 | 1.892     | 7.15 |       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |

| Nr   | ion      | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8 | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |   |
|------|----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|---|
| 4269 | Fe XXII  | *2B 9    | 6566.600 | 1.888     | 7.22 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.55 | 4.48 | 4.73 | 5.30 | 6.07 | 7.12 | -    | -    | -    | -    | -    |   |
| 4268 | Fe XXII  | *2B gam8 | 6573.200 | 1.886     | 7.22 | 3.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.78 | 3.70 | 3.94 | 4.51 | 5.29 | 6.34 | 7.68 | -    | -    | -    | -    |   |
| 4267 | Fe XXII  | *2B sig7 | 6581.600 | 1.884     | 7.23 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 4.80 | 3.72 | 3.95 | 4.52 | 5.28 | 6.33 | -    | -    | -    | -    | -    |   |
| 4266 | Fe XXII  | *2B      | 6582.000 | 1.884     | 7.23 | 4.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.31 | 4.22 | 4.46 | 5.01 | 5.75 | 6.78 | -    | -    | -    | -    | -    |   |
| 4265 | Fe XXII  | *2B      | 6584.000 | 1.883     | 7.22 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.27 | 4.19 | 4.44 | 5.01 | 5.79 | 6.85 | -    | -    | -    | -    | -    |   |
| 4264 | Fe XXII  | *2B 6    | 6593.500 | 1.880     | 7.22 | 4.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.48 | 4.40 | 4.65 | 5.23 | 6.01 | 7.08 | -    | -    | -    | -    | -    |   |
| 4631 | Fe XXIII | *2BE     | 6595.600 | 1.880     | 7.36 | 4.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.10 | 4.49 | 4.32 | 4.53 | 4.98 | 5.72 | 6.76 | 7.98 | -    | -    | -    |   |
| 4630 | Fe XXIII | *2BE 5   | 6599.500 | 1.879     | 7.36 | 4.00  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.80 | 4.20 | 4.01 | 4.22 | 4.67 | 5.41 | 6.43 | 7.64 | -    | -    | -    |   |
| 4629 | Fe XXIII | *2BE     | 6601.600 | 1.878     | 7.34 | 4.62  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.36 | 4.78 | 4.64 | 4.89 | 5.38 | 6.16 | 7.27 | 8.48 | -    | -    | -    |   |
| 4628 | Fe XXIII | *2BE     | 6603.700 | 1.878     | 7.34 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.29 | 4.71 | 4.56 | 4.80 | 5.28 | 6.05 | 7.14 | 8.34 | -    | -    | -    |   |
| 4627 | Fe XXIII | *2BEsig4 | 6607.600 | 1.876     | 7.36 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.27 | 3.65 | 3.45 | 3.65 | 4.09 | 4.82 | 5.84 | 7.04 | -    | -    | -    |   |
| 4626 | Fe XXIII | *2BE     | 6608.600 | 1.876     | 7.35 | 4.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.18 | 4.59 | 4.42 | 4.65 | 5.12 | 5.87 | 6.93 | 8.14 | -    | -    | -    |   |
| 4880 | Fe XXIV  | *2LI v   | 6609.700 | 1.876     | 7.63 | 4.10  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.14 | 4.94 | 4.29 | 4.10 | 4.20 | 4.61 | 5.31 | 6.22 | 7.26 | -    | -    |   |
| 4625 | Fe XXIII | *2BE     | 6611.400 | 1.875     | 7.35 | 4.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.05 | 4.45 | 4.28 | 4.49 | 4.95 | 5.70 | 6.74 | 7.95 | -    | -    | -    |   |
| 4624 | Fe XXIII | *3BE     | 6611.800 | 1.875     | 7.42 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.39 | 5.57 | 5.25 | 5.36 | 5.75 | 6.45 | 7.44 | 8.64 | -    | -    | -    |   |
| 4623 | Fe XXIII | *3BE     | 6613.200 | 1.875     | 7.42 | 5.02  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.17 | 5.35 | 5.02 | 5.14 | 5.53 | 6.23 | 7.21 | 8.41 | -    | -    | -    |   |
| 4879 | Fe XXIV  | *2LI u   | 6613.200 | 1.875     | 7.64 | 3.64  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.73 | 4.51 | 3.85 | 3.64 | 3.72 | 4.12 | 4.80 | 5.70 | 6.73 | -    | -    |   |
| 4622 | Fe XXIII | *3BE     | 6613.600 | 1.875     | 7.42 | 5.15  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.30 | 5.48 | 5.15 | 5.27 | 5.66 | 6.36 | 7.35 | 8.54 | -    | -    | -    |   |
| 4621 | Fe XXIII | *2BEsig3 | 6615.000 | 1.874     | 7.36 | 3.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.47 | 3.85 | 3.65 | 3.85 | 4.30 | 5.03 | 6.04 | 7.25 | -    | -    | -    |   |
| 4620 | Fe XXIII | *2BE     | 6615.700 | 1.874     | 7.36 | 3.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.76 | 4.15 | 3.96 | 4.16 | 4.61 | 5.35 | 6.37 | 7.58 | -    | -    | -    |   |
| 4619 | Fe XXIII | *2BE     | 6616.700 | 1.874     | 7.35 | 4.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.04 | 4.44 | 4.26 | 4.47 | 4.93 | 5.68 | 6.72 | 7.93 | -    | -    | -    |   |
| 4878 | Fe XXIV  | *2LI e   | 6617.100 | 1.874     | 7.56 | 3.33  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.18 | 4.00 | 3.43 | 3.34 | 3.52 | 3.98 | 4.69 | 5.56 | 6.54 | -    | -    | - |
| 4618 | Fe XXIII | *3BE     | 6617.400 | 1.874     | 7.42 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.35 | 5.52 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.59 | -    | -    | -    |   |
| 4617 | Fe XXIII | *2BEsig2 | 6619.900 | 1.873     | 7.36 | 3.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.77 | 4.15 | 3.96 | 4.17 | 4.62 | 5.35 | 6.38 | 7.59 | -    | -    | -    |   |
| 4616 | Fe XXIII | *2BE     | 6622.000 | 1.872     | 7.33 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.46 | 4.90 | 4.77 | 5.04 | 5.55 | 6.36 | 7.54 | 8.74 | -    | -    | -    |   |
| 4615 | Fe XXIII | *3BE     | 6623.100 | 1.872     | 7.42 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.05 | 5.22 | 4.90 | 5.01 | 5.40 | 6.10 | 7.09 | 8.29 | -    | -    | -    |   |
| 4614 | Fe XXIII | *2BE     | 6625.200 | 1.871     | 7.34 | 4.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.37 | 4.79 | 4.64 | 4.89 | 5.38 | 6.16 | 7.27 | 8.48 | -    | -    | -    |   |
| 4613 | Fe XXIII | *2BEbet1 | 6626.600 | 1.871     | 7.38 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.16 | 3.50 | 3.27 | 3.43 | 3.84 | 4.54 | 5.55 | 6.79 | -    | -    | -    |   |
| 4612 | Fe XXIII | *3BE     | 6627.000 | 1.871     | 7.42 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.35 | 5.53 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.59 | -    | -    | -    |   |
| 4611 | Fe XXIII | *2BE     | 6629.100 | 1.870     | 7.34 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.31 | 4.72 | 4.56 | 4.80 | 5.28 | 6.05 | 7.13 | 8.34 | -    | -    | -    |   |
| 4610 | Fe XXIII | *3BE     | 6629.500 | 1.870     | 7.42 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.35 | 5.53 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.59 | -    | -    | -    |   |
| 4609 | Fe XXIII | *3BE     | 6632.300 | 1.869     | 7.42 | 5.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.23 | 5.40 | 5.07 | 5.19 | 5.58 | 6.28 | 7.27 | 8.46 | -    | -    | -    |   |
| 4877 | Fe XXIV  | *3LI e1  | 6632.700 | 1.869     | 7.61 | 4.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.54 | 5.17 | 4.47 | 4.29 | 4.42 | 4.85 | 5.53 | 6.39 | 7.36 | -    | -    | - |
| 4995 | Fe XXV   | HE6 z    | 6634.100 | 1.869     | 7.83 | 1.96  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.73 | 2.65 | 2.15 | 1.96 | 2.06 | 2.39 | 2.82 | 3.25 | 3.65 | 4.03 |   |
| 4608 | Fe XXIII | *2BE     | 6635.500 | 1.868     | 7.36 | 4.12  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.92 | 4.31 | 4.12 | 4.33 | 4.78 | 5.53 | 6.56 | 7.76 | -    | -    | -    |   |
| 4876 | Fe XXIV  | *2LI 1   | 6636.600 | 1.868     | 7.56 | 3.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.54 | 4.36 | 3.79 | 3.69 | 3.88 | 4.34 | 5.06 | 5.94 | 6.92 | -    | -    | - |
| 4607 | Fe XXIII | *2BE     | 6637.300 | 1.868     | 7.33 | 4.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.47 | 4.90 | 4.77 | 5.04 | 5.56 | 6.36 | 7.53 | 8.74 | -    | -    | -    |   |
| 4606 | Fe XXIII | *3BE     | 6638.300 | 1.868     | 7.42 | 5.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.46 | 5.64 | 5.31 | 5.42 | 5.81 | 6.51 | 7.50 | 8.69 | -    | -    | -    |   |
| 4875 | Fe XXIV  | *3LI e2  | 6638.300 | 1.868     | 7.61 | 4.43  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.68 | 5.30 | 4.60 | 4.43 | 4.56 | 4.98 | 5.67 | 6.52 | 7.49 | -    | -    | - |
| 4605 | Fe XXIII | *2BE     | 6639.800 | 1.867     | 7.35 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.13 | 4.53 | 4.35 | 4.57 | 5.04 | 5.79 | 6.83 | 8.04 | -    | -    | -    |   |
| 4604 | Fe XXIII | *3BE     | 6640.500 | 1.867     | 7.42 | 5.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.27 | 5.44 | 5.11 | 5.23 | 5.62 | 6.31 | 7.30 | 8.50 | -    | -    | -    |   |
| 4874 | Fe XXIV  | *2LI j   | 6642.300 | 1.867     | 7.56 | 2.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.39 | 3.22 | 2.64 | 2.54 | 2.72 | 3.18 | 3.89 | 4.76 | 5.73 | -    | -    | - |
| 4603 | Fe XXIII | *3BE     | 6644.000 | 1.866     | 7.42 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.36 | 5.53 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.59 | -    | -    | -    |   |
| 4602 | Fe XXIII | *3BE     | 6645.800 | 1.866     | 7.42 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.41 | 5.58 | 5.25 | 5.36 | 5.75 | 6.45 | 7.44 | 8.64 | -    | -    | -    |   |
| 4601 | Fe XXIII | *3BE     | 6647.200 | 1.865     | 7.42 | 5.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.36 | 5.53 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.59 | -    | -    | -    |   |
| 4600 | Fe XXIII | *3BE     | 6647.900 | 1.865     | 7.42 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.41 | 5.58 | 5.25 | 5.36 | 5.75 | 6.45 | 7.44 | 8.64 | -    | -    | -    |   |
| 4599 | Fe XXIII | *3BE     | 6649.000 | 1.865     | 7.42 | 4.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.54 | 4.71 | 4.38 | 4.50 | 4.89 | 5.58 | 6.57 | 7.77 | -    | -    | -    |   |
| 4597 | Fe XXIII | *3BE     | 6649.700 | 1.865     | 7.42 | 5.31  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.47 | 5.64 | 5.31 | 5.42 | 5.81 | 6.51 | 7.50 | 8.69 | -    | -    | -    |   |
| 4598 | Fe XXIII | *3BE (3) | 6649.700 | 1.865     | 7.42 | 5.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.27 | 5.44 | 5.11 | 5.23 | 5.62 | 6.31 | 7.30 | 8.50 | -    | -    | -    |   |
| 4873 | Fe XXIV  | *2LI r   | 6650.400 | 1.864     | 7.63 | 2.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.98 | 3.77 | 3.13 | 2.95 | 3.04 | 3.44 | 4.13 | 5.01 | 6.03 | -    | -    | - |
| 4596 | Fe XXIII | *3BE     | 6651.900 | 1.864     | 7.42 | 4.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.69 | 4.86 | 4.53 | 4.64 | 5.03 | 5.73 | 6.72 | 7.92 |      |      |      |   |

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## line list SPEX version 2.0

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| Nr   | ion | Transit. | E(eV)     | Lambda(A) | Tmax  | -Qmax | 4.0  | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8 | 7.0 | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |   |
|------|-----|----------|-----------|-----------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|---|
| 4594 | Fe  | XXIII    | *3BE      | 6653.300  | 1.863 | 7.42  | 4.72 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.88 | 5.05 | 4.72 | 4.84 | 5.23 | 5.92 | 6.91 | 8.11 | -    | -    | -    |   |
| 4593 | Fe  | XXIII    | *3BE      | 6654.700  | 1.863 | 7.42  | 4.47 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.63 | 4.80 | 4.48 | 4.59 | 4.98 | 5.67 | 6.66 | 7.86 | -    | -    | -    |   |
| 4592 | Fe  | XXIII    | BE S4     | 6655.100  | 1.863 | 7.45  | 3.66 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.99 | 4.06 | 3.67 | 3.74 | 4.10 | 4.79 | 5.76 | 6.95 | -    | -    | -    |   |
| 4869 | Fe  | XXIV     | *2LI a    | 6655.400  | 1.863 | 7.56  | 3.16 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.02 | 3.84 | 3.26 | 3.16 | 3.34 | 3.80 | 4.51 | 5.38 | 6.36 | -    | -    |   |
| 4591 | Fe  | XXIII    | *3BE      | 6657.900  | 1.862 | 7.42  | 4.90 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.06 | 5.23 | 4.90 | 5.01 | 5.40 | 6.10 | 7.09 | 8.28 | -    | -    | -    |   |
| 4868 | Fe  | XXIV     | *3LI h32  | 6658.700  | 1.862 | 7.61  | 4.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.88 | 5.50 | 4.80 | 4.63 | 4.75 | 5.18 | 5.86 | 6.72 | 7.69 | -    | -    |   |
| 4867 | Fe  | XXIV     | *2LI q    | 6659.700  | 1.862 | 7.66  | 2.63 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.81 | 3.56 | 2.87 | 2.64 | 2.70 | 3.08 | 3.75 | 4.64 | 5.68 | -    | -    |   |
| 4866 | Fe  | XXIV     | *3LI d17  | 6660.100  | 1.862 | 7.61  | 4.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.88 | 5.50 | 4.80 | 4.63 | 4.75 | 5.18 | 5.86 | 6.72 | 7.69 | -    | -    |   |
| 4590 | Fe  | XXIII    | *3BE      | 6660.400  | 1.862 | 7.42  | 4.76 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.92 | 5.09 | 4.76 | 4.87 | 5.26 | 5.96 | 6.95 | 8.14 | -    | -    | -    |   |
| 4865 | Fe  | XXIV     | *4LI      | 6661.200  | 1.861 | 7.63  | 4.23 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.70 | 5.22 | 4.45 | 4.24 | 4.34 | 4.75 | 5.43 | 6.28 | 7.24 | -    | -    |   |
| 4589 | Fe  | XXIII    | *3BE      | 6661.500  | 1.861 | 7.42  | 5.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.54 | 5.71 | 5.38 | 5.49 | 5.88 | 6.58 | 7.56 | 8.76 | -    | -    | -    |   |
| 4588 | Fe  | XXIII    | *3BE      | 6661.900  | 1.861 | 7.42  | 4.81 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.97 | 5.14 | 4.81 | 4.93 | 5.31 | 6.01 | 7.00 | 8.20 | -    | -    | -    |   |
| 4587 | Fe  | XXIII    | *3BE (2)  | 6662.200  | 1.861 | 7.42  | 4.79 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.95 | 5.12 | 4.80 | 4.91 | 5.30 | 5.99 | 6.98 | 8.18 | -    | -    | -    |   |
| 4586 | Fe  | XXIII    | *3BE      | 6662.200  | 1.861 | 7.42  | 5.11 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.27 | 5.45 | 5.12 | 5.23 | 5.62 | 6.31 | 7.30 | 8.50 | -    | -    | -    |   |
| 4585 | Fe  | XXIII    | *3BE      | 6663.300  | 1.861 | 7.42  | 4.98 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.14 | 5.31 | 4.98 | 5.09 | 5.48 | 6.18 | 7.17 | 8.36 | -    | -    | -    |   |
| 4584 | Fe  | XXIII    | *3BE      | 6663.700  | 1.861 | 7.42  | 5.20 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.36 | 5.53 | 5.20 | 5.31 | 5.70 | 6.40 | 7.39 | 8.58 | -    | -    | -    |   |
| 4864 | Fe  | XXIV     | *4LI      | 6663.700  | 1.861 | 7.63  | 4.36 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.82 | 5.34 | 4.58 | 4.36 | 4.46 | 4.87 | 5.55 | 6.40 | 7.37 | -    | -    |   |
| 4583 | Fe  | XXIII    | *3BE      | 6665.100  | 1.860 | 7.42  | 5.06 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.22 | 5.39 | 5.06 | 5.17 | 5.56 | 6.26 | 7.25 | 8.44 | -    | -    | -    |   |
| 4863 | Fe  | XXIV     | *5LIln=5- | 6665.100  | 1.860 | 7.63  | 3.30 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.76 | 4.28 | 3.52 | 3.30 | 3.40 | 3.81 | 4.49 | 5.34 | 6.30 | -    | -    |   |
| 4994 | Fe  | XXV      | HE5 y     | 6665.100  | 1.860 | 7.80  | 2.19 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.81 | 2.79 | 2.34 | 2.19 | 2.33 | 2.70 | 3.18 | 3.68 | 4.15 | 4.56 | - |
| 4862 | Fe  | XXIV     | *3LI d18  | 6665.500  | 1.860 | 7.61  | 4.57 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.83 | 5.45 | 4.74 | 4.57 | 4.69 | 5.12 | 5.81 | 6.66 | 7.63 | -    | -    |   |
| 4861 | Fe  | XXIV     | *4LI      | 6666.200  | 1.860 | 7.63  | 4.23 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.70 | 5.22 | 4.45 | 4.24 | 4.34 | 4.75 | 5.43 | 6.28 | 7.24 | -    | -    |   |
| 4582 | Fe  | XXIII    | *3BE      | 6668.000  | 1.859 | 7.43  | 5.31 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.47 | 5.64 | 5.31 | 5.42 | 5.81 | 6.51 | 7.50 | 8.69 | -    | -    | -    |   |
| 4581 | Fe  | XXIII    | *3BE      | 6668.300  | 1.859 | 7.43  | 5.04 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.20 | 5.37 | 5.04 | 5.15 | 5.54 | 6.24 | 7.23 | 8.42 | -    | -    | -    |   |
| 4860 | Fe  | XXIV     | *3LI a4   | 6668.300  | 1.859 | 7.61  | 3.65 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.91 | 4.53 | 3.83 | 3.65 | 3.78 | 4.20 | 4.89 | 5.75 | 6.72 | -    | -    |   |
| 4580 | Fe  | XXIII    | *3BE      | 6669.000  | 1.859 | 7.43  | 5.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.54 | 5.71 | 5.38 | 5.49 | 5.88 | 6.58 | 7.56 | 8.76 | -    | -    | -    |   |
| 4578 | Fe  | XXIII    | *3BE      | 6669.400  | 1.859 | 7.43  | 5.38 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.54 | 5.71 | 5.38 | 5.49 | 5.88 | 6.58 | 7.56 | 8.76 | -    | -    | -    |   |
| 4579 | Fe  | XXIII    | *3BE (1)  | 6669.400  | 1.859 | 7.43  | 5.25 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.42 | 5.59 | 5.25 | 5.36 | 5.75 | 6.45 | 7.44 | 8.64 | -    | -    | -    |   |
| 4859 | Fe  | XXIV     | *3LI d9   | 6669.400  | 1.859 | 7.61  | 4.57 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.83 | 5.45 | 4.74 | 4.57 | 4.69 | 5.12 | 5.81 | 6.66 | 7.63 | -    | -    |   |
| 4858 | Fe  | XXIV     | *2LI t    | 6674.800  | 1.857 | 7.60  | 3.02 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.96 | 3.77 | 3.16 | 3.02 | 3.15 | 3.57 | 4.27 | 5.15 | 6.15 | -    | -    |   |
| 4857 | Fe  | XXIV     | *2LI m    | 6675.900  | 1.857 | 7.56  | 3.54 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.40 | 4.22 | 3.64 | 3.55 | 3.73 | 4.19 | 4.90 | 5.78 | 6.76 | -    | -    |   |
| 4856 | Fe  | XXIV     | *3LI d16  | 6676.900  | 1.857 | 7.61  | 4.13 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.39 | 5.01 | 4.30 | 4.13 | 4.25 | 4.68 | 5.37 | 6.22 | 7.19 | -    | -    |   |
| 4855 | Fe  | XXIV     | *2LI s    | 6677.700  | 1.857 | 7.57  | 3.93 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.81 | 4.62 | 4.04 | 3.94 | 4.12 | 4.58 | 5.30 | 6.19 | 7.18 | -    | -    |   |
| 4993 | Fe  | XXV      | HE5 x     | 6679.800  | 1.856 | 7.80  | 2.33 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 3.95 | 2.94 | 2.48 | 2.33 | 2.47 | 2.84 | 3.32 | 3.82 | 4.28 | 4.70 | - |
| 4854 | Fe  | XXIV     | *3LI d13  | 6689.200  | 1.854 | 7.61  | 3.17 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.43 | 4.05 | 3.34 | 3.17 | 3.29 | 3.72 | 4.41 | 5.26 | 6.23 | -    | -    |   |
| 4853 | Fe  | XXIV     | *3LI d15  | 6692.100  | 1.853 | 7.61  | 3.31 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.57 | 4.19 | 3.48 | 3.31 | 3.43 | 3.86 | 4.54 | 5.40 | 6.37 | -    | -    |   |
| 4852 | Fe  | XXIV     | *3LI d5   | 6692.800  | 1.852 | 7.61  | 3.62 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.89 | 4.50 | 3.80 | 3.62 | 3.75 | 4.17 | 4.86 | 5.71 | 6.68 | -    | -    |   |
| 4851 | Fe  | XXIV     | *3LI a1   | 6693.200  | 1.852 | 7.61  | 4.57 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.84 | 5.45 | 4.75 | 4.57 | 4.69 | 5.12 | 5.81 | 6.66 | 7.63 | -    | -    |   |
| 4850 | Fe  | XXIV     | *3LI h7   | 6693.500  | 1.852 | 7.61  | 4.52 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.79 | 5.40 | 4.69 | 4.52 | 4.64 | 5.07 | 5.75 | 6.61 | 7.58 | -    | -    |   |
| 4849 | Fe  | XXIV     | *3LI a2   | 6693.900  | 1.852 | 7.61  | 3.98 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.25 | 4.86 | 4.16 | 3.98 | 4.11 | 4.53 | 5.22 | 6.07 | 7.04 | -    | -    |   |
| 4846 | Fe  | XXIV     | *3LI h15  | 6695.300  | 1.852 | 7.61  | 3.37 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.64 | 4.26 | 3.55 | 3.37 | 3.50 | 3.93 | 4.61 | 5.47 | 6.44 | -    | -    |   |
| 4847 | Fe  | XXIV     | *3LI h9   | 6695.300  | 1.852 | 7.61  | 4.63 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.90 | 5.51 | 4.80 | 4.63 | 4.75 | 5.18 | 5.86 | 6.72 | 7.69 | -    | -    |   |
| 4848 | Fe  | XXIV     | *4LI      | 6695.300  | 1.852 | 7.63  | 3.81 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.29 | 4.80 | 4.03 | 3.82 | 3.92 | 4.33 | 5.00 | 5.85 | 6.82 | -    | -    |   |
| 4845 | Fe  | XXIV     | *4LI      | 6696.100  | 1.852 | 7.63  | 4.21 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.69 | 5.20 | 4.43 | 4.22 | 4.32 | 4.73 | 5.40 | 6.25 | 7.22 | -    | -    |   |
| 4844 | Fe  | XXIV     | *4LI      | 6696.400  | 1.852 | 7.63  | 3.79 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.26 | 4.78 | 4.01 | 3.79 | 3.89 | 4.30 | 4.98 | 5.83 | 6.79 | -    | -    |   |
| 4843 | Fe  | XXIV     | *4LI      | 6697.100  | 1.851 | 7.63  | 3.70 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.18 | 4.70 | 3.92 | 3.71 | 3.81 | 4.22 | 4.89 | 5.74 | 6.71 | -    | -    |   |
| 4842 | Fe  | XXIV     | *4LI      | 6697.900  | 1.851 | 7.63  | 4.54 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.01 | 5.53 | 4.76 | 4.54 | 4.64 | 5.05 | 5.73 | 6.58 | 7.54 | -    | -    |   |
| 4841 | Fe  | XXIV     | *4LI      | 6698.200  | 1.851 | 7.63  | 4.19 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.67 | 5.19 | 4.42 | 4.20 | 4.30 | 4.71 | 5.38 | 6.23 | 7.20 | -    | -    |   |
| 4839 | Fe  | XXIV     | *3LI d1   | 6698.200  | 1.851 | 7.61  | 3.99 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.26 | 4.88 | 4.17 | 3.99 | 4.12 | 4.55 | 5.23 | 6.09 | 7.06 | -    | -    |   |
| 4840 | Fe  | XXIV     | *3LI h16  | 6698.200  | 1.851 | 7.61  | 3.84 | -   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |   |

| Nr   | ion     | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8 | 7.0 | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |
|------|---------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 4990 | Fe XXV  | *2HE P   | 6879.600 | 1.802     | 7.92 | 4.54  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.85 | 6.02 | 5.07 | 4.61 | 4.56 | 4.82 | 5.23 | 5.69 | 6.18 | 6.67 |
| 4989 | Fe XXV  | *2HE G   | 6900.300 | 1.797     | 7.93 | 4.17  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.49 | 5.66 | 4.70 | 4.24 | 4.19 | 4.45 | 4.86 | 5.32 | 5.81 | 6.30 |
| 4988 | Fe XXV  | *2HE S   | 6914.900 | 1.793     | 7.93 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.21 | 6.38 | 5.42 | 4.96 | 4.91 | 5.17 | 5.58 | 6.04 | 6.53 | 7.02 |
| 4987 | Fe XXV  | *2HE A   | 6918.400 | 1.792     | 7.93 | 3.66  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.98 | 5.15 | 4.20 | 3.74 | 3.69 | 3.94 | 4.35 | 4.82 | 5.30 | 5.79 |
| 4986 | Fe XXV  | *2HE R   | 6919.500 | 1.792     | 7.93 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.62 | 5.79 | 4.83 | 4.38 | 4.33 | 4.58 | 4.99 | 5.46 | 5.94 | 6.43 |
| 4985 | Fe XXV  | *2HE J   | 6919.900 | 1.792     | 7.93 | 3.22  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.54 | 4.70 | 3.75 | 3.29 | 3.24 | 3.49 | 3.90 | 4.37 | 4.86 | 5.34 |
| 4984 | Fe XXV  | *3HE     | 6926.100 | 1.790     | 7.94 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.42 | 6.46 | 5.42 | 4.91 | 4.83 | 5.06 | 5.46 | 5.92 | 6.40 | 6.88 |
| 4983 | Fe XXV  | *3HE     | 6933.100 | 1.788     | 7.94 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.86 | 6.90 | 5.86 | 5.35 | 5.27 | 5.50 | 5.90 | 6.36 | 6.84 | 7.32 |
| 4982 | Fe XXV  | *2HE B   | 6933.500 | 1.788     | 7.93 | 3.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.22 | 5.39 | 4.43 | 3.97 | 3.92 | 4.18 | 4.59 | 5.05 | 5.54 | 6.03 |
| 4981 | Fe XXV  | *2HE Q   | 6933.900 | 1.788     | 7.93 | 4.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.52 | 5.69 | 4.73 | 4.28 | 4.22 | 4.48 | 4.89 | 5.35 | 5.84 | 6.33 |
| 4980 | Fe XXV  | *3HE     | 6935.400 | 1.788     | 7.94 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.42 | 6.46 | 5.42 | 4.91 | 4.83 | 5.06 | 5.46 | 5.92 | 6.40 | 6.88 |
| 4979 | Fe XXV  | *3HE     | 6937.000 | 1.787     | 7.94 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.86 | 6.90 | 5.86 | 5.35 | 5.27 | 5.50 | 5.90 | 6.36 | 6.84 | 7.32 |
| 4978 | Fe XXV  | *2HE K   | 6938.100 | 1.787     | 7.93 | 3.75  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.07 | 5.24 | 4.28 | 3.83 | 3.77 | 4.03 | 4.44 | 4.90 | 5.39 | 5.88 |
| 4977 | Fe XXV  | *2HE T   | 6941.600 | 1.786     | 7.93 | 3.53  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 6.86 | 5.02 | 4.07 | 3.61 | 3.56 | 3.81 | 4.22 | 4.69 | 5.17 | 5.66 |
| 4976 | Fe XXV  | *3HE     | 6942.000 | 1.786     | 7.94 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.56 | 6.60 | 5.56 | 5.05 | 4.97 | 5.20 | 5.60 | 6.06 | 6.54 | 7.02 |
| 4975 | Fe XXV  | *3HE     | 6943.200 | 1.786     | 7.94 | 4.86  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.47 | 6.50 | 5.46 | 4.95 | 4.87 | 5.10 | 5.50 | 5.96 | 6.44 | 6.92 |
| 4974 | Fe XXV  | *4HE     | 6943.600 | 1.786     | 7.95 | 5.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.95 | 6.92 | 5.84 | 5.30 | 5.20 | 5.42 | 5.81 | 6.27 | 6.74 | 7.23 |
| 4973 | Fe XXV  | *3HE     | 6945.100 | 1.785     | 7.94 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.11 | 6.14 | 5.10 | 4.59 | 4.51 | 4.74 | 5.14 | 5.60 | 6.08 | 6.56 |
| 4972 | Fe XXV  | *3HE     | 6946.300 | 1.785     | 7.94 | 5.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.77 | 6.81 | 5.77 | 5.26 | 5.17 | 5.41 | 5.80 | 6.26 | 6.74 | 7.22 |
| 4971 | Fe XXV  | *3HE     | 6947.800 | 1.785     | 7.94 | 4.48  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.09 | 6.13 | 5.08 | 4.57 | 4.49 | 4.72 | 5.12 | 5.58 | 6.06 | 6.54 |
| 4970 | Fe XXV  | *4HE     | 6949.000 | 1.784     | 7.95 | 5.41  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.17 | 7.14 | 6.06 | 5.52 | 5.42 | 5.65 | 6.03 | 6.49 | 6.97 | 7.45 |
| 4969 | Fe XXV  | *3HE     | 6949.800 | 1.784     | 7.94 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.11 | 6.14 | 5.10 | 4.59 | 4.51 | 4.74 | 5.14 | 5.60 | 6.08 | 6.56 |
| 4968 | Fe XXV  | *4HE     | 6951.000 | 1.784     | 7.95 | 5.29  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.05 | 7.02 | 5.93 | 5.40 | 5.30 | 5.52 | 5.91 | 6.36 | 6.84 | 7.32 |
| 4967 | Fe XXV  | *4HE     | 6951.300 | 1.784     | 7.95 | 4.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.74 | 6.72 | 5.63 | 5.10 | 5.00 | 5.22 | 5.61 | 6.06 | 6.54 | 7.02 |
| 5005 | Fe XXVI | H1B Lal2 | 6951.700 | 1.783     | 8.18 | 1.94  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 4.64 | 3.27 | 2.44 | 2.03 | 1.94 | 2.01 | 2.15 | 2.31 | 2.48 |
| 4966 | Fe XXV  | *5HEn=5- | 6951.700 | 1.783     | 7.95 | 3.93  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.69 | 5.66 | 4.58 | 4.04 | 3.94 | 4.16 | 4.55 | 5.01 | 5.48 | 5.97 |
| 4965 | Fe XXV  | *4HE     | 6953.300 | 1.783     | 7.95 | 5.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.87 | 6.84 | 5.76 | 5.22 | 5.12 | 5.34 | 5.73 | 6.19 | 6.67 | 7.15 |
| 4964 | Fe XXV  | *3HE     | 6954.100 | 1.783     | 7.94 | 5.16  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.77 | 6.81 | 5.77 | 5.26 | 5.17 | 5.41 | 5.80 | 6.26 | 6.74 | 7.22 |
| 4963 | Fe XXV  | *4HE     | 6955.200 | 1.783     | 7.95 | 4.89  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.65 | 6.62 | 5.54 | 5.00 | 4.90 | 5.12 | 5.51 | 5.97 | 6.44 | 6.93 |
| 4962 | Fe XXV  | *2HE M   | 6955.200 | 1.783     | 7.93 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.82 | 5.98 | 5.02 | 4.57 | 4.51 | 4.77 | 5.18 | 5.64 | 6.13 | 6.62 |
| 4961 | Fe XXV  | *3HE     | 6956.000 | 1.782     | 7.94 | 4.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.75 | 5.78 | 4.74 | 4.23 | 4.15 | 4.38 | 4.78 | 5.23 | 5.71 | 6.20 |
| 4960 | Fe XXV  | *4HE     | 6956.400 | 1.782     | 7.95 | 5.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.95 | 6.92 | 5.84 | 5.30 | 5.20 | 5.42 | 5.81 | 6.27 | 6.74 | 7.23 |
| 4959 | Fe XXV  | *4HE     | 6958.000 | 1.782     | 7.95 | 4.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.47 | 6.44 | 5.36 | 4.82 | 4.72 | 4.95 | 5.34 | 5.79 | 6.27 | 6.75 |
| 4958 | Fe XXV  | *3HE     | 6959.500 | 1.781     | 7.94 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.87 | 6.90 | 5.86 | 5.35 | 5.27 | 5.50 | 5.90 | 6.36 | 6.84 | 7.32 |
| 4957 | Fe XXV  | *3HE     | 6960.300 | 1.781     | 7.94 | 4.78  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.39 | 6.43 | 5.39 | 4.88 | 4.79 | 5.02 | 5.42 | 5.88 | 6.36 | 6.84 |
| 4956 | Fe XXV  | *3HE     | 6961.900 | 1.781     | 7.94 | 4.49  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.11 | 6.15 | 5.10 | 4.59 | 4.51 | 4.74 | 5.14 | 5.60 | 6.08 | 6.56 |
| 4955 | Fe XXV  | *3HE     | 6963.100 | 1.781     | 7.94 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.87 | 6.91 | 5.86 | 5.35 | 5.27 | 5.50 | 5.90 | 6.36 | 6.84 | 7.32 |
| 4954 | Fe XXV  | *3HE     | 6963.800 | 1.780     | 7.94 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.57 | 6.60 | 5.56 | 5.05 | 4.97 | 5.20 | 5.60 | 6.05 | 6.53 | 7.02 |
| 4953 | Fe XXV  | *3HE     | 6966.600 | 1.780     | 7.94 | 5.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.00 | 7.03 | 5.99 | 5.48 | 5.39 | 5.63 | 6.02 | 6.48 | 6.96 | 7.44 |
| 4952 | Fe XXV  | *3HE     | 6968.100 | 1.779     | 7.94 | 3.71  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.33 | 5.36 | 4.32 | 3.81 | 3.72 | 3.96 | 4.35 | 4.81 | 5.29 | 5.77 |
| 4951 | Fe XXV  | *3HE     | 6968.500 | 1.779     | 7.94 | 5.25  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.87 | 6.91 | 5.86 | 5.35 | 5.27 | 5.50 | 5.90 | 6.36 | 6.84 | 7.32 |
| 4950 | Fe XXV  | *3HE     | 6969.300 | 1.779     | 7.94 | 4.04  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.66 | 5.70 | 4.65 | 4.14 | 4.06 | 4.29 | 4.69 | 5.14 | 5.62 | 6.11 |
| 4949 | Fe XXV  | *2HE V   | 6970.500 | 1.779     | 7.93 | 5.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.34 | 6.51 | 5.55 | 5.09 | 5.04 | 5.29 | 5.70 | 6.17 | 6.65 | 7.14 |
| 4948 | Fe XXV  | *4HE     | 6970.900 | 1.779     | 7.95 | 4.85  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.61 | 6.58 | 5.50 | 4.96 | 4.86 | 5.08 | 5.47 | 5.92 | 6.40 | 6.88 |
| 4947 | Fe XXV  | *4HE     | 6971.700 | 1.778     | 7.95 | 4.61  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.37 | 6.34 | 5.26 | 4.72 | 4.62 | 4.84 | 5.23 | 5.69 | 6.16 | 6.65 |
| 4946 | Fe XXV  | *4HE     | 6972.100 | 1.778     | 7.95 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.02 | 5.99 | 4.90 | 4.37 | 4.27 | 4.49 | 4.88 | 5.33 | 5.81 | 6.29 |
| 4945 | Fe XXV  | *4HE     | 6972.500 | 1.778     | 7.95 | 4.51  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.27 | 6.24 | 5.16 | 4.62 | 4.52 | 4.74 | 5.13 | 5.59 | 6.06 | 6.54 |
| 4944 | Fe XXV  | *3HE     | 6972.800 | 1.778     | 7.94 | 4.26  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.88 | 5.92 | 4.88 | 4.36 | 4.28 | 4.51 | 4.91 | 5.37 | 5.85 | 6.33 |
| 4943 | Fe XXV  | *5HEn=5- | 6973.200 | 1.778     | 7.95 | 3.40  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 7.16 | 5.13 | 4.05 | 3.51 | 3.41 | 3.63 | 4.02 | 4.48 | 4.95 | 5.43 |
| 5004 | Fe XXVI | H1A Lal1 | 6973.200 | 1.778     | 8.17 | 1.70  | -   | -   | -   |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |

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| Nr   | ion       | Transit. | E(eV)    | Lambda(A) | Tmax | -Qmax | 4.0 | 4.2 | 4.4 | 4.6 | 4.8 | 5.0 | 5.2 | 5.4 | 5.6 | 5.8 | 6.0 | 6.2 | 6.4 | 6.6 | 6.8 | 7.0  | 7.2  | 7.4  | 7.6  | 7.8  | 8.0  | 8.2  | 8.4  | 8.6  | 8.8  | 9.0  |      |      |
|------|-----------|----------|----------|-----------|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 4937 | Fe XXV    | *3HE     | 6976.800 | 1.777     | 7.94 | 4.81  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.43 | 6.47 | 5.43 | 4.91 | 4.83 | 5.06 | 5.46 | 5.92 | 6.40 | 6.88 |      |      |
| 4936 | Fe XXV    | *3HE     | 6977.600 | 1.777     | 7.94 | 4.34  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.96 | 5.99 | 4.95 | 4.44 | 4.35 | 4.58 | 4.98 | 5.44 | 5.92 | 6.40 |      |      |
| 4935 | Fe XXV    | *3HE     | 6978.000 | 1.777     | 7.94 | 4.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.57 | 6.61 | 5.56 | 5.05 | 4.97 | 5.20 | 5.60 | 6.05 | 6.53 | 7.02 |      |      |
| 4934 | Fe XXV    | *3HE     | 6979.100 | 1.776     | 7.94 | 4.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.52 | 6.56 | 5.51 | 5.00 | 4.92 | 5.15 | 5.54 | 6.00 | 6.48 | 6.97 |      |      |
| 4933 | Fe XXV    | *3HE     | 6979.500 | 1.776     | 7.94 | 4.55  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 8.17 | 6.21 | 5.17 | 4.65 | 4.57 | 4.80 | 5.20 | 5.66 | 6.14 | 6.62 |      |      |
| 5035 | Ni XII    | CL S     | 7468.900 | 1.660     | 6.55 | 21.29 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5023 | Ni XI     | A S      | 7468.900 | 1.660     | 6.51 | 22.51 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5063 | Ni XIV    | P S      | 7468.900 | 1.660     | 6.65 | 18.73 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5081 | Ni XV     | SI S     | 7468.900 | 1.660     | 6.72 | 17.24 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5049 | Ni XIII   | S S      | 7468.900 | 1.660     | 6.60 | 20.03 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5104 | Ni XVI    | AL S     | 7468.900 | 1.660     | 6.81 | 15.74 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5127 | Ni XVII   | MG S     | 7514.200 | 1.650     | 6.90 | 14.30 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5157 | Ni XVIII  | NA S     | 7514.200 | 1.650     | 6.94 | 12.78 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5193 | Ni XIX    | NE S     | 7514.200 | 1.650     | 6.98 | 10.84 | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5267 | Ni XXI    | O S      | 7514.200 | 1.650     | 7.06 | 6.91  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 9.07 | 7.03 | 7.45 | 9.05 | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5234 | Ni XX     | F S      | 7514.200 | 1.650     | 7.02 | 7.01  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.37 | 7.02 | 7.96 | -    | -    | -    | -    | -    | -    | -    | -    |      |      |
| 5283 | Ni XXII   | N S      | 7546.200 | 1.643     | 7.11 | 5.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 8.85 | 6.07 | 5.92 | 7.07 | 8.34 | 9.65 | -    | -    | -    | -    | -    |      |      |
| 5304 | Ni XXIII  | C S      | 7546.200 | 1.643     | 7.16 | 5.13  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 5.92 | 5.17 | 5.84 | 6.72 | 7.66 | 8.76 | -    | -    | -    | -    |      |      |
| 5333 | Ni XXIV   | B S      | 7592.400 | 1.633     | 7.24 | 4.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.08 | 4.67 | 4.84 | 5.33 | 5.94 | 6.70 | 7.60 | -    | -    | -    |      |      |
| 5357 | Ni XXV    | BE S2    | 7639.200 | 1.623     | 7.41 | 3.95  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.30 | 4.25 | 3.95 | 4.07 | 4.39 | 4.90 | 5.58 | 6.36 | 7.16 | 7.92 | -    |      |
| 5356 | Ni XXV    | BE S3    | 7681.800 | 1.614     | 7.47 | 4.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.44 | 5.16 | 4.72 | 4.75 | 5.03 | 5.52 | 6.22 | 7.04 | 7.89 | -    | -    |      |
| 5381 | Ni XXVI   | LI S2    | 7686.600 | 1.613     | 7.68 | 3.18  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.91 | 4.20 | 3.44 | 3.20 | 3.22 | 3.45 | 3.89 | 4.44 | 5.04 | 5.62 | 6.17 |      |
| 5355 | Ni XXV    | BE S4    | 7686.600 | 1.613     | 7.50 | 4.83  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 7.78 | 5.38 | 4.87 | 4.86 | 5.11 | 5.58 | 6.27 | 7.08 | 7.92 | 8.76 | -    |      |
| 5380 | Ni XXVI   | LI S3    | 7734.500 | 1.603     | 7.69 | 3.80  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.01 | 4.12 | 3.83 | 3.83 | 4.09 | 4.55 | 5.15 | 5.81 | 6.46 | 7.10 |      |
| 5379 | Ni XXVI   | LI S4    | 7744.200 | 1.601     | 7.72 | 3.90  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.25 | 4.28 | 3.94 | 3.92 | 4.15 | 4.61 | 5.20 | 5.85 | 6.50 | 7.14 |      |
| 5404 | Ni XXVII  | HE6      | 7749.000 | 1.600     | 7.97 | 3.11  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.49 | 4.20 | 3.54 | 3.20 | 3.11 | 3.24 | 3.51 | 3.83 | 4.16 | 4.49 |      |
| 5402 | Ni XXVII  | HE4      | 7797.800 | 1.590     | 7.96 | 2.69  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.05 | 3.76 | 3.11 | 2.77 | 2.69 | 2.84 | 3.14 | 3.49 | 3.87 | 4.23 |      |
| 5403 | Ni XXVII  | HE5      | 7797.800 | 1.590     | 7.95 | 3.08  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.30 | 4.06 | 3.45 | 3.15 | 3.09 | 3.25 | 3.55 | 3.90 | 4.28 | 4.65 |      |
| 4932 | Fe XXV    | HE3      | 7897.100 | 1.570     | 7.82 | 2.23  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 5.96 | 3.56 | 2.75 | 2.37 | 2.23 | 2.34 | 2.70 | 3.22 | 3.80 | 4.35 | 4.79 |      |      |
| 5401 | Ni XXVII  | HE S2    | 7999.000 | 1.550     | 8.02 | 4.07  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 6.07 | 4.91 | 4.29 | 4.08 | 4.18 | 4.50 | 4.92 | 5.38 | 5.86 | -    |      |
| 5412 | Ni XXVIII | H1B      | 8030.100 | 1.544     | 8.32 | 3.20  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.65 | 5.05 | 4.05 | 3.48 | 3.23 | 3.21 | 3.30 | 3.44 | 3.60 |      |
| 5400 | Ni XXVII  | HE S3    | 8056.200 | 1.539     | 8.04 | 4.47  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.67 | 5.40 | 4.73 | 4.47 | 4.55 | 4.85 | 5.26 | 5.72 | 6.19 |      |
| 5411 | Ni XXVIII | H1A      | 8061.400 | 1.538     | 8.30 | 2.97  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.36 | 4.77 | 3.78 | 3.22 | 2.99 | 2.99 | 3.09 | 3.24 | 3.41 |      |
| 5399 | Ni XXVII  | HE S4    | 8061.400 | 1.538     | 8.05 | 4.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.74 | 5.43 | 4.72 | 4.45 | 4.52 | 4.81 | 5.21 | 5.67 | 6.14 |      |
| 4931 | Fe XXV    | HE2      | 8210.900 | 1.510     | 7.82 | 2.65  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.48 | 4.04 | 3.20 | 2.81 | 2.65 | 2.76 | 3.11 | 3.61 | 4.17 | 4.70 | 5.12 |      |
| 5003 | Fe XXVI   | H2       | 8210.900 | 1.510     | 8.16 | 2.38  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 4.92 | 3.63 | 2.83 | 2.45 | 2.38 | 2.47 | 2.63 | 2.81 | 2.99 |      |
| 4929 | Fe XXV    | HE1      | 8492.100 | 1.460     | 7.83 | 2.99  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | 6.90 | 4.43 | 3.57 | 3.17 | 2.99 | 3.09 | 3.43 | 3.92 | 4.47 | 4.98 | 5.39 |      |
| 5002 | Fe XXVI   | H3       | 8670.200 | 1.430     | 8.17 | 2.92  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.56 | 4.24 | 3.41 | 3.00 | 2.92 | 3.00 | 3.15 | 3.32 | 3.50 |      |
| 5001 | Fe XXVI   | H4       | 8856.000 | 1.400     | 8.18 | 3.27  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.96 | 4.62 | 3.78 | 3.36 | 3.27 | 3.35 | 3.49 | 3.66 | 3.83 |      |
| 5000 | Fe XXVI   | H5       | 8919.699 | 1.390     | 8.19 | 3.57  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 6.28 | 4.93 | 4.08 | 3.67 | 3.57 | 3.64 | 3.78 | 3.94 | 4.11 | -    |
| 5398 | Ni XXVII  | HE3      | 9049.900 | 1.370     | 7.94 | 3.44  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.08 | 4.16 | 3.72 | 3.49 | 3.45 | 3.61 | 3.90 | 4.25 | 4.61 | 4.97 |      |
| 5409 | Ni XXVIII | H2       | 9464.400 | 1.310     | 8.31 | 3.63  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.24 | 5.54 | 4.49 | 3.89 | 3.65 | 3.64 | 3.75 | 3.90 | 4.08 |      |
| 5397 | Ni XXVII  | HE2      | 9537.200 | 1.300     | 7.95 | 3.87  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 5.60 | 4.64 | 4.17 | 3.92 | 3.87 | 4.02 | 4.31 | 4.65 | 5.01 | 5.36 |
| 5396 | Ni XXVII  | HE1      | 9611.200 | 1.290     | 7.95 | 4.19  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | 5.94 | 4.97 | 4.50 | 4.25 | 4.20 | 4.34 | 4.63 | 4.97 | 5.33 | 5.68 |      |
| 5408 | Ni XXVIII | H3       | 9998.700 | 1.240     | 8.28 | 4.30  | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    | -    | -    | 7.90 | 6.18 | 5.13 | 4.54 | 4.32 | 4.33 | 4.46 | 4.64 | 4.85 | -    |