

Density-sensitive X-ray lines between 1.2 – 31 Å

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Introduction

We present tables of density-sensitive lines with wavelengths between 1.2 – 31 Å (corresponding to *Chandra*'s HETG range) for a collisional plasma at $T = 10^6, 10^{6.5}, 10^7, 10^{7.5}$ K. Temperatures of $10^5, 10^{5.5}$, and 10^8 K were also considered but no density-sensitive lines were found.

Our method was to calculate line emissivities at a range of densities from $10^5 - 10^{15} \text{ cm}^{-3}$ and then to calculate the mean and standard deviation of each line's emissivity vector. If the standard deviation was more than 10% of the mean, we marked the line as density-sensitive. This criterion is *ad-hoc* but quite effective; most non-density-sensitive lines have a ratio of standard deviation to mean of much less than 0.1.

After selecting the lines, we fit the emissivity curve $\Lambda(n)$ to a function of the form

$$\Lambda(n) = c_0 + c_1 \exp(-n/n_0) \tag{1}$$

to find the characteristic density for the line. Of course, some emissivity curves are more complex than this. If this function was a poor fit, we added a second term as follows:

$$\Lambda(n) = c_0 + c_1 \exp(-n/n_0) + c_2 \exp(-n/n_1) \tag{2}$$

In most cases, adding a second term led to an adequate fit. If not, however, we give in the table the best-fit characteristic density from the single-term fit and mark the line as a “Bad Fit.” Plots of the emissivity curve and the best one- and two-density fits are shown after the tables. By examining these “unacceptable” fits it is easy to get a sense of the quality of the acceptable fits.

Of course, not all density-sensitive lines are easy to see. To highlight the strong lines, those whose peak emissivity is greater than $10^{-17} \text{ erg cm}^3 \text{ s}^{-1}$ are printed with boldface wavelengths. Lines with peak emissivities between $10^{-20} - 10^{-17} \text{ erg cm}^3 \text{ s}^{-1}$ are shown in normal type.

Density-sensitive lines at $T = 10^6$ K

Table 1: Temperature = $1.00000e + 06$ K

| Ion | λ (\AA) | Transition | Peak Λ | $\Lambda(\text{Low } n)$ | $\Lambda(\text{High } n)$ | $\log n_0$ | $\log n_1$ |
|-------|----------------------------|-------------------|----------------|--------------------------|---------------------------|------------|------------|
| O VII | 21.6015 | $7 \rightarrow 1$ | 3.53E-16 | 2.61E-16 | 3.53E-16 | 13.90 | – |
| O VII | 21.8010 | $6 \rightarrow 1$ | 2.43E-18 | 5.03E-19 | 2.11E-18 | 11.25 | – |
| O VII | 21.8036 | $5 \rightarrow 1$ | 2.98E-16 | 6.08E-17 | 2.96E-16 | 11.29 | – |
| O VII | 22.0977 | $2 \rightarrow 1$ | 2.50E-16 | 2.50E-16 | 3.05E-20 | 11.29 | – |
| C VI | 28.4652 | $7 \rightarrow 1$ | 1.15E-16 | 6.99E-17 | 1.15E-16 | 14.06 | – |
| C VI | 28.4663 | $6 \rightarrow 1$ | 5.54E-17 | 3.38E-17 | 5.54E-17 | 14.06 | – |
| N VI | 28.7870 | $7 \rightarrow 1$ | 3.83E-16 | 2.35E-16 | 3.83E-16 | 13.47 | – |
| N VI | 29.0819 | $6 \rightarrow 1$ | 8.63E-19 | 1.50E-19 | 7.33E-19 | 10.69 | – |
| N VI | 29.0843 | $5 \rightarrow 1$ | 2.26E-16 | 3.92E-17 | 2.21E-16 | 10.73 | – |
| N VI | 29.5347 | $2 \rightarrow 1$ | 1.94E-16 | 1.94E-16 | 2.05E-20 | 10.72 | – |

Density-sensitive lines at $T = 10^{6.5}$ K

Table 2: Temperature = $3.16228e + 06$ K

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Si XIII | 6.6882 | 5 \rightarrow 1 | 9.39E-19 | 3.68E-19 | 9.39E-19 | 14.22 | – |
| Si XIII | 6.7403 | 2 \rightarrow 1 | 9.10E-19 | 9.10E-19 | 1.14E-19 | 14.21 | – |
| Mg XI | 9.2282 | 6 \rightarrow 1 | 1.76E-18 | 5.04E-19 | 1.76E-18 | 13.50 | – |
| Mg XI | 9.2312 | 5 \rightarrow 1 | 1.32E-17 | 3.67E-18 | 1.32E-17 | 13.52 | – |
| Mg XI | 9.3143 | 2 \rightarrow 1 | 1.15E-17 | 1.15E-17 | 2.70E-19 | 13.52 | – |
| Ne IX | 13.5503 | 6 \rightarrow 1 | 8.96E-18 | 2.31E-18 | 8.72E-18 | 12.57 | – |
| Ne IX | 13.5531 | 5 \rightarrow 1 | 2.38E-16 | 5.90E-17 | 2.38E-16 | 12.60 | – |
| Ne IX | 13.6990 | 2 \rightarrow 1 | 1.90E-16 | 1.90E-16 | 4.92E-19 | 12.59 | – |
| Fe XVIII | 14.1369 | 61 \rightarrow 2 | 3.04E-18 | 9.44E-20 | 3.04E-18 | 13.55 | – |
| Fe XVIII | 14.1419 | 58 \rightarrow 1 | 5.52E-19 | 1.76E-19 | 5.52E-19 | 13.55 | – |
| Fe XVIII | 14.1580 | 57 \rightarrow 1 | 9.72E-19 | 3.88E-19 | 9.72E-19 | 13.55 | – |
| Fe XVIII | 14.2080 | 56 \rightarrow 1 | 1.06E-17 | 1.06E-17 | 7.69E-18 | 13.55 | – |
| Fe XVIII | 14.3430 | 58 \rightarrow 2 | 2.42E-18 | 7.68E-19 | 2.42E-18 | 13.55 | – |
| Fe XVIII | 14.3430 | 57 \rightarrow 2 | 3.00E-18 | 1.20E-18 | 3.00E-18 | 13.55 | – |
| Ni XIX | 14.6953 | 3 \rightarrow 1 | 7.43E-18 | 4.74E-18 | 7.43E-18 | 14.32 | – |
| Ni XIX | 14.7362 | 2 \rightarrow 1 | 4.77E-18 | 4.77E-18 | 7.05E-19 | 14.26 | – |
| Fe XVIII | 15.5199 | 17 \rightarrow 2 | 8.16E-19 | 1.85E-19 | 8.16E-19 | 13.55 | – |
| Fe XVIII | 15.8700 | 10 \rightarrow 2 | 2.85E-18 | 1.57E-18 | 2.85E-18 | 13.55 | – |
| Fe XVIII | 16.0600 | 65 \rightarrow 3 | 6.99E-19 | 1.07E-20 | 6.99E-19 | 13.55 | – |
| Fe XVIII | 16.1590 | 64 \rightarrow 3 | 2.61E-18 | 2.61E-18 | 1.87E-18 | 13.55 | – |
| Fe XVII | 16.2285 | 10 \rightarrow 1 | 2.76E-17 | 7.48E-18 | 2.76E-17 | 14.15 | – |
| Fe XVII | 16.3500 | 7 \rightarrow 1 | 3.45E-17 | 1.05E-17 | 3.45E-17 | 14.15 | – |
| Fe XVII | 17.0510 | 3 \rightarrow 1 | 6.66E-16 | 4.18E-16 | 6.66E-16 | 14.14 | – |
| Fe XVII | 17.0960 | 2 \rightarrow 1 | 4.16E-16 | 4.16E-16 | 3.99E-17 | 14.08 | – |
| Fe XVIII | 17.3471 | 38 \rightarrow 3 | 5.88E-19 | 1.39E-20 | 5.88E-19 | 13.55 | – |
| Fe XVIII | 17.6179 | 30 \rightarrow 3 | 8.63E-19 | 8.22E-20 | 8.63E-19 | 13.55 | – |
| Fe XVIII | 17.6230 | 29 \rightarrow 3 | 5.39E-18 | 5.39E-18 | 3.89E-18 | 13.55 | – |
| Ca XVI | 21.4500 | 31 \rightarrow 1 | 2.98E-18 | 2.98E-18 | 1.42E-18 | 11.67 | – |
| Ca XVI | 21.6100 | 50 \rightarrow 2 | 2.08E-18 | 3.38E-19 | 2.06E-18 | 11.66 | – |
| Ca XVI | 21.6190 | 31 \rightarrow 2 | 5.88E-19 | 5.88E-19 | 2.80E-19 | 11.67 | – |
| O VII | 21.8010 | 6 \rightarrow 1 | 8.90E-18 | 1.82E-18 | 8.11E-18 | 11.39 | – |
| O VII | 21.8036 | 5 \rightarrow 1 | 1.09E-15 | 2.16E-16 | 1.08E-15 | 11.42 | – |
| Ca XVI | 22.0260 | 121 \rightarrow 7 | 4.32E-19 | 1.06E-20 | 4.27E-19 | 11.69 | – |
| O VII | 22.0977 | 2 \rightarrow 1 | 9.03E-16 | 9.03E-16 | 1.52E-19 | 11.42 | – |
| Ca XVI | 22.1800 | 111 \rightarrow 6 | 6.38E-19 | 6.38E-19 | 3.43E-19 | 11.67 | – |
| Ca XVI | 23.4970 | 89 \rightarrow 7 | 5.66E-19 | 2.23E-20 | 5.59E-19 | 11.71 | – |
| Ca XVI | 23.6260 | 75 \rightarrow 6 | 1.21E-18 | 1.21E-18 | 4.67E-19 | 11.66 | – |
| Ar XV | 24.5460 | 23 \rightarrow 4 | 5.58E-19 | 8.91E-20 | 5.58E-19 | 14.92 | 11.06 |
| Ar XIV | 25.1740 | 54 \rightarrow 2 | 4.74E-19 | 1.96E-19 | 4.57E-19 | 10.76 | – |
| Ar XIV | 25.1980 | 37 \rightarrow 2 | 6.61E-19 | 1.12E-19 | 6.36E-19 | 10.77 | – |
| Ca XI | 25.3520 | 34 \rightarrow 1 | 3.32E-18 | 3.32E-18 | 2.34E-18 | 13.71 | – |
| Ar XV | 25.8400 | 18 \rightarrow 3 | 2.09E-18 | 1.24E-18 | 2.09E-18 | 14.59 | – |
| Ar XV | 25.9990 | 19 \rightarrow 4 | 5.26E-18 | 2.32E-18 | 5.26E-18 | 11.20 | – |
| Ar XIV | 26.2870 | 36 \rightarrow 1 | 7.05E-18 | 7.05E-18 | 3.03E-18 | 10.78 | – |
| Ar XIV | 26.3450 | 53 \rightarrow 2 | 5.84E-18 | 1.98E-20 | 5.65E-18 | 10.77 | – |
| Ar XIV | 26.4440 | 36 \rightarrow 2 | 2.46E-18 | 2.46E-18 | 1.06E-18 | 10.78 | – |
| Ar XIV | 26.4820 | 52 \rightarrow 2 | 8.33E-19 | 1.02E-19 | 8.33E-19 | 15.30 | 10.76 |
| Ar XIV | 26.6420 | 18 \rightarrow 1 | 2.44E-18 | 2.44E-18 | 1.02E-18 | 10.78 | – |
| Ar XIV | 26.7450 | 17 \rightarrow 1 | 1.08E-18 | 1.08E-18 | 4.49E-19 | 10.78 | – |
| Ar XIV | 26.8030 | 18 \rightarrow 2 | 7.04E-19 | 7.04E-19 | 2.96E-19 | 10.78 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Ar XIV | 27.0760 | 92 \rightarrow 3 | 7.54E-19 | 7.54E-19 | 3.85E-19 | 10.78 | – |
| Ar XIV | 27.1390 | 92 \rightarrow 4 | 8.26E-19 | 8.26E-19 | 4.22E-19 | 10.78 | – |
| Ar XIV | 27.2130 | 112 \rightarrow 6 | 1.62E-18 | 1.62E-18 | 9.94E-19 | 10.79 | – |
| Ar XIV | 27.2200 | 122 \rightarrow 7 | 1.69E-18 | 4.92E-19 | 1.62E-18 | 10.76 | – |
| Ar XIV | 27.3490 | 96 \rightarrow 9 | 1.40E-18 | 1.40E-18 | 1.03E-18 | 10.81 | – |
| Ar XIV | 27.4190 | 113 \rightarrow 10 | 2.21E-18 | 1.50E-18 | 2.12E-18 | 10.75 | – |
| Ar XIV | 27.4390 | 91 \rightarrow 3 | 6.46E-19 | 6.46E-19 | 6.31E-19 | -Inf | 10.75 |
| Ar XIV | 27.4700 | 31 \rightarrow 1 | 4.86E-17 | 4.86E-17 | 2.00E-17 | 10.78 | – |
| Ar XIV | 27.5040 | 120 \rightarrow 5 | 1.50E-18 | 2.32E-19 | 1.50E-18 | 15.54 | 10.76 |
| Ar XIV | 27.5090 | 108 \rightarrow 4 | 1.93E-18 | 1.93E-18 | 1.93E-18 | -Inf | 10.52 |
| Ar XIV | 27.6290 | 50 \rightarrow 2 | 3.50E-17 | 4.96E-18 | 3.37E-17 | 10.77 | – |
| Ar XIV | 27.6420 | 31 \rightarrow 2 | 9.63E-18 | 9.63E-18 | 3.96E-18 | 10.78 | – |
| Ar XIV | 27.7060 | 107 \rightarrow 4 | 7.03E-19 | 7.03E-19 | 3.67E-19 | 10.75 | – |
| Ar XIV | 27.7430 | 119 \rightarrow 5 | 8.68E-19 | 8.68E-19 | 6.28E-19 | 10.74 | – |
| Ar XIV | 27.8100 | 80 \rightarrow 8 | 3.40E-19 | 6.75E-20 | 3.27E-19 | 10.77 | – |
| Ar XIV | 28.2340 | 121 \rightarrow 7 | 7.46E-18 | 9.53E-20 | 7.20E-18 | 10.77 | – |
| Ar XV | 28.2500 | 39 \rightarrow 8 | 8.62E-19 | 1.14E-20 | 8.62E-19 | 14.92 | 11.08 |
| Ar XIV | 28.3310 | 111 \rightarrow 6 | 1.16E-17 | 1.16E-17 | 5.24E-18 | 10.78 | – |
| Ar XIV | 28.3380 | 111 \rightarrow 7 | 1.56E-18 | 1.56E-18 | 7.05E-19 | 10.78 | – |
| C VI | 28.4652 | 7 \rightarrow 1 | 8.33E-17 | 5.64E-17 | 8.33E-17 | 14.01 | – |
| C VI | 28.4663 | 6 \rightarrow 1 | 4.00E-17 | 2.70E-17 | 4.00E-17 | 14.01 | – |
| Ar XIV | 28.7380 | 92 \rightarrow 6 | 2.67E-18 | 2.67E-18 | 1.36E-18 | 10.78 | – |
| N VI | 28.7870 | 7 \rightarrow 1 | 7.50E-17 | 5.60E-17 | 7.50E-17 | 13.61 | – |
| Ar XIV | 28.8930 | 93 \rightarrow 7 | 1.33E-18 | 6.48E-20 | 1.28E-18 | 10.77 | – |
| Ar XIV | 28.8940 | 77 \rightarrow 6 | 1.39E-18 | 1.39E-18 | 4.88E-19 | 10.78 | – |
| Ca XIII | 28.9160 | 15 \rightarrow 1 | 7.40E-19 | 7.40E-19 | 4.47E-19 | 11.32 | – |
| N VI | 29.0843 | 5 \rightarrow 1 | 3.23E-17 | 5.15E-18 | 3.20E-17 | 10.85 | – |
| Ar XIV | 29.1860 | 79 \rightarrow 8 | 9.32E-19 | 7.00E-20 | 9.00E-19 | 10.77 | – |
| Ar XIV | 29.2530 | 95 \rightarrow 8 | 3.76E-18 | 3.76E-18 | 2.78E-18 | 10.80 | – |
| Ar XIV | 29.4930 | 79 \rightarrow 9 | 5.90E-19 | 4.43E-20 | 5.70E-19 | 10.77 | – |
| N VI | 29.5347 | 2 \rightarrow 1 | 2.79E-17 | 2.79E-17 | 1.25E-20 | 10.84 | – |
| Ar XIV | 29.6250 | 92 \rightarrow 8 | 6.15E-19 | 6.15E-19 | 3.14E-19 | 10.78 | – |
| Ar XIV | 29.8030 | 93 \rightarrow 8 | 5.35E-19 | 2.60E-20 | 5.15E-19 | 10.77 | – |
| Ar XIV | 29.8970 | 92 \rightarrow 9 | 8.02E-19 | 8.02E-19 | 4.10E-19 | 10.78 | – |
| Ar XV | 30.0900 | 16 \rightarrow 8 | 1.33E-18 | 6.21E-19 | 1.33E-18 | 11.21 | – |
| Ar XIV | 30.1320 | 77 \rightarrow 9 | 1.70E-18 | 1.70E-18 | 5.97E-19 | 10.78 | – |
| Ar XIV | 30.2200 | 93 \rightarrow 10 | 1.48E-18 | 7.21E-20 | 1.43E-18 | 10.77 | – |
| Ar XIV | 30.2280 | 77 \rightarrow 10 | 6.88E-19 | 6.88E-19 | 2.41E-19 | 10.78 | – |
| Ar XIV | 30.3800 | 89 \rightarrow 6 | 9.71E-19 | 1.40E-20 | 9.33E-19 | 10.79 | – |
| Ar XIV | 30.3870 | 89 \rightarrow 7 | 9.60E-18 | 5.86E-20 | 9.23E-18 | 10.77 | – |
| Ca XI | 30.4710 | 27 \rightarrow 1 | 2.31E-17 | 2.31E-17 | 1.62E-17 | 13.71 | – |
| Ar XIV | 30.5240 | 75 \rightarrow 6 | 1.88E-17 | 1.88E-17 | 6.09E-18 | 10.78 | – |
| Ca XI | 30.9140 | 23 \rightarrow 1 | 2.23E-18 | 2.23E-18 | 1.56E-18 | 13.71 | – |

Density-sensitive lines at $T = 10^7$ K

Table 3: Temperature = 1.00000e + 07 K

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|---------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| S XV | 5.0631 | 6 \rightarrow 1 | 4.10E-18 | 2.34E-18 | 4.10E-18 | 14.78 | - |
| S XV | 5.0665 | 5 \rightarrow 1 | 5.95E-18 | 3.40E-18 | 5.95E-18 | 14.78 | - |
| S XV | 5.1015 | 2 \rightarrow 1 | 8.20E-18 | 8.20E-18 | 3.80E-18 | 14.78 | - |
| Si XIII | 6.6850 | 6 \rightarrow 1 | 1.20E-17 | 4.40E-18 | 1.20E-17 | 14.32 | - |
| Si XIII | 6.6882 | 5 \rightarrow 1 | 3.34E-17 | 1.20E-17 | 3.34E-17 | 14.33 | - |
| Si XIII | 6.7403 | 2 \rightarrow 1 | 3.55E-17 | 3.55E-17 | 5.88E-18 | 14.33 | - |
| Fe XXII | 7.6812 | 233 \rightarrow 1 | 1.87E-18 | 1.87E-18 | 1.00E-18 | 13.57 | - |
| Fe XXII | 7.7520 | 234 \rightarrow 2 | 1.69E-18 | 4.50E-19 | 1.69E-18 | 13.57 | - |
| Al XII | 7.8038 | 6 \rightarrow 1 | 7.50E-19 | 2.13E-19 | 7.50E-19 | 13.54 | - |
| Al XII | 7.8070 | 5 \rightarrow 1 | 3.19E-18 | 8.78E-19 | 3.19E-18 | 13.56 | - |
| Fe XXII | 7.8650 | 167 \rightarrow 1 | 6.90E-19 | 6.90E-19 | 2.76E-19 | 13.57 | - |
| Fe XXII | 7.8650 | 168 \rightarrow 1 | 9.86E-19 | 9.86E-19 | 4.03E-19 | 13.57 | - |
| Al XII | 7.8721 | 2 \rightarrow 1 | 2.99E-18 | 2.99E-18 | 7.65E-20 | 13.55 | - |
| Fe XXII | 7.8838 | 197 \rightarrow 2 | 4.94E-19 | 1.83E-20 | 4.94E-19 | 13.62 | - |
| Fe XXII | 8.0904 | 151 \rightarrow 1 | 4.39E-18 | 4.39E-18 | 2.31E-18 | 13.57 | - |
| Fe XXII | 8.1684 | 151 \rightarrow 2 | 8.38E-19 | 8.38E-19 | 4.42E-19 | 13.57 | - |
| Fe XXII | 8.1684 | 152 \rightarrow 2 | 3.57E-18 | 1.03E-18 | 3.57E-18 | 13.57 | - |
| Fe XXII | 8.2740 | 206 \rightarrow 7 | 5.94E-19 | 2.41E-20 | 5.94E-19 | 13.62 | - |
| Fe XXI | 8.3162 | 581 \rightarrow 1 | 3.46E-18 | 3.46E-18 | 3.78E-19 | 12.70 | - |
| Fe XXI | 8.3208 | 650 \rightarrow 3 | 3.94E-19 | 2.20E-20 | 3.76E-19 | 12.42 | - |
| Fe XXI | 8.3224 | 647 \rightarrow 3 | 4.59E-19 | 2.58E-20 | 4.39E-19 | 12.42 | - |
| Fe XXI | 8.3289 | 605 \rightarrow 2 | 4.79E-19 | 1.58E-20 | 4.16E-19 | 12.72 | - |
| Fe XXII | 8.3343 | 178 \rightarrow 6 | 9.41E-19 | 9.41E-19 | 3.91E-19 | 13.57 | - |
| Fe XXII | 8.3375 | 192 \rightarrow 7 | 4.21E-19 | 1.58E-20 | 4.21E-19 | 13.62 | - |
| Fe XXII | 8.3869 | 160 \rightarrow 6 | 6.80E-19 | 6.80E-19 | 2.69E-19 | 13.57 | - |
| Fe XXII | 8.4053 | 177 \rightarrow 8 | 6.53E-19 | 6.53E-19 | 2.68E-19 | 13.57 | - |
| Fe XXI | 8.5188 | 495 \rightarrow 2 | 4.82E-19 | 2.81E-20 | 4.35E-19 | 12.71 | - |
| Fe XXI | 8.5190 | 494 \rightarrow 2 | 1.07E-18 | 4.52E-20 | 9.98E-19 | 12.65 | - |
| Fe XXI | 8.5190 | 493 \rightarrow 2 | 3.58E-19 | 1.23E-20 | 3.58E-19 | 12.63 | - |
| Fe XXII | 8.5298 | 133 \rightarrow 2 | 5.83E-19 | 1.11E-19 | 5.83E-19 | 13.57 | - |
| Fe XXI | 8.5460 | 491 \rightarrow 2 | 6.39E-19 | 1.65E-20 | 6.36E-19 | 12.74 | - |
| Fe XXI | 8.5740 | 460 \rightarrow 1 | 1.52E-17 | 1.52E-17 | 2.09E-18 | 12.70 | - |
| Fe XXI | 8.5740 | 494 \rightarrow 3 | 4.70E-19 | 1.98E-20 | 4.38E-19 | 12.65 | - |
| Fe XXI | 8.5740 | 493 \rightarrow 3 | 1.26E-18 | 4.31E-20 | 1.26E-18 | 12.63 | - |
| Fe XXI | 8.5740 | 492 \rightarrow 3 | 3.01E-18 | 6.46E-20 | 2.92E-18 | 12.41 | - |
| Fe XXI | 8.6053 | 460 \rightarrow 2 | 2.21E-18 | 2.21E-18 | 3.04E-19 | 12.70 | - |
| Fe XXIII | 8.6172 | 55 \rightarrow 4 | 1.44E-18 | 1.05E-18 | 1.44E-18 | 13.65 | - |
| Fe XXI | 8.6366 | 594 \rightarrow 6 | 6.55E-19 | 6.55E-19 | 1.13E-19 | 12.70 | - |
| Fe XXI | 8.6400 | 458 \rightarrow 2 | 3.01E-18 | 1.64E-18 | 2.58E-18 | 12.63 | - |
| Fe XXI | 8.6480 | 493 \rightarrow 4 | 7.77E-19 | 2.66E-20 | 7.77E-19 | 12.63 | - |
| Fe XXI | 8.6528 | 491 \rightarrow 4 | 3.79E-19 | 1.02E-20 | 3.77E-19 | 12.76 | - |
| Fe XXI | 8.6630 | 459 \rightarrow 3 | 2.71E-18 | 1.05E-18 | 2.58E-18 | 12.33 | - |
| Fe XXI | 8.6630 | 497 \rightarrow 4 | 3.86E-18 | 6.78E-20 | 3.86E-18 | 14.28 | 13.25 |
| Fe XX | 8.7037 | 817 \rightarrow 3 | 3.60E-19 | 2.15E-20 | 3.60E-19 | 13.41 | - |
| Fe XXII | 8.7140 | 86 \rightarrow 1 | 4.07E-18 | 4.07E-18 | 1.64E-18 | 13.57 | - |
| Fe XXII | 8.7254 | 85 \rightarrow 1 | 2.59E-18 | 2.59E-18 | 1.04E-18 | 13.57 | - |
| Fe XXII | 8.7275 | 109 \rightarrow 2 | 7.83E-19 | 1.00E-19 | 7.83E-19 | 13.57 | - |
| Fe XXII | 8.7355 | 108 \rightarrow 2 | 1.88E-18 | 5.13E-20 | 1.88E-18 | 13.57 | - |
| Fe XXII | 8.7360 | 81 \rightarrow 1 | 1.38E-18 | 1.38E-18 | 6.48E-19 | 13.57 | - |
| Fe XXI | 8.7382 | 459 \rightarrow 4 | 5.80E-19 | 2.25E-19 | 5.54E-19 | 12.33 | - |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|---------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXII | 8.7474 | 102 \rightarrow 2 | 5.13E-19 | 6.14E-20 | 5.13E-19 | 13.57 | - |
| Fe XXII | 8.7541 | 100 \rightarrow 2 | 4.05E-19 | 1.11E-20 | 4.05E-19 | 13.57 | - |
| Fe XXI | 8.7646 | 790 \rightarrow 13 | 5.54E-19 | 5.54E-19 | 1.21E-19 | 12.68 | - |
| Fe XXI | 8.7979 | 665 \rightarrow 9 | 5.93E-19 | 1.09E-20 | 5.68E-19 | 12.40 | - |
| Fe XXI | 8.8177 | 421 \rightarrow 3 | 3.45E-19 | 1.78E-20 | 3.45E-19 | 12.73 | - |
| Fe XXI | 8.8188 | 627 \rightarrow 8 | 5.65E-19 | 1.16E-20 | 4.91E-19 | 12.68 | - |
| Fe XX | 8.8214 | 702 \rightarrow 1 | 6.93E-19 | 6.93E-19 | 2.56E-19 | 13.63 | - |
| Fe XX | 8.8232 | 701 \rightarrow 1 | 1.20E-18 | 1.20E-18 | 4.47E-19 | 13.63 | - |
| Fe XX | 8.8246 | 700 \rightarrow 1 | 1.49E-18 | 1.49E-18 | 5.49E-19 | 13.63 | - |
| Fe XXI | 8.8254 | 387 \rightarrow 1 | 6.59E-19 | 6.59E-19 | 1.41E-19 | 12.68 | - |
| Fe XXI | 8.8310 | 460 \rightarrow 5 | 1.11E-18 | 1.11E-18 | 1.53E-19 | 12.70 | - |
| Fe XXI | 8.8605 | 599 \rightarrow 7 | 3.87E-18 | 3.87E-18 | 4.34E-19 | 12.70 | - |
| Fe XXI | 8.8664 | 612 \rightarrow 9 | 4.45E-19 | 2.60E-20 | 4.27E-19 | 12.42 | - |
| Fe XXI | 8.9291 | 553 \rightarrow 7 | 2.24E-18 | 2.24E-18 | 2.40E-19 | 12.70 | - |
| Fe XXI | 8.9322 | 710 \rightarrow 14 | 3.29E-19 | 2.46E-20 | 3.29E-19 | 13.92 | - |
| Fe XXII | 8.9748 | 72 \rightarrow 1 | 1.59E-17 | 1.59E-17 | 8.21E-18 | 13.57 | - |
| Fe XXII | 8.9796 | 138 \rightarrow 7 | 9.28E-19 | 2.31E-19 | 9.28E-19 | 13.57 | - |
| Fe XXII | 9.0126 | 111 \rightarrow 5 | 4.71E-19 | 1.19E-20 | 4.71E-19 | 13.57 | - |
| Fe XXII | 9.0190 | 99 \rightarrow 4 | 7.85E-19 | 7.85E-19 | 3.19E-19 | 13.57 | - |
| Fe XXII | 9.0271 | 73 \rightarrow 2 | 1.26E-17 | 3.13E-18 | 1.26E-17 | 13.57 | - |
| Fe XXII | 9.0303 | 72 \rightarrow 2 | 3.04E-18 | 3.04E-18 | 1.57E-18 | 13.57 | - |
| Fe XX | 9.0419 | 698 \rightarrow 4 | 8.92E-19 | 1.19E-20 | 8.92E-19 | 13.98 | - |
| Fe XXII | 9.0614 | 89 \rightarrow 4 | 9.82E-19 | 9.82E-19 | 4.07E-19 | 13.56 | - |
| Fe XX | 9.0647 | 594 \rightarrow 1 | 5.17E-18 | 5.17E-18 | 1.99E-18 | 13.62 | - |
| Fe XX | 9.0659 | 592 \rightarrow 1 | 7.36E-18 | 7.36E-18 | 2.97E-18 | 13.64 | - |
| Fe XX | 9.0683 | 590 \rightarrow 1 | 3.55E-18 | 3.55E-18 | 1.67E-18 | 13.66 | - |
| Fe XX | 9.0707 | 661 \rightarrow 2 | 4.35E-19 | 3.26E-20 | 4.35E-19 | 14.10 | - |
| Fe XX | 9.0772 | 657 \rightarrow 2 | 1.06E-18 | 9.20E-20 | 1.06E-18 | 13.54 | - |
| Fe XX | 9.0774 | 656 \rightarrow 2 | 8.45E-19 | 8.03E-20 | 8.45E-19 | 13.93 | 12.70 |
| Fe XXII | 9.0850 | 91 \rightarrow 5 | 8.53E-19 | 8.53E-19 | 4.78E-19 | 13.57 | - |
| Fe XXI | 9.0933 | 360 \rightarrow 4 | 4.21E-19 | 1.32E-20 | 4.21E-19 | 14.00 | - |
| Fe XX | 9.0956 | 697 \rightarrow 5 | 8.00E-19 | 1.48E-20 | 8.00E-19 | 14.18 | - |
| Fe XXI | 9.0956 | 359 \rightarrow 4 | 5.30E-19 | 7.11E-20 | 5.30E-19 | 13.84 | - |
| Fe XX | 9.1063 | 559 \rightarrow 1 | 5.69E-18 | 5.69E-18 | 2.40E-18 | 13.63 | - |
| Fe XX | 9.1094 | 555 \rightarrow 1 | 1.32E-18 | 1.32E-18 | 6.33E-19 | 13.61 | - |
| Fe XX | 9.1101 | 658 \rightarrow 3 | 2.48E-18 | 5.74E-20 | 2.48E-18 | 13.98 | 12.56 |
| Fe XX | 9.1111 | 656 \rightarrow 3 | 1.60E-18 | 1.52E-19 | 1.60E-18 | 13.93 | 12.70 |
| Fe XXI | 9.1118 | 354 \rightarrow 4 | 3.84E-19 | 1.31E-20 | 3.84E-19 | 13.85 | - |
| Fe XXI | 9.1120 | 353 \rightarrow 4 | 1.02E-18 | 2.38E-20 | 1.02E-18 | 13.92 | - |
| Fe XXI | 9.1220 | 387 \rightarrow 5 | 4.96E-19 | 4.96E-19 | 1.06E-19 | 12.68 | - |
| Fe XX | 9.1613 | 533 \rightarrow 1 | 3.33E-18 | 3.33E-18 | 1.73E-18 | 13.66 | - |
| Fe XX | 9.1795 | 599 \rightarrow 2 | 9.79E-19 | 2.40E-19 | 9.79E-19 | 13.51 | - |
| Fe XX | 9.1882 | 526 \rightarrow 1 | 3.29E-18 | 3.29E-18 | 1.24E-18 | 13.63 | - |
| Fe XXI | 9.1944 | 283 \rightarrow 1 | 1.11E-17 | 1.11E-17 | 1.24E-18 | 12.70 | - |
| Fe XXII | 9.1967 | 117 \rightarrow 7 | 2.53E-18 | 2.07E-20 | 2.53E-18 | 13.57 | - |
| Fe XXI | 9.1970 | 309 \rightarrow 3 | 1.44E-18 | 2.76E-20 | 1.37E-18 | 12.40 | - |
| Fe XXI | 9.1971 | 293 \rightarrow 2 | 4.24E-19 | 1.64E-20 | 3.67E-19 | 12.72 | - |
| Fe XX | 9.1979 | 518 \rightarrow 1 | 1.34E-18 | 1.34E-18 | 5.27E-19 | 13.62 | - |
| Fe XXI | 9.1987 | 308 \rightarrow 3 | 1.00E-18 | 1.00E-18 | 2.57E-19 | 12.78 | - |
| Fe XXI | 9.2009 | 306 \rightarrow 3 | 1.15E-18 | 7.55E-19 | 1.01E-18 | 12.01 | - |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|---------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 9.2021 | 304 \rightarrow 3 | 8.51E-19 | 2.02E-19 | 7.89E-19 | 12.33 | - |
| Fe XXI | 9.2080 | 291 \rightarrow 2 | 1.83E-18 | 1.25E-20 | 1.59E-18 | 12.69 | - |
| Fe XX | 9.2107 | 604 \rightarrow 3 | 8.18E-19 | 2.75E-19 | 8.18E-19 | 13.13 | - |
| Fe XX | 9.2114 | 602 \rightarrow 3 | 3.23E-18 | 4.00E-19 | 3.23E-18 | 13.95 | 12.53 |
| Fe XXII | 9.2138 | 115 \rightarrow 7 | 6.68E-19 | 5.28E-20 | 6.68E-19 | 13.57 | - |
| Fe XX | 9.2139 | 599 \rightarrow 3 | 1.05E-18 | 2.57E-19 | 1.05E-18 | 13.51 | - |
| Fe XXI | 9.2168 | 288 \rightarrow 2 | 8.50E-19 | 9.00E-20 | 7.37E-19 | 12.68 | - |
| Fe XX | 9.2192 | 566 \rightarrow 2 | 3.21E-18 | 1.63E-18 | 3.21E-18 | 13.51 | - |
| Fe XX | 9.2225 | 663 \rightarrow 5 | 1.34E-18 | 2.73E-19 | 1.34E-18 | 14.20 | - |
| Fe XX | 9.2240 | 661 \rightarrow 5 | 2.49E-18 | 1.87E-19 | 2.49E-18 | 14.10 | - |
| Mg XI | 9.2282 | 6 \rightarrow 1 | 3.64E-18 | 9.86E-19 | 3.64E-18 | 13.64 | - |
| Fe XIX | 9.2285 | 678 \rightarrow 1 | 8.07E-19 | 8.07E-19 | 3.81E-19 | 13.44 | - |
| Mg XI | 9.2312 | 5 \rightarrow 1 | 2.69E-17 | 6.89E-18 | 2.69E-17 | 13.66 | - |
| Fe XXII | 9.2630 | 99 \rightarrow 6 | 4.47E-18 | 4.47E-18 | 1.81E-18 | 13.57 | - |
| Fe XXII | 9.2689 | 96 \rightarrow 6 | 7.19E-19 | 7.19E-19 | 2.95E-19 | 13.57 | - |
| Fe XX | 9.2803 | 601 \rightarrow 4 | 9.67E-19 | 3.02E-19 | 9.67E-19 | 13.91 | - |
| Fe XX | 9.2817 | 533 \rightarrow 2 | 2.82E-18 | 2.82E-18 | 1.47E-18 | 13.66 | - |
| Fe XXI | 9.2832 | 280 \rightarrow 2 | 4.51E-19 | 4.51E-19 | 8.06E-20 | 12.70 | - |
| Fe XXII | 9.2984 | 130 \rightarrow 10 | 5.29E-19 | 4.53E-20 | 5.29E-19 | 13.57 | - |
| Fe XX | 9.3107 | 534 \rightarrow 3 | 4.11E-19 | 2.10E-20 | 4.11E-19 | 13.49 | - |
| Mg XI | 9.3143 | 2 \rightarrow 1 | 2.39E-17 | 2.39E-17 | 7.82E-19 | 13.66 | - |
| Fe XXI | 9.3233 | 429 \rightarrow 9 | 4.77E-19 | 2.04E-20 | 4.77E-19 | 12.71 | - |
| Fe XXII | 9.3318 | 88 \rightarrow 7 | 1.78E-18 | 1.17E-20 | 1.78E-18 | 13.59 | - |
| Ni XXI | 9.3355 | 243 \rightarrow 1 | 8.93E-19 | 8.93E-19 | 4.41E-19 | 13.67 | - |
| Fe XX | 9.3365 | 599 \rightarrow 5 | 6.02E-19 | 1.47E-19 | 6.02E-19 | 13.51 | - |
| Fe XXII | 9.3736 | 96 \rightarrow 8 | 2.52E-18 | 2.52E-18 | 1.03E-18 | 13.57 | - |
| Fe XXII | 9.3824 | 122 \rightarrow 9 | 4.35E-19 | 1.25E-20 | 4.35E-19 | 13.60 | - |
| Fe XXII | 9.3933 | 78 \rightarrow 6 | 3.58E-18 | 3.58E-18 | 1.41E-18 | 13.57 | - |
| Fe XX | 9.3945 | 878 \rightarrow 10 | 4.15E-19 | 2.43E-20 | 4.15E-19 | 13.41 | - |
| Fe XXII | 9.3955 | 116 \rightarrow 9 | 4.09E-19 | 4.68E-20 | 4.09E-19 | 13.57 | - |
| Fe XX | 9.4042 | 717 \rightarrow 6 | 2.23E-18 | 2.23E-18 | 8.26E-19 | 13.63 | - |
| Fe XXI | 9.4168 | 408 \rightarrow 7 | 1.30E-18 | 1.30E-18 | 3.37E-19 | 12.68 | - |
| Fe XXI | 9.4383 | 431 \rightarrow 12 | 4.09E-19 | 2.07E-20 | 4.09E-19 | 12.72 | - |
| Fe XXI | 9.4430 | 264 \rightarrow 2 | 1.67E-18 | 8.20E-20 | 1.50E-18 | 12.71 | - |
| Fe XXI | 9.4435 | 263 \rightarrow 2 | 3.68E-18 | 1.18E-19 | 3.42E-18 | 12.65 | - |
| Fe XXI | 9.4436 | 262 \rightarrow 2 | 1.21E-18 | 3.36E-20 | 1.21E-18 | 12.62 | - |
| Fe XXI | 9.4557 | 260 \rightarrow 2 | 2.61E-18 | 5.78E-20 | 2.58E-18 | 12.74 | - |
| Fe XX | 9.4630 | 714 \rightarrow 7 | 1.06E-18 | 1.06E-18 | 3.90E-19 | 13.63 | - |
| Fe XXI | 9.4797 | 248 \rightarrow 1 | 5.47E-17 | 5.47E-17 | 7.44E-18 | 12.70 | - |
| Fe XXI | 9.4854 | 263 \rightarrow 3 | 1.65E-18 | 5.29E-20 | 1.53E-18 | 12.65 | - |
| Fe XXI | 9.4855 | 262 \rightarrow 3 | 4.50E-18 | 1.25E-19 | 4.50E-18 | 12.62 | - |
| Fe XXI | 9.4910 | 261 \rightarrow 3 | 1.15E-17 | 2.23E-19 | 1.11E-17 | 12.40 | - |
| Fe XX | 9.4945 | 694 \rightarrow 6 | 1.25E-18 | 1.25E-18 | 4.64E-19 | 13.62 | - |
| Fe XXI | 9.4977 | 260 \rightarrow 3 | 8.99E-19 | 1.99E-20 | 8.89E-19 | 12.74 | - |
| Fe XXII | 9.5009 | 78 \rightarrow 8 | 1.51E-18 | 1.51E-18 | 5.96E-19 | 13.57 | - |
| Fe XXI | 9.5120 | 307 \rightarrow 6 | 4.21E-19 | 8.51E-20 | 3.73E-19 | 12.64 | - |
| Fe XXI | 9.5209 | 375 \rightarrow 9 | 8.35E-19 | 2.85E-20 | 8.35E-19 | 13.85 | - |
| Fe XXII | 9.5280 | 88 \rightarrow 9 | 4.52E-19 | 1.76E-20 | 4.52E-19 | 13.62 | - |
| Fe XXI | 9.5337 | 368 \rightarrow 9 | 3.43E-19 | 1.55E-20 | 3.43E-19 | 13.78 | - |
| Fe XXI | 9.5443 | 248 \rightarrow 2 | 8.39E-18 | 8.39E-18 | 1.14E-18 | 12.70 | - |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|---------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXII | 9.5462 | 88 \rightarrow 10 | 3.05E-19 | 1.19E-20 | 3.05E-19 | 13.62 | - |
| Fe XXI | 9.5502 | 246 \rightarrow 2 | 1.01E-17 | 4.89E-18 | 8.76E-18 | 12.65 | - |
| Fe XX | 9.5536 | 694 \rightarrow 7 | 6.87E-19 | 6.87E-19 | 2.56E-19 | 13.62 | - |
| Fe XXI | 9.5575 | 292 \rightarrow 6 | 1.92E-18 | 1.92E-18 | 3.28E-19 | 12.70 | - |
| Fe XX | 9.5650 | 457 \rightarrow 4 | 4.60E-19 | 3.11E-20 | 4.60E-19 | 13.91 | - |
| Fe XXI | 9.5656 | 358 \rightarrow 7 | 5.35E-19 | 5.35E-19 | 7.20E-20 | 12.69 | - |
| Fe XXI | 9.5658 | 290 \rightarrow 6 | 6.67E-19 | 6.67E-19 | 1.13E-19 | 12.70 | - |
| Fe XX | 9.5743 | 404 \rightarrow 2 | 5.80E-19 | 4.56E-20 | 5.80E-19 | 13.51 | - |
| Fe XX | 9.5792 | 411 \rightarrow 3 | 1.29E-18 | 1.41E-20 | 1.29E-18 | 13.95 | 12.54 |
| Fe XXI | 9.5846 | 265 \rightarrow 4 | 1.38E-17 | 2.69E-19 | 1.38E-17 | 14.31 | 13.35 |
| Fe XXI | 9.5871 | 248 \rightarrow 3 | 8.53E-19 | 8.53E-19 | 1.16E-19 | 12.70 | - |
| Fe XX | 9.5876 | 401 \rightarrow 2 | 4.57E-19 | 9.62E-20 | 4.57E-19 | 13.53 | - |
| Fe XXI | 9.5917 | 247 \rightarrow 3 | 8.83E-18 | 3.43E-18 | 8.30E-18 | 12.31 | - |
| Fe XX | 9.5918 | 399 \rightarrow 2 | 1.42E-18 | 3.74E-19 | 1.42E-18 | 13.53 | - |
| Fe XXI | 9.5930 | 246 \rightarrow 3 | 7.98E-19 | 3.85E-19 | 6.89E-19 | 12.65 | - |
| Fe XX | 9.5935 | 409 \rightarrow 3 | 6.25E-19 | 8.24E-20 | 6.25E-19 | 13.34 | - |
| Fe XXI | 9.6022 | 263 \rightarrow 4 | 3.94E-19 | 1.27E-20 | 3.67E-19 | 12.65 | - |
| Fe XXI | 9.6023 | 262 \rightarrow 4 | 2.71E-18 | 7.52E-20 | 2.71E-18 | 12.62 | - |
| Fe XXI | 9.6059 | 435 \rightarrow 14 | 3.79E-19 | 2.42E-20 | 3.76E-19 | 12.63 | - |
| Fe XXI | 9.6079 | 261 \rightarrow 4 | 4.47E-19 | 1.12E-20 | 4.34E-19 | 12.42 | - |
| Fe XX | 9.6079 | 406 \rightarrow 3 | 1.24E-18 | 2.26E-20 | 1.24E-18 | 13.35 | - |
| Fe XXI | 9.6147 | 260 \rightarrow 4 | 1.42E-18 | 3.15E-20 | 1.41E-18 | 12.74 | - |
| Fe XIX | 9.6458 | 620 \rightarrow 3 | 5.82E-19 | 4.39E-20 | 5.82E-19 | 13.38 | - |
| Fe XXI | 9.6482 | 238 \rightarrow 1 | 6.12E-19 | 6.12E-19 | 2.53E-19 | 12.80 | - |
| Fe XXI | 9.6521 | 243 \rightarrow 3 | 5.51E-19 | 5.79E-20 | 5.51E-19 | 12.67 | - |
| Fe XIX | 9.6854 | 598 \rightarrow 2 | 1.19E-18 | 1.30E-20 | 1.04E-18 | 8.88 | - |
| Fe XIX | 9.6884 | 536 \rightarrow 1 | 1.78E-18 | 1.78E-18 | 1.11E-18 | 13.31 | - |
| Fe XIX | 9.6938 | 532 \rightarrow 1 | 4.47E-18 | 4.47E-18 | 2.26E-18 | 13.43 | - |
| Fe XXI | 9.6959 | 266 \rightarrow 5 | 2.80E-18 | 2.21E-18 | 2.80E-18 | -Inf | 11.33 |
| Fe XIX | 9.6965 | 529 \rightarrow 1 | 3.34E-18 | 3.34E-18 | 1.72E-18 | 13.41 | - |
| Fe XIX | 9.7036 | 596 \rightarrow 3 | 6.44E-19 | 1.79E-20 | 6.44E-19 | 13.37 | 9.00 |
| Fe XXI | 9.7079 | 410 \rightarrow 13 | 2.21E-18 | 2.21E-18 | 4.60E-19 | 12.69 | - |
| Fe XXI | 9.7111 | 247 \rightarrow 4 | 1.28E-18 | 4.96E-19 | 1.20E-18 | 12.31 | - |
| Fe XIX | 9.7196 | 624 \rightarrow 4 | 1.14E-18 | 2.96E-19 | 1.14E-18 | 13.91 | - |
| Fe XX | 9.7242 | 365 \rightarrow 1 | 2.45E-18 | 2.45E-18 | 9.09E-19 | 13.63 | - |
| Fe XX | 9.7269 | 363 \rightarrow 1 | 4.78E-18 | 4.78E-18 | 1.77E-18 | 13.63 | - |
| Fe XX | 9.7269 | 364 \rightarrow 1 | 7.31E-18 | 7.31E-18 | 2.71E-18 | 13.63 | - |
| Fe XIX | 9.7327 | 491 \rightarrow 1 | 3.26E-18 | 3.26E-18 | 1.80E-18 | 13.40 | - |
| Fe XXI | 9.7356 | 330 \rightarrow 9 | 6.59E-19 | 1.35E-20 | 6.27E-19 | 12.41 | - |
| Fe XXI | 9.7414 | 328 \rightarrow 9 | 2.21E-18 | 1.31E-20 | 2.12E-18 | 12.39 | - |
| Fe XXI | 9.7457 | 405 \rightarrow 13 | 5.36E-19 | 1.25E-20 | 5.36E-19 | 12.68 | - |
| Fe XXI | 9.7595 | 238 \rightarrow 3 | 1.19E-18 | 1.19E-18 | 4.90E-19 | 12.80 | - |
| Fe XXI | 9.7654 | 244 \rightarrow 4 | 5.57E-19 | 8.88E-20 | 5.57E-19 | 13.99 | 12.51 |
| Fe XXI | 9.7662 | 311 \rightarrow 8 | 2.10E-18 | 7.61E-20 | 1.83E-18 | 12.68 | - |
| Fe XXI | 9.7788 | 310 \rightarrow 8 | 5.13E-19 | 5.15E-20 | 4.45E-19 | 12.68 | - |
| Fe XIX | 9.7829 | 597 \rightarrow 4 | 6.45E-19 | 1.68E-19 | 6.45E-19 | 13.82 | - |
| Fe XIX | 9.8105 | 496 \rightarrow 3 | 1.54E-18 | 9.35E-19 | 1.52E-18 | 13.31 | - |
| Fe XXI | 9.8188 | 296 \rightarrow 7 | 1.38E-17 | 1.38E-17 | 1.55E-18 | 12.70 | - |
| Fe XXI | 9.8219 | 384 \rightarrow 14 | 3.89E-19 | 2.18E-20 | 3.89E-19 | 13.96 | - |
| Fe XXI | 9.8228 | 248 \rightarrow 5 | 2.59E-18 | 2.59E-18 | 3.52E-19 | 12.70 | - |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 9.8327 | 376 \rightarrow 14 | 6.66E-19 | 1.13E-20 | 6.66E-19 | 13.92 | – |
| Fe XIX | 9.8479 | 541 \rightarrow 4 | 2.35E-18 | 4.10E-19 | 2.35E-18 | 13.92 | – |
| Fe XIX | 9.8495 | 634 \rightarrow 5 | 5.83E-19 | 1.27E-20 | 5.83E-19 | 14.40 | 8.99 |
| Fe XIX | 9.8502 | 537 \rightarrow 4 | 1.49E-18 | 2.68E-19 | 1.49E-18 | 13.81 | – |
| Fe XIX | 9.8552 | 432 \rightarrow 1 | 1.11E-17 | 1.11E-17 | 5.33E-18 | 13.46 | – |
| Fe XXI | 9.8595 | 327 \rightarrow 11 | 3.63E-19 | 1.02E-20 | 3.43E-19 | 12.43 | – |
| Fe XXI | 9.8680 | 330 \rightarrow 12 | 8.56E-19 | 1.75E-20 | 8.14E-19 | 12.41 | – |
| Fe XXI | 9.8716 | 329 \rightarrow 12 | 6.02E-19 | 1.38E-19 | 5.64E-19 | 12.32 | – |
| Fe XXI | 9.8778 | 358 \rightarrow 13 | 1.10E-18 | 1.10E-18 | 1.48E-19 | 12.69 | – |
| Fe XXI | 9.8984 | 312 \rightarrow 10 | 5.44E-19 | 1.84E-20 | 4.75E-19 | 12.67 | – |
| Fe XXI | 9.9117 | 285 \rightarrow 9 | 1.85E-18 | 1.22E-20 | 1.77E-18 | 12.39 | – |
| Fe XXI | 9.9218 | 310 \rightarrow 11 | 4.28E-19 | 4.30E-20 | 3.72E-19 | 12.68 | – |
| Fe XXI | 9.9231 | 501 \rightarrow 17 | 4.14E-19 | 4.14E-19 | 7.55E-20 | 12.69 | – |
| Fe XIX | 9.9278 | 431 \rightarrow 2 | 9.86E-19 | 1.88E-19 | 8.88E-19 | 8.91 | – |
| Fe XXI | 9.9397 | 279 \rightarrow 8 | 1.77E-18 | 1.22E-20 | 1.53E-18 | 12.71 | – |
| Fe XXI | 9.9631 | 296 \rightarrow 11 | 1.37E-18 | 1.37E-18 | 1.54E-19 | 12.70 | – |
| Fe XXI | 9.9887 | 276 \rightarrow 7 | 9.34E-18 | 9.34E-18 | 9.98E-19 | 12.70 | – |
| Fe XX | 9.9977 | 309 \rightarrow 1 | 1.63E-17 | 1.63E-17 | 6.32E-18 | 13.62 | – |
| Fe XXI | 9.9978 | 346 \rightarrow 14 | 1.38E-18 | 1.73E-20 | 1.38E-18 | 13.82 | – |
| Fe XX | 9.9989 | 343 \rightarrow 2 | 6.29E-19 | 1.59E-19 | 6.29E-19 | 13.99 | – |
| Fe XX | 9.9995 | 341 \rightarrow 2 | 1.43E-18 | 7.54E-20 | 1.43E-18 | 14.10 | – |
| Fe XX | 10.0004 | 306 \rightarrow 1 | 2.84E-17 | 2.84E-17 | 1.12E-17 | 13.64 | – |
| Fe XX | 10.0054 | 305 \rightarrow 1 | 1.69E-17 | 1.69E-17 | 7.64E-18 | 13.66 | – |
| Fe XIX | 10.0072 | 441 \rightarrow 4 | 6.91E-19 | 2.02E-19 | 6.91E-19 | 13.95 | – |
| Fe XX | 10.0119 | 361 \rightarrow 4 | 3.32E-18 | 1.08E-20 | 3.32E-18 | 13.98 | – |
| Fe XX | 10.0138 | 339 \rightarrow 2 | 1.05E-18 | 6.06E-20 | 1.05E-18 | 13.68 | – |
| Fe XX | 10.0172 | 337 \rightarrow 2 | 3.73E-18 | 2.77E-19 | 3.73E-18 | 13.55 | – |
| Fe XX | 10.0172 | 338 \rightarrow 2 | 3.15E-18 | 2.82E-19 | 3.15E-18 | 13.92 | 12.71 |
| Fe XIX | 10.0282 | 695 \rightarrow 6 | 7.61E-19 | 7.61E-19 | 3.63E-19 | 13.44 | – |
| Fe XXI | 10.0300 | 285 \rightarrow 11 | 3.52E-19 | 2.00E-20 | 3.37E-19 | 12.42 | – |
| Fe XX | 10.0388 | 302 \rightarrow 1 | 1.22E-18 | 8.85E-19 | 1.21E-18 | 13.47 | – |
| Fe XXI | 10.0435 | 358 \rightarrow 15 | 3.96E-19 | 3.96E-19 | 5.32E-20 | 12.69 | – |
| Fe XXI | 10.0491 | 285 \rightarrow 12 | 1.04E-18 | 1.98E-20 | 9.93E-19 | 12.40 | – |
| Fe XX | 10.0512 | 584 \rightarrow 10 | 5.17E-19 | 2.63E-20 | 5.17E-19 | 13.99 | 12.61 |
| Fe XX | 10.0529 | 300 \rightarrow 1 | 1.91E-17 | 1.91E-17 | 7.88E-18 | 13.64 | – |
| Fe XX | 10.0543 | 340 \rightarrow 3 | 1.02E-17 | 2.28E-19 | 1.02E-17 | 13.97 | 12.55 |
| Fe XX | 10.0582 | 337 \rightarrow 3 | 1.11E-18 | 8.27E-20 | 1.11E-18 | 13.55 | – |
| Fe XX | 10.0582 | 338 \rightarrow 3 | 5.60E-18 | 5.01E-19 | 5.60E-18 | 13.92 | 12.71 |
| Fe XX | 10.0596 | 297 \rightarrow 1 | 3.78E-18 | 3.78E-18 | 1.86E-18 | 13.61 | – |
| Fe XX | 10.0700 | 335 \rightarrow 3 | 1.44E-18 | 4.46E-20 | 1.44E-18 | 14.03 | 12.65 |
| Fe XX | 10.0770 | 361 \rightarrow 5 | 5.72E-19 | 1.92E-20 | 5.72E-19 | 13.99 | – |
| Fe XXI | 10.0771 | 279 \rightarrow 10 | 3.73E-19 | 1.18E-20 | 3.23E-19 | 12.72 | – |
| Fe XX | 10.0796 | 360 \rightarrow 5 | 3.13E-18 | 1.34E-20 | 3.13E-18 | 14.20 | – |
| Fe XXI | 10.0876 | 279 \rightarrow 11 | 4.37E-19 | 1.38E-20 | 3.79E-19 | 12.72 | – |
| Ni XXIV | 10.0932 | 21 \rightarrow 1 | 1.08E-18 | 1.08E-18 | 5.68E-19 | 13.94 | – |
| Fe XIX | 10.1117 | 369 \rightarrow 2 | 6.09E-19 | 1.60E-20 | 4.95E-19 | 8.86 | – |
| Fe XIX | 10.1195 | 354 \rightarrow 1 | 1.65E-18 | 1.65E-18 | 8.04E-19 | 13.45 | – |
| Fe XX | 10.1203 | 286 \rightarrow 1 | 1.32E-17 | 1.32E-17 | 6.22E-18 | 13.65 | – |
| Fe XX | 10.1301 | 315 \rightarrow 2 | 6.02E-18 | 7.92E-19 | 6.02E-18 | 13.50 | – |
| Fe XIX | 10.1309 | 353 \rightarrow 1 | 9.71E-19 | 9.71E-19 | 4.64E-19 | 13.45 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 10.1322 | 285 \rightarrow 1 | 1.23E-18 | 1.23E-18 | 6.74E-19 | 13.64 | – |
| Fe XX | 10.1342 | 339 \rightarrow 4 | 6.30E-19 | 3.62E-20 | 6.30E-19 | 13.68 | – |
| Fe XIX | 10.1381 | 363 \rightarrow 3 | 5.01E-19 | 7.31E-20 | 4.93E-19 | 13.22 | – |
| Fe XXI | 10.1381 | 276 \rightarrow 11 | 9.83E-19 | 9.83E-19 | 1.05E-19 | 12.70 | – |
| Fe XIX | 10.1408 | 674 \rightarrow 6 | 7.78E-19 | 7.78E-19 | 3.69E-19 | 13.44 | – |
| Fe XIX | 10.1419 | 351 \rightarrow 1 | 2.78E-18 | 2.78E-18 | 1.32E-18 | 13.44 | – |
| Fe XIX | 10.1438 | 361 \rightarrow 3 | 3.94E-19 | 2.39E-20 | 3.89E-19 | 13.30 | 9.00 |
| Fe XX | 10.1493 | 305 \rightarrow 2 | 1.72E-18 | 1.72E-18 | 7.78E-19 | 13.66 | – |
| Fe XX | 10.1695 | 317 \rightarrow 3 | 1.44E-17 | 2.02E-18 | 1.44E-17 | 13.95 | 12.52 |
| Fe XX | 10.1720 | 315 \rightarrow 3 | 3.30E-18 | 4.34E-19 | 3.30E-18 | 13.50 | – |
| Fe XX | 10.1835 | 344 \rightarrow 5 | 4.42E-18 | 6.67E-19 | 4.42E-18 | 14.18 | – |
| Fe XX | 10.1836 | 302 \rightarrow 2 | 7.93E-18 | 5.75E-18 | 7.84E-18 | 13.47 | – |
| Fe XX | 10.1854 | 343 \rightarrow 5 | 1.27E-18 | 3.22E-19 | 1.27E-18 | 13.99 | – |
| Fe XX | 10.1860 | 341 \rightarrow 5 | 8.36E-18 | 4.40E-19 | 8.36E-18 | 14.10 | – |
| Fe XX | 10.1861 | 306 \rightarrow 3 | 1.77E-18 | 1.77E-18 | 6.96E-19 | 13.64 | – |
| Fe XX | 10.1913 | 305 \rightarrow 3 | 2.97E-18 | 2.97E-18 | 1.34E-18 | 13.66 | – |
| Fe XX | 10.2098 | 278 \rightarrow 1 | 1.28E-18 | 1.28E-18 | 6.72E-19 | 13.68 | – |
| Ni XXIV | 10.2223 | 22 \rightarrow 2 | 7.59E-19 | 1.39E-19 | 7.59E-19 | 13.94 | – |
| Fe XX | 10.2372 | 500 \rightarrow 10 | 9.34E-19 | 2.24E-19 | 9.34E-19 | 14.23 | – |
| Fe XX | 10.2406 | 300 \rightarrow 3 | 8.04E-19 | 8.04E-19 | 3.32E-19 | 13.64 | – |
| Fe XX | 10.2449 | 493 \rightarrow 9 | 6.47E-19 | 6.79E-20 | 6.47E-19 | 13.93 | – |
| Fe XX | 10.2530 | 316 \rightarrow 4 | 3.62E-18 | 7.78E-19 | 3.62E-18 | 13.91 | – |
| Fe XX | 10.2648 | 309 \rightarrow 4 | 9.72E-19 | 9.72E-19 | 3.77E-19 | 13.62 | – |
| Fe XX | 10.2648 | 293 \rightarrow 3 | 5.31E-19 | 1.06E-19 | 5.31E-19 | 13.58 | – |
| Fe XX | 10.2675 | 286 \rightarrow 2 | 5.57E-18 | 5.57E-18 | 2.62E-18 | 13.65 | – |
| Fe XX | 10.2854 | 562 \rightarrow 12 | 1.10E-18 | 5.19E-19 | 1.10E-18 | 13.05 | – |
| Fe XVIII | 10.3106 | 368 \rightarrow 2 | 1.41E-18 | 1.28E-19 | 1.41E-18 | 13.51 | – |
| Fe XX | 10.3213 | 316 \rightarrow 5 | 8.13E-19 | 1.75E-19 | 8.13E-19 | 13.91 | – |
| Fe XX | 10.3216 | 315 \rightarrow 5 | 1.25E-18 | 1.65E-19 | 1.25E-18 | 13.50 | – |
| Fe XVIII | 10.3554 | 330 \rightarrow 1 | 5.97E-19 | 2.23E-19 | 5.97E-19 | 13.51 | – |
| Fe XX | 10.3676 | 461 \rightarrow 10 | 8.57E-19 | 1.70E-20 | 8.57E-19 | 13.94 | 12.55 |
| Fe XX | 10.3682 | 460 \rightarrow 10 | 1.46E-18 | 1.61E-20 | 1.46E-18 | 13.94 | 12.54 |
| Fe XX | 10.3807 | 376 \rightarrow 6 | 8.02E-18 | 8.02E-18 | 2.97E-18 | 13.63 | – |
| Fe XX | 10.3829 | 373 \rightarrow 6 | 1.96E-18 | 1.96E-18 | 7.26E-19 | 13.63 | – |
| Fe XX | 10.3860 | 432 \rightarrow 9 | 1.26E-18 | 3.03E-19 | 1.26E-18 | 13.52 | – |
| Fe XX | 10.3865 | 431 \rightarrow 9 | 4.79E-19 | 7.10E-20 | 4.79E-19 | 13.50 | – |
| Fe XX | 10.4493 | 415 \rightarrow 10 | 6.98E-19 | 1.26E-19 | 6.98E-19 | 14.25 | – |
| Fe XX | 10.4522 | 412 \rightarrow 9 | 3.47E-19 | 1.01E-20 | 3.47E-19 | 13.92 | – |
| Fe XX | 10.4531 | 374 \rightarrow 7 | 1.96E-18 | 1.96E-18 | 7.24E-19 | 13.63 | – |
| Fe XX | 10.4537 | 373 \rightarrow 7 | 3.59E-18 | 3.59E-18 | 1.33E-18 | 13.63 | – |
| Fe XVIII | 10.4639 | 331 \rightarrow 2 | 1.88E-18 | 4.49E-19 | 1.88E-18 | 13.51 | – |
| Fe XVIII | 10.4654 | 330 \rightarrow 2 | 2.03E-18 | 7.59E-19 | 2.03E-18 | 13.51 | – |
| Fe XX | 10.4768 | 375 \rightarrow 8 | 1.52E-18 | 1.52E-18 | 5.65E-19 | 13.63 | – |
| Fe XX | 10.4780 | 374 \rightarrow 8 | 1.53E-18 | 1.53E-18 | 5.65E-19 | 13.63 | – |
| Fe XXI | 10.4860 | 242 \rightarrow 11 | 7.09E-19 | 7.09E-19 | 8.87E-20 | 12.70 | – |
| Fe XVIII | 10.5364 | 232 \rightarrow 1 | 6.39E-18 | 6.39E-18 | 4.58E-18 | 13.51 | – |
| Fe XVIII | 10.5545 | 280 \rightarrow 2 | 1.13E-18 | 1.96E-19 | 1.13E-18 | 13.51 | – |
| Fe XVIII | 10.5640 | 221 \rightarrow 1 | 1.92E-18 | 1.92E-18 | 1.38E-18 | 13.51 | – |
| Fe XVIII | 10.5695 | 269 \rightarrow 2 | 7.66E-19 | 2.70E-19 | 7.66E-19 | 13.51 | – |
| Fe XIX | 10.5729 | 333 \rightarrow 3 | 1.60E-18 | 1.68E-19 | 1.60E-18 | 13.57 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XIX | 10.5877 | 330 \rightarrow 3 | 2.15E-18 | 1.45E-19 | 2.15E-18 | 13.37 | – |
| Fe XIX | 10.5925 | 325 \rightarrow 3 | 9.92E-19 | 2.08E-20 | 9.92E-19 | 13.33 | – |
| Fe XX | 10.5978 | 392 \rightarrow 10 | 2.01E-18 | 1.55E-20 | 2.01E-18 | 13.31 | – |
| Fe XX | 10.6013 | 356 \rightarrow 6 | 6.56E-18 | 6.56E-18 | 2.45E-18 | 13.62 | – |
| Fe XX | 10.6076 | 390 \rightarrow 9 | 1.95E-18 | 4.81E-19 | 1.95E-18 | 13.53 | – |
| Fe XX | 10.6217 | 412 \rightarrow 11 | 3.71E-19 | 1.00E-20 | 3.71E-19 | 13.92 | – |
| Fe XIX | 10.6279 | 322 \rightarrow 2 | 4.38E-18 | 4.38E-20 | 3.73E-18 | 8.87 | – |
| Fe XIX | 10.6295 | 292 \rightarrow 1 | 6.81E-18 | 6.81E-18 | 4.10E-18 | 13.36 | – |
| Fe XIX | 10.6414 | 288 \rightarrow 1 | 1.61E-17 | 1.61E-17 | 8.08E-18 | 13.44 | – |
| Fe XIX | 10.6428 | 322 \rightarrow 3 | 3.91E-19 | 1.07E-20 | 3.33E-19 | 8.89 | – |
| Fe XIX | 10.6491 | 286 \rightarrow 1 | 1.55E-17 | 1.55E-17 | 7.77E-18 | 13.42 | – |
| Fe XIX | 10.6562 | 319 \rightarrow 3 | 2.50E-18 | 9.01E-20 | 2.50E-18 | 13.38 | 9.06 |
| Fe XIX | 10.6684 | 333 \rightarrow 4 | 2.34E-18 | 2.46E-19 | 2.34E-18 | 13.57 | – |
| Fe XIX | 10.6714 | 332 \rightarrow 4 | 6.17E-18 | 5.39E-19 | 6.17E-18 | 13.89 | – |
| Fe XX | 10.6751 | 356 \rightarrow 7 | 3.66E-18 | 3.66E-18 | 1.37E-18 | 13.62 | – |
| Fe XIX | 10.6798 | 279 \rightarrow 1 | 1.12E-18 | 6.00E-19 | 1.10E-18 | 13.30 | – |
| Fe XIX | 10.6840 | 276 \rightarrow 1 | 8.75E-18 | 8.75E-18 | 4.61E-18 | 13.43 | – |
| Fe XX | 10.6883 | 266 \rightarrow 3 | 4.64E-19 | 1.28E-20 | 4.64E-19 | 13.37 | – |
| Fe XX | 10.7010 | 356 \rightarrow 8 | 1.94E-18 | 1.94E-18 | 7.27E-19 | 13.62 | – |
| Fe XIX | 10.7238 | 297 \rightarrow 3 | 4.92E-19 | 8.29E-20 | 4.92E-19 | 13.81 | – |
| Ni XXII | 10.7261 | 112 \rightarrow 3 | 3.70E-19 | 1.02E-20 | 3.70E-19 | 13.56 | – |
| Fe XIX | 10.7273 | 472 \rightarrow 6 | 1.80E-18 | 1.80E-18 | 9.31E-19 | 13.41 | – |
| Fe XIX | 10.7440 | 287 \rightarrow 3 | 6.67E-19 | 1.83E-19 | 6.60E-19 | 13.32 | – |
| Fe XIX | 10.7518 | 321 \rightarrow 4 | 2.00E-18 | 6.49E-19 | 2.00E-18 | 13.85 | – |
| Fe XIX | 10.7532 | 319 \rightarrow 4 | 6.21E-19 | 2.24E-20 | 6.21E-19 | 13.38 | 9.06 |
| Fe XIX | 10.7576 | 280 \rightarrow 2 | 7.92E-19 | 2.55E-19 | 7.81E-19 | 13.19 | 8.91 |
| Fe XIX | 10.7616 | 318 \rightarrow 4 | 5.29E-19 | 4.18E-20 | 5.29E-19 | 13.76 | 8.99 |
| Fe XIX | 10.7650 | 279 \rightarrow 3 | 4.98E-18 | 2.66E-18 | 4.90E-18 | 13.30 | – |
| Fe XIX | 10.7728 | 280 \rightarrow 3 | 1.44E-18 | 4.64E-19 | 1.42E-18 | 13.19 | 8.91 |
| Fe XIX | 10.8156 | 334 \rightarrow 5 | 2.97E-18 | 6.11E-20 | 2.97E-18 | 14.39 | 9.06 |
| Fe XIX | 10.8160 | 243 \rightarrow 1 | 2.78E-17 | 2.78E-17 | 1.34E-17 | 13.46 | – |
| Fe XIX | 10.8160 | 301 \rightarrow 4 | 7.49E-18 | 2.37E-18 | 7.49E-18 | 13.96 | – |
| Fe XIX | 10.8221 | 297 \rightarrow 4 | 4.48E-18 | 7.54E-19 | 4.48E-18 | 13.81 | – |
| Fe XIX | 10.8263 | 292 \rightarrow 4 | 2.21E-18 | 2.21E-18 | 1.33E-18 | 13.36 | – |
| Ni XXII | 10.8661 | 73 \rightarrow 1 | 1.08E-18 | 1.08E-18 | 5.14E-19 | 13.85 | – |
| Ni XXII | 10.8668 | 72 \rightarrow 1 | 8.34E-19 | 8.34E-19 | 3.58E-19 | 13.86 | – |
| Fe XIX | 10.9026 | 227 \rightarrow 1 | 1.12E-18 | 1.12E-18 | 6.77E-19 | 13.32 | – |
| Fe XIX | 10.9172 | 242 \rightarrow 2 | 2.70E-18 | 6.72E-19 | 2.41E-18 | 8.91 | – |
| Fe XXIII | 10.9266 | 32 \rightarrow 4 | 6.75E-19 | 1.55E-19 | 6.75E-19 | 13.65 | – |
| Fe XIX | 10.9329 | 242 \rightarrow 3 | 1.07E-18 | 2.67E-19 | 9.58E-19 | 8.91 | – |
| Fe XIX | 10.9520 | 400 \rightarrow 6 | 5.26E-19 | 6.90E-20 | 5.24E-19 | 13.26 | – |
| Fe XXII | 10.9520 | 61 \rightarrow 1 | 9.49E-19 | 4.57E-19 | 9.49E-19 | 13.57 | – |
| Fe XIX | 10.9840 | 418 \rightarrow 7 | 2.05E-18 | 2.05E-18 | 1.05E-18 | 13.49 | – |
| Fe XIX | 11.0022 | 405 \rightarrow 7 | 1.55E-18 | 9.28E-19 | 1.08E-18 | 8.66 | – |
| Fe XIX | 11.0328 | 374 \rightarrow 6 | 1.19E-18 | 1.19E-18 | 5.70E-19 | 13.45 | – |
| Fe XIX | 11.0370 | 373 \rightarrow 6 | 2.18E-18 | 2.18E-18 | 1.06E-18 | 13.45 | – |
| Ni XXII | 11.0537 | 60 \rightarrow 1 | 2.94E-18 | 2.94E-18 | 1.33E-18 | 13.84 | – |
| Ni XXII | 11.0641 | 86 \rightarrow 4 | 5.71E-19 | 1.43E-20 | 5.71E-19 | 14.32 | – |
| Ni XXII | 11.0668 | 58 \rightarrow 1 | 7.19E-18 | 7.19E-18 | 3.17E-18 | 13.86 | – |
| Ni XXII | 11.0835 | 56 \rightarrow 1 | 6.00E-18 | 6.00E-18 | 2.85E-18 | 13.88 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXII | 11.0950 | 61 \rightarrow 2 | 4.92E-18 | 2.37E-18 | 4.92E-18 | 13.57 | – |
| Ni XXII | 11.0957 | 70 \rightarrow 2 | 1.02E-18 | 4.57E-20 | 1.02E-18 | 14.23 | 13.17 |
| Ni XXII | 11.1037 | 69 \rightarrow 2 | 7.70E-19 | 5.43E-20 | 7.70E-19 | 13.89 | – |
| Fe XXII | 11.1163 | 60 \rightarrow 2 | 3.86E-18 | 9.36E-19 | 3.86E-18 | 13.57 | – |
| Ni XXII | 11.1187 | 74 \rightarrow 3 | 3.47E-18 | 8.68E-20 | 3.47E-18 | 14.24 | 12.97 |
| Ni XXII | 11.1340 | 51 \rightarrow 1 | 1.88E-18 | 1.88E-18 | 1.12E-18 | 13.86 | – |
| Fe XXII | 11.1421 | 58 \rightarrow 2 | 2.70E-18 | 1.07E-18 | 2.70E-18 | 13.57 | – |
| Ni XXII | 11.1541 | 70 \rightarrow 3 | 1.03E-18 | 4.62E-20 | 1.03E-18 | 14.23 | 13.17 |
| Ni XXII | 11.1732 | 85 \rightarrow 5 | 7.76E-19 | 1.00E-20 | 7.76E-19 | 14.45 | – |
| Ni XXII | 11.1755 | 48 \rightarrow 1 | 2.25E-18 | 2.25E-18 | 1.11E-18 | 13.87 | – |
| Ni XXII | 11.1997 | 63 \rightarrow 2 | 1.94E-18 | 5.87E-19 | 1.94E-18 | 13.81 | – |
| Ni XXII | 11.2027 | 67 \rightarrow 3 | 5.94E-19 | 2.58E-20 | 5.94E-19 | 14.29 | 13.02 |
| Fe XIX | 11.2147 | 349 \rightarrow 6 | 4.29E-19 | 1.06E-20 | 4.24E-19 | 13.30 | – |
| Fe XXII | 11.2462 | 44 \rightarrow 1 | 1.22E-18 | 5.75E-19 | 1.22E-18 | 13.57 | – |
| Ni XXII | 11.2592 | 63 \rightarrow 3 | 5.81E-19 | 1.76E-19 | 5.81E-19 | 13.81 | – |
| Ni XXII | 11.2633 | 42 \rightarrow 1 | 1.75E-18 | 1.75E-18 | 8.90E-19 | 13.85 | – |
| Fe XVIII | 11.2729 | 196 \rightarrow 2 | 4.36E-18 | 2.35E-19 | 4.36E-18 | 13.51 | – |
| Fe XIX | 11.2735 | 352 \rightarrow 7 | 5.48E-19 | 1.18E-20 | 4.12E-19 | 8.85 | – |
| Ni XXII | 11.2844 | 81 \rightarrow 5 | 1.03E-18 | 7.92E-20 | 1.03E-18 | 14.33 | – |
| Ni XXII | 11.2854 | 80 \rightarrow 5 | 6.25E-19 | 6.00E-20 | 6.25E-19 | 14.37 | – |
| Fe XVIII | 11.2930 | 181 \rightarrow 1 | 1.82E-18 | 6.67E-19 | 1.82E-18 | 13.51 | – |
| Ni XXII | 11.2959 | 61 \rightarrow 3 | 1.26E-18 | 2.25E-19 | 1.26E-18 | 13.45 | – |
| Fe XIX | 11.2980 | 344 \rightarrow 6 | 3.05E-18 | 3.05E-18 | 1.45E-18 | 13.44 | – |
| Fe XXI | 11.3057 | 143 \rightarrow 3 | 3.95E-19 | 2.98E-20 | 3.95E-19 | 12.57 | – |
| Fe XVIII | 11.3140 | 182 \rightarrow 1 | 8.02E-19 | 1.92E-19 | 8.02E-19 | 13.51 | – |
| Fe XXII | 11.3412 | 37 \rightarrow 1 | 1.75E-18 | 8.88E-19 | 1.75E-18 | 13.57 | – |
| Ni XXII | 11.3414 | 51 \rightarrow 2 | 1.07E-18 | 1.07E-18 | 6.41E-19 | 13.86 | – |
| Fe XXI | 11.3446 | 128 \rightarrow 2 | 1.53E-18 | 2.08E-19 | 1.47E-18 | 12.72 | – |
| Ni XXII | 11.3494 | 56 \rightarrow 3 | 1.05E-18 | 1.05E-18 | 4.99E-19 | 13.88 | – |
| Fe XXII | 11.3695 | 34 \rightarrow 1 | 6.50E-19 | 2.89E-19 | 6.50E-19 | 13.59 | – |
| Fe XIX | 11.3710 | 407 \rightarrow 9 | 7.21E-19 | 4.65E-20 | 7.21E-19 | 13.90 | – |
| Ni XXII | 11.3780 | 62 \rightarrow 4 | 5.79E-19 | 1.45E-19 | 5.79E-19 | 14.21 | – |
| Fe XXI | 11.3808 | 116 \rightarrow 1 | 5.20E-18 | 5.20E-18 | 1.11E-18 | 12.69 | – |
| Fe XXI | 11.3862 | 132 \rightarrow 3 | 1.07E-18 | 3.16E-20 | 1.07E-18 | 13.80 | 12.35 |
| Fe XXI | 11.3945 | 130 \rightarrow 3 | 1.25E-18 | 1.31E-19 | 1.25E-18 | 12.59 | – |
| Fe XXI | 11.3996 | 129 \rightarrow 3 | 2.36E-18 | 1.35E-20 | 2.36E-18 | 13.64 | 12.29 |
| Fe XXII | 11.4000 | 44 \rightarrow 2 | 6.23E-18 | 2.93E-18 | 6.23E-18 | 13.57 | – |
| Fe XVIII | 11.4230 | 164 \rightarrow 1 | 1.60E-17 | 1.60E-17 | 1.17E-17 | 13.51 | – |
| Fe XXII | 11.4270 | 32 \rightarrow 1 | 3.20E-17 | 3.20E-17 | 1.30E-17 | 13.57 | – |
| Fe XVIII | 11.4292 | 165 \rightarrow 1 | 5.74E-19 | 1.61E-19 | 5.74E-19 | 13.51 | – |
| Fe XXII | 11.4332 | 40 \rightarrow 2 | 1.83E-17 | 6.10E-20 | 1.83E-17 | 13.57 | – |
| Fe XVIII | 11.4454 | 182 \rightarrow 2 | 5.64E-18 | 1.35E-18 | 5.64E-18 | 13.51 | – |
| Fe XVIII | 11.4494 | 181 \rightarrow 2 | 6.96E-18 | 2.55E-18 | 6.96E-18 | 13.51 | – |
| Fe XXII | 11.4508 | 31 \rightarrow 1 | 1.59E-18 | 1.59E-18 | 8.43E-19 | 13.56 | – |
| Fe XXIII | 11.4580 | 19 \rightarrow 4 | 1.20E-17 | 6.66E-18 | 1.20E-17 | 13.65 | – |
| Fe XXI | 11.4741 | 116 \rightarrow 2 | 3.41E-18 | 3.41E-18 | 7.29E-19 | 12.69 | – |
| Fe XXI | 11.4824 | 142 \rightarrow 4 | 5.34E-19 | 1.06E-19 | 5.34E-19 | 13.27 | – |
| Fe XXII | 11.4900 | 30 \rightarrow 1 | 1.75E-17 | 1.75E-17 | 7.38E-18 | 13.57 | – |
| Fe XXII | 11.4900 | 28 \rightarrow 1 | 8.12E-18 | 8.12E-18 | 4.12E-18 | 13.57 | – |
| Fe XXII | 11.4900 | 37 \rightarrow 2 | 7.81E-18 | 3.97E-18 | 7.81E-18 | 13.57 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXII | 11.5027 | 36 \rightarrow 2 | 5.49E-18 | 4.08E-19 | 5.49E-18 | 13.57 | – |
| Fe XXI | 11.5077 | 114 \rightarrow 2 | 9.21E-19 | 9.21E-19 | 5.24E-19 | 12.44 | – |
| Fe XXII | 11.5237 | 34 \rightarrow 2 | 3.01E-18 | 1.34E-18 | 3.01E-18 | 13.59 | – |
| Fe XVIII | 11.5270 | 138 \rightarrow 1 | 1.56E-17 | 1.56E-17 | 1.12E-17 | 13.51 | – |
| Fe XXIII | 11.5272 | 40 \rightarrow 8 | 5.98E-19 | 5.14E-20 | 5.98E-19 | 13.65 | – |
| Fe XXI | 11.5310 | 162 \rightarrow 6 | 6.91E-19 | 8.28E-20 | 6.91E-19 | 12.66 | – |
| Fe XXII | 11.5455 | 26 \rightarrow 1 | 1.29E-18 | 1.29E-18 | 8.59E-19 | 13.57 | – |
| Fe XXI | 11.5461 | 113 \rightarrow 2 | 7.30E-19 | 3.70E-19 | 6.35E-19 | 12.71 | – |
| Ni XXII | 11.5512 | 111 \rightarrow 6 | 1.66E-18 | 1.66E-18 | 7.18E-19 | 13.86 | – |
| Fe XXI | 11.5549 | 132 \rightarrow 4 | 1.84E-18 | 5.43E-20 | 1.84E-18 | 13.80 | 12.35 |
| Fe XXI | 11.5634 | 130 \rightarrow 4 | 8.10E-19 | 8.53E-20 | 8.10E-19 | 12.59 | – |
| Fe XXI | 11.5670 | 94 \rightarrow 1 | 1.07E-18 | 1.07E-18 | 5.64E-19 | 12.66 | – |
| Fe XXI | 11.5686 | 129 \rightarrow 4 | 2.26E-18 | 1.29E-20 | 2.26E-18 | 13.64 | 12.29 |
| Fe XVIII | 11.5740 | 165 \rightarrow 2 | 3.75E-18 | 1.05E-18 | 3.75E-18 | 13.51 | – |
| Fe XXII | 11.5819 | 25 \rightarrow 1 | 3.72E-18 | 3.72E-18 | 1.57E-18 | 13.57 | – |
| Fe XXI | 11.5973 | 105 \rightarrow 2 | 5.29E-19 | 1.14E-19 | 4.77E-19 | 12.70 | – |
| Ni XXI | 11.5984 | 86 \rightarrow 3 | 8.28E-19 | 1.71E-20 | 8.28E-19 | 13.55 | 9.24 |
| Fe XVIII | 11.6072 | 355 \rightarrow 3 | 6.39E-19 | 1.45E-19 | 6.39E-19 | 13.51 | – |
| Fe XXII | 11.6159 | 30 \rightarrow 2 | 1.41E-18 | 1.41E-18 | 5.96E-19 | 13.57 | – |
| Fe XXI | 11.6160 | 112 \rightarrow 3 | 5.97E-19 | 1.64E-20 | 5.97E-19 | 13.63 | – |
| Ni XXI | 11.6184 | 81 \rightarrow 2 | 1.24E-18 | 5.06E-20 | 1.01E-18 | 9.13 | – |
| Ni XXI | 11.6185 | 74 \rightarrow 1 | 1.89E-18 | 1.89E-18 | 1.09E-18 | 13.57 | – |
| Fe XXI | 11.6279 | 99 \rightarrow 2 | 1.37E-18 | 1.18E-20 | 1.37E-18 | 12.74 | – |
| Fe XXII | 11.6504 | 28 \rightarrow 2 | 3.21E-18 | 3.21E-18 | 1.63E-18 | 13.57 | – |
| Ni XXI | 11.6538 | 71 \rightarrow 1 | 3.32E-18 | 3.32E-18 | 1.82E-18 | 13.68 | – |
| Ni XXI | 11.6622 | 68 \rightarrow 1 | 7.30E-18 | 7.30E-18 | 3.63E-18 | 13.65 | – |
| Fe XXI | 11.6634 | 94 \rightarrow 2 | 1.02E-18 | 1.02E-18 | 5.40E-19 | 12.66 | – |
| Ni XXII | 11.6638 | 107 \rightarrow 7 | 7.37E-19 | 7.37E-19 | 3.17E-19 | 13.86 | – |
| Ni XXI | 11.6652 | 90 \rightarrow 4 | 8.76E-19 | 3.55E-20 | 8.76E-19 | 13.85 | – |
| Ni XXI | 11.6672 | 79 \rightarrow 3 | 7.80E-19 | 2.33E-19 | 7.80E-19 | 13.67 | – |
| Ni XXI | 11.6682 | 89 \rightarrow 4 | 2.35E-18 | 1.02E-19 | 2.35E-18 | 14.09 | – |
| Fe XXI | 11.6685 | 104 \rightarrow 3 | 4.83E-19 | 1.24E-20 | 4.83E-19 | 13.61 | – |
| Fe XXI | 11.6890 | 100 \rightarrow 3 | 2.03E-18 | 1.69E-20 | 2.03E-18 | 13.67 | Bad Fit |
| Fe XXI | 11.6915 | 99 \rightarrow 3 | 7.47E-19 | 1.45E-20 | 7.44E-19 | 12.78 | – |
| Fe XXII | 11.7045 | 26 \rightarrow 2 | 2.69E-18 | 2.69E-18 | 1.78E-18 | 13.57 | – |
| Fe XXI | 11.7157 | 95 \rightarrow 3 | 1.20E-18 | 1.48E-20 | 1.20E-18 | 14.01 | 12.47 |
| Fe XXI | 11.7274 | 94 \rightarrow 3 | 1.67E-18 | 1.67E-18 | 8.82E-19 | 12.66 | – |
| Fe XXII | 11.7324 | 64 \rightarrow 6 | 5.26E-18 | 3.37E-18 | 5.26E-18 | 13.57 | – |
| Fe XXII | 11.7326 | 53 \rightarrow 4 | 7.30E-19 | 1.73E-20 | 7.30E-19 | 14.36 | 13.34 |
| Fe XXI | 11.7336 | 93 \rightarrow 3 | 1.85E-18 | 6.01E-20 | 1.85E-18 | 13.83 | 12.32 |
| Fe XXII | 11.7350 | 52 \rightarrow 4 | 9.62E-19 | 2.21E-19 | 9.62E-19 | 13.61 | – |
| Fe XVIII | 11.7391 | 305 \rightarrow 3 | 5.48E-19 | 3.60E-20 | 5.48E-19 | 13.51 | – |
| Fe XX | 11.7392 | 192 \rightarrow 3 | 5.76E-19 | 1.60E-19 | 5.76E-19 | 13.89 | – |
| Fe XXI | 11.7442 | 114 \rightarrow 4 | 1.62E-18 | 1.62E-18 | 9.24E-19 | 12.44 | – |
| Fe XXI | 11.7516 | 126 \rightarrow 5 | 1.86E-18 | 6.48E-19 | 1.86E-18 | 14.62 | – |
| Fe XX | 11.7620 | 159 \rightarrow 1 | 1.38E-17 | 1.38E-17 | 5.71E-18 | 13.64 | – |
| Fe XXII | 11.7667 | 63 \rightarrow 7 | 9.21E-18 | 1.89E-18 | 9.21E-18 | 13.57 | – |
| Fe XXII | 11.7700 | 21 \rightarrow 1 | 1.59E-16 | 1.59E-16 | 7.84E-17 | 13.57 | – |
| Ni XXI | 11.7774 | 57 \rightarrow 1 | 1.16E-18 | 1.16E-18 | 6.76E-19 | 13.61 | – |
| Fe XXI | 11.7783 | 87 \rightarrow 3 | 1.20E-18 | 2.42E-20 | 1.20E-18 | 13.90 | 12.37 |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 11.7827 | 154 \rightarrow 1 | 1.12E-18 | 1.12E-18 | 5.99E-19 | 13.54 | – |
| Fe XXI | 11.7916 | 112 \rightarrow 4 | 2.45E-18 | 2.36E-20 | 2.45E-18 | 14.02 | 12.47 |
| Fe XX | 11.7960 | 152 \rightarrow 1 | 4.79E-18 | 4.79E-18 | 2.23E-18 | 13.63 | – |
| Fe XXII | 11.8020 | 42 \rightarrow 3 | 3.23E-18 | 3.23E-18 | 2.05E-18 | 13.55 | – |
| Fe XXII | 11.8020 | 49 \rightarrow 4 | 1.30E-17 | 1.30E-17 | 5.79E-18 | 13.57 | – |
| Ni XXI | 11.8025 | 79 \rightarrow 4 | 5.11E-19 | 1.53E-19 | 5.11E-19 | 13.67 | – |
| Ni XXI | 11.8120 | 92 \rightarrow 5 | 5.51E-19 | 1.02E-20 | 5.51E-19 | 14.52 | – |
| Fe XXII | 11.8131 | 52 \rightarrow 5 | 6.55E-19 | 1.50E-19 | 6.55E-19 | 13.61 | – |
| Fe XXII | 11.8335 | 50 \rightarrow 5 | 2.95E-18 | 5.15E-19 | 2.95E-18 | 13.58 | – |
| Fe XXII | 11.8441 | 67 \rightarrow 8 | 1.98E-18 | 3.87E-19 | 1.98E-18 | 13.57 | – |
| Fe XXI | 11.8457 | 104 \rightarrow 4 | 2.49E-18 | 1.55E-20 | 2.49E-18 | 14.02 | 12.44 |
| Fe XXI | 11.8462 | 103 \rightarrow 4 | 3.01E-18 | 5.75E-19 | 3.01E-18 | 13.75 | – |
| Fe XX | 11.8557 | 181 \rightarrow 3 | 8.56E-19 | 3.16E-19 | 8.56E-19 | 13.66 | – |
| Fe XXII | 11.8634 | 42 \rightarrow 4 | 9.66E-19 | 9.66E-19 | 6.11E-19 | 13.55 | – |
| Fe XXI | 11.8669 | 100 \rightarrow 4 | 8.86E-18 | 2.67E-20 | 8.86E-18 | 14.05 | 12.49 |
| Fe XXI | 11.8694 | 99 \rightarrow 4 | 4.56E-19 | 1.90E-20 | 4.54E-19 | 12.80 | – |
| Fe XXI | 11.8788 | 116 \rightarrow 5 | 2.56E-18 | 2.56E-18 | 5.47E-19 | 12.69 | – |
| Fe XXII | 11.8810 | 41 \rightarrow 4 | 1.04E-17 | 1.04E-17 | 5.33E-18 | 13.56 | – |
| Fe XXII | 11.8933 | 35 \rightarrow 3 | 2.00E-18 | 2.00E-18 | 8.65E-19 | 13.57 | – |
| Fe XXI | 11.8943 | 95 \rightarrow 4 | 4.49E-18 | 5.51E-20 | 4.49E-18 | 14.01 | 12.47 |
| Fe XX | 11.9001 | 174 \rightarrow 3 | 6.28E-19 | 6.40E-20 | 6.28E-19 | 14.09 | 12.75 |
| Ni XXI | 11.9057 | 53 \rightarrow 1 | 2.92E-18 | 2.92E-18 | 1.50E-18 | 13.68 | – |
| Fe XXI | 11.9064 | 94 \rightarrow 4 | 1.95E-18 | 1.95E-18 | 1.03E-18 | 12.66 | – |
| Fe XXIII | 11.9108 | 24 \rightarrow 8 | 6.15E-19 | 1.99E-20 | 6.15E-19 | 13.65 | – |
| Fe XXI | 11.9128 | 93 \rightarrow 4 | 4.85E-19 | 1.58E-20 | 4.85E-19 | 13.83 | 12.32 |
| Fe XXI | 11.9139 | 71 \rightarrow 2 | 9.89E-19 | 1.02E-20 | 9.33E-19 | 12.41 | – |
| Fe XXI | 11.9149 | 114 \rightarrow 5 | 7.70E-19 | 7.70E-19 | 4.38E-19 | 12.44 | – |
| Fe XX | 11.9156 | 164 \rightarrow 2 | 9.41E-19 | 1.41E-19 | 9.41E-19 | 13.95 | – |
| Fe XXII | 11.9320 | 22 \rightarrow 2 | 1.16E-16 | 1.95E-17 | 1.16E-16 | 13.57 | – |
| Fe XXII | 11.9410 | 38 \rightarrow 4 | 4.79E-18 | 4.79E-18 | 2.27E-18 | 13.56 | – |
| Fe XVIII | 11.9417 | 219 \rightarrow 3 | 3.27E-19 | 1.69E-20 | 3.27E-19 | 13.56 | – |
| Fe XXI | 11.9466 | 60 \rightarrow 1 | 9.30E-18 | 9.30E-18 | 2.72E-18 | 12.71 | – |
| Fe XX | 11.9468 | 190 \rightarrow 5 | 1.24E-18 | 1.07E-19 | 1.24E-18 | 14.13 | – |
| Fe XX | 11.9495 | 166 \rightarrow 3 | 4.14E-18 | 4.69E-20 | 4.14E-18 | 13.98 | 12.57 |
| Fe XX | 11.9531 | 159 \rightarrow 2 | 1.56E-18 | 1.56E-18 | 6.45E-19 | 13.64 | – |
| Fe XXI | 11.9555 | 67 \rightarrow 2 | 4.37E-19 | 1.13E-19 | 4.12E-19 | 12.42 | – |
| Fe XX | 11.9583 | 188 \rightarrow 5 | 1.72E-18 | 2.35E-19 | 1.72E-18 | 14.08 | – |
| Fe XXI | 11.9587 | 66 \rightarrow 2 | 3.17E-18 | 5.71E-20 | 2.75E-18 | 12.69 | – |
| Fe XXI | 11.9588 | 87 \rightarrow 4 | 2.36E-18 | 4.74E-20 | 2.36E-18 | 13.90 | 12.37 |
| Fe XXII | 11.9598 | 41 \rightarrow 5 | 9.30E-19 | 9.30E-19 | 4.75E-19 | 13.56 | – |
| Fe XX | 11.9663 | 181 \rightarrow 4 | 8.82E-19 | 3.25E-19 | 8.82E-19 | 13.66 | – |
| Fe XXII | 11.9693 | 35 \rightarrow 4 | 1.98E-18 | 1.98E-18 | 8.56E-19 | 13.57 | – |
| Fe XXI | 11.9750 | 58 \rightarrow 1 | 4.08E-17 | 4.08E-17 | 5.15E-18 | 12.70 | – |
| Fe XXII | 11.9764 | 39 \rightarrow 5 | 5.62E-18 | 5.62E-18 | 3.25E-18 | 13.57 | – |
| Fe XXII | 11.9770 | 21 \rightarrow 2 | 2.95E-17 | 2.95E-17 | 1.45E-17 | 13.57 | – |
| Fe XXI | 11.9807 | 71 \rightarrow 3 | 1.04E-17 | 8.81E-20 | 9.77E-18 | 12.40 | – |
| Fe XX | 11.9889 | 226 \rightarrow 6 | 7.36E-19 | 7.36E-19 | 3.46E-19 | 13.66 | – |
| Fe XXI | 11.9938 | 69 \rightarrow 3 | 1.37E-17 | 1.36E-20 | 1.33E-17 | 12.40 | – |
| Fe XXI | 12.0053 | 63 \rightarrow 2 | 1.43E-17 | 1.91E-19 | 1.24E-17 | 12.68 | – |
| Fe XXII | 12.0218 | 38 \rightarrow 5 | 1.18E-18 | 1.18E-18 | 5.59E-19 | 13.56 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 12.0228 | 67 \rightarrow 3 | 1.27E-18 | 3.30E-19 | 1.20E-18 | 12.42 | – |
| Fe XXI | 12.0413 | 155 \rightarrow 9 | 1.09E-18 | 1.96E-20 | 1.09E-18 | 13.58 | 12.29 |
| Fe XXI | 12.0440 | 60 \rightarrow 2 | 1.66E-17 | 1.66E-17 | 4.86E-18 | 12.71 | – |
| Fe XX | 12.0447 | 152 \rightarrow 3 | 1.14E-18 | 1.14E-18 | 5.32E-19 | 13.63 | – |
| Fe XXII | 12.0470 | 67 \rightarrow 10 | 5.41E-19 | 1.06E-19 | 5.41E-19 | 13.57 | – |
| Fe XXII | 12.0545 | 56 \rightarrow 7 | 2.67E-17 | 2.78E-19 | 2.67E-17 | 13.57 | – |
| Fe XXI | 12.0731 | 63 \rightarrow 3 | 7.36E-19 | 1.00E-20 | 6.41E-19 | 12.69 | – |
| Fe XXI | 12.0764 | 152 \rightarrow 9 | 9.85E-18 | 1.04E-20 | 9.85E-18 | 12.71 | – |
| Fe XXII | 12.0845 | 66 \rightarrow 10 | 9.88E-18 | 5.55E-18 | 9.88E-18 | 13.57 | – |
| Fe XX | 12.0871 | 117 \rightarrow 1 | 5.44E-19 | 1.58E-19 | 5.44E-19 | 13.41 | – |
| Fe XXI | 12.0917 | 59 \rightarrow 2 | 3.17E-18 | 1.69E-18 | 2.71E-18 | 12.62 | – |
| Fe XXI | 12.1040 | 61 \rightarrow 3 | 3.84E-18 | 1.01E-20 | 3.72E-18 | 12.41 | – |
| Fe XXI | 12.1059 | 51 \rightarrow 1 | 3.71E-18 | 3.71E-18 | 1.02E-18 | 12.75 | – |
| Fe XX | 12.1145 | 172 \rightarrow 5 | 1.10E-18 | 1.74E-19 | 1.10E-18 | 13.96 | – |
| Fe XXI | 12.1177 | 60 \rightarrow 3 | 6.10E-19 | 6.10E-19 | 1.79E-19 | 12.71 | – |
| Fe XX | 12.1555 | 154 \rightarrow 4 | 1.05E-18 | 1.05E-18 | 5.61E-19 | 13.54 | – |
| Fe XXI | 12.1560 | 54 \rightarrow 2 | 1.67E-18 | 1.05E-18 | 1.67E-18 | 14.59 | – |
| Fe XXI | 12.1608 | 53 \rightarrow 2 | 2.10E-18 | 2.10E-18 | 5.06E-19 | 12.71 | – |
| Fe XXI | 12.1632 | 58 \rightarrow 3 | 1.26E-18 | 1.26E-18 | 1.59E-19 | 12.70 | – |
| Fe XXI | 12.1633 | 57 \rightarrow 3 | 1.67E-18 | 2.78E-20 | 1.50E-18 | 12.61 | – |
| Fe XXII | 12.1655 | 27 \rightarrow 4 | 4.46E-19 | 1.16E-20 | 4.46E-19 | 13.60 | – |
| Fe XXI | 12.1676 | 71 \rightarrow 4 | 6.14E-19 | 1.60E-20 | 5.79E-19 | 12.42 | – |
| Fe XXII | 12.1757 | 57 \rightarrow 8 | 7.92E-19 | 2.41E-20 | 7.92E-19 | 13.57 | – |
| Fe XXI | 12.1811 | 69 \rightarrow 4 | 1.39E-18 | 2.58E-20 | 1.34E-18 | 12.42 | – |
| Fe XX | 12.1814 | 164 \rightarrow 5 | 2.93E-18 | 4.38E-19 | 2.93E-18 | 13.95 | – |
| Fe XX | 12.1837 | 106 \rightarrow 1 | 6.14E-19 | 1.54E-19 | 6.14E-19 | 13.52 | – |
| Ni XX | 12.1895 | 61 \rightarrow 2 | 2.86E-18 | 8.07E-20 | 2.86E-18 | 13.88 | – |
| Fe XXI | 12.1917 | 145 \rightarrow 8 | 4.39E-18 | 2.90E-18 | 3.83E-18 | 12.68 | – |
| Fe XXI | 12.1938 | 156 \rightarrow 10 | 5.55E-19 | 3.39E-20 | 5.39E-19 | 12.62 | – |
| Fe XX | 12.1956 | 162 \rightarrow 5 | 1.47E-18 | 1.47E-18 | 1.05E-18 | 13.12 | – |
| Fe XXI | 12.2016 | 144 \rightarrow 8 | 5.08E-19 | 5.08E-19 | 1.54E-19 | 12.63 | – |
| Fe XXI | 12.2040 | 144 \rightarrow 7 | 1.48E-17 | 1.48E-17 | 4.48E-18 | 12.63 | – |
| Ni XX | 12.2049 | 57 \rightarrow 1 | 9.45E-19 | 4.07E-19 | 9.45E-19 | 13.88 | – |
| Fe XXI | 12.2091 | 156 \rightarrow 11 | 8.90E-19 | 5.43E-20 | 8.64E-19 | 12.62 | – |
| Fe XXII | 12.2100 | 49 \rightarrow 6 | 2.70E-17 | 2.70E-17 | 1.21E-17 | 13.57 | – |
| Fe XXI | 12.2161 | 50 \rightarrow 2 | 2.19E-18 | 2.19E-18 | 1.13E-18 | 12.69 | – |
| Fe XIX | 12.2193 | 169 \rightarrow 3 | 1.01E-18 | 6.86E-20 | 1.01E-18 | 13.31 | – |
| Fe XXI | 12.2198 | 55 \rightarrow 3 | 6.97E-18 | 1.40E-19 | 6.97E-18 | 14.21 | 13.07 |
| Fe XX | 12.2200 | 130 \rightarrow 3 | 1.68E-18 | 3.43E-19 | 1.68E-18 | 13.80 | – |
| Fe XXI | 12.2227 | 158 \rightarrow 12 | 8.46E-19 | 6.63E-20 | 8.46E-19 | 13.86 | 12.36 |
| Fe XX | 12.2273 | 141 \rightarrow 4 | 1.11E-18 | 1.66E-19 | 1.11E-18 | 14.03 | – |
| Fe XXI | 12.2304 | 53 \rightarrow 3 | 5.34E-19 | 5.34E-19 | 1.29E-19 | 12.71 | – |
| Fe XIX | 12.2327 | 159 \rightarrow 1 | 4.97E-18 | 4.97E-18 | 2.94E-18 | 13.33 | – |
| Fe XXI | 12.2346 | 154 \rightarrow 11 | 1.98E-18 | 2.55E-19 | 1.98E-18 | 14.24 | 12.66 |
| Fe XX | 12.2398 | 121 \rightarrow 2 | 7.26E-19 | 1.93E-19 | 7.26E-19 | 13.81 | – |
| Fe XXI | 12.2398 | 49 \rightarrow 2 | 1.52E-17 | 4.59E-19 | 1.34E-17 | 12.70 | – |
| Fe XXI | 12.2410 | 48 \rightarrow 2 | 9.53E-18 | 1.33E-19 | 9.53E-18 | 12.58 | – |
| Fe XXI | 12.2411 | 47 \rightarrow 2 | 3.32E-17 | 1.39E-18 | 3.04E-17 | 12.64 | – |
| Fe XXII | 12.2440 | 46 \rightarrow 6 | 1.73E-18 | 1.73E-18 | 8.46E-19 | 13.57 | – |
| Fe XXI | 12.2445 | 155 \rightarrow 12 | 5.30E-18 | 9.57E-20 | 5.30E-18 | 13.58 | 12.29 |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXII | 12.2455 | 49 \rightarrow 7 | 3.36E-18 | 3.36E-18 | 1.50E-18 | 13.57 | – |
| Fe XX | 12.2506 | 126 \rightarrow 3 | 3.38E-18 | 1.36E-19 | 3.38E-18 | 14.10 | 12.61 |
| Fe XXI | 12.2509 | 140 \rightarrow 7 | 6.51E-19 | 8.41E-20 | 6.51E-19 | 13.92 | – |
| Fe XXI | 12.2532 | 92 \rightarrow 6 | 1.14E-18 | 6.14E-20 | 9.99E-19 | 12.65 | – |
| Fe XXI | 12.2620 | 91 \rightarrow 6 | 8.53E-19 | 2.99E-20 | 8.45E-19 | 12.40 | – |
| Fe XXI | 12.2629 | 154 \rightarrow 12 | 5.68E-19 | 7.29E-20 | 5.68E-19 | 14.24 | 12.66 |
| Fe XXI | 12.2717 | 90 \rightarrow 6 | 1.53E-18 | 4.86E-19 | 1.46E-18 | 12.33 | – |
| Fe XXI | 12.2780 | 139 \rightarrow 8 | 9.21E-19 | 8.89E-20 | 9.21E-19 | 13.86 | 12.34 |
| Fe XX | 12.2814 | 124 \rightarrow 3 | 1.53E-18 | 4.97E-19 | 1.53E-18 | 13.56 | – |
| Fe XXI | 12.2816 | 51 \rightarrow 3 | 6.08E-18 | 6.08E-18 | 1.66E-18 | 12.75 | – |
| Fe XXI | 12.2840 | 40 \rightarrow 1 | 5.01E-16 | 5.01E-16 | 6.70E-17 | 12.70 | – |
| Fe XXI | 12.2859 | 151 \rightarrow 12 | 2.92E-18 | 3.36E-19 | 2.83E-18 | 12.76 | – |
| Fe XXII | 12.2883 | 24 \rightarrow 4 | 2.63E-18 | 3.87E-20 | 2.63E-18 | 13.57 | – |
| Fe XXI | 12.2921 | 88 \rightarrow 6 | 3.08E-18 | 1.14E-19 | 2.87E-18 | 12.49 | – |
| Fe XXI | 12.2948 | 61 \rightarrow 4 | 7.09E-19 | 1.40E-20 | 6.87E-19 | 12.44 | – |
| Fe XXII | 12.2963 | 23 \rightarrow 4 | 6.17E-19 | 6.17E-19 | 2.44E-19 | 13.57 | – |
| Fe XXI | 12.2970 | 44 \rightarrow 2 | 4.12E-17 | 1.07E-18 | 3.93E-17 | 12.74 | – |
| Fe XX | 12.2976 | 117 \rightarrow 2 | 4.23E-18 | 1.23E-18 | 4.23E-18 | 13.41 | – |
| Fe XXI | 12.3022 | 233 \rightarrow 16 | 3.73E-19 | 1.38E-20 | 3.73E-19 | 13.87 | – |
| Fe XXI | 12.3031 | 86 \rightarrow 6 | 9.86E-19 | 9.86E-19 | 5.38E-19 | 12.75 | – |
| Fe XXI | 12.3103 | 134 \rightarrow 8 | 1.14E-18 | 4.42E-20 | 1.14E-18 | 13.96 | – |
| Ni XXII | 12.3184 | 54 \rightarrow 6 | 2.33E-18 | 2.33E-18 | 1.08E-18 | 13.83 | – |
| Fe XX | 12.3244 | 141 \rightarrow 5 | 1.01E-18 | 1.52E-19 | 1.01E-18 | 14.03 | – |
| Fe XX | 12.3252 | 118 \rightarrow 3 | 7.86E-18 | 2.74E-19 | 7.86E-18 | 13.95 | 12.54 |
| Fe XXI | 12.3270 | 47 \rightarrow 3 | 1.33E-17 | 5.58E-19 | 1.22E-17 | 12.64 | – |
| Fe XXI | 12.3270 | 48 \rightarrow 3 | 4.22E-17 | 5.88E-19 | 4.22E-17 | 12.58 | – |
| Fe XXI | 12.3270 | 46 \rightarrow 3 | 1.22E-16 | 2.36E-18 | 1.17E-16 | 12.39 | – |
| Fe XX | 12.3307 | 131 \rightarrow 4 | 2.99E-18 | 1.76E-18 | 2.99E-18 | 14.02 | – |
| Fe XXI | 12.3354 | 138 \rightarrow 9 | 1.63E-17 | 2.35E-20 | 1.63E-17 | 13.78 | Bad Fit |
| Fe XX | 12.3403 | 113 \rightarrow 2 | 1.14E-18 | 7.42E-19 | 1.14E-18 | 13.40 | – |
| Fe XXII | 12.3404 | 41 \rightarrow 7 | 8.22E-19 | 8.22E-19 | 4.20E-19 | 13.56 | – |
| Fe XXI | 12.3425 | 137 \rightarrow 9 | 1.07E-18 | 1.67E-19 | 1.07E-18 | 13.89 | 12.35 |
| Fe XX | 12.3443 | 129 \rightarrow 4 | 2.10E-18 | 1.24E-18 | 2.10E-18 | 13.94 | – |
| Fe XXI | 12.3489 | 83 \rightarrow 6 | 2.56E-18 | 2.56E-18 | 3.40E-19 | 12.71 | – |
| Fe XXI | 12.3559 | 125 \rightarrow 8 | 7.53E-19 | 2.42E-19 | 7.53E-19 | 13.10 | – |
| Fe XXI | 12.3560 | 57 \rightarrow 4 | 4.08E-19 | 1.14E-20 | 3.65E-19 | 12.64 | – |
| Fe XX | 12.3594 | 117 \rightarrow 3 | 2.95E-18 | 8.58E-19 | 2.95E-18 | 13.41 | – |
| Fe XXII | 12.3596 | 57 \rightarrow 9 | 4.51E-18 | 1.37E-19 | 4.51E-18 | 13.57 | – |
| Fe XXI | 12.3666 | 123 \rightarrow 7 | 5.66E-19 | 1.23E-19 | 5.66E-19 | 12.82 | – |
| Fe XXI | 12.3682 | 44 \rightarrow 3 | 7.09E-18 | 1.85E-19 | 6.76E-18 | 12.74 | – |
| Fe XXI | 12.3706 | 122 \rightarrow 8 | 5.01E-18 | 1.19E-19 | 5.01E-18 | 12.54 | – |
| Ni XX | 12.3712 | 58 \rightarrow 2 | 2.31E-18 | 7.89E-19 | 2.31E-18 | 13.88 | – |
| Fe XXII | 12.3739 | 24 \rightarrow 5 | 5.20E-18 | 7.67E-20 | 5.20E-18 | 13.57 | – |
| Fe XXIII | 12.3742 | 16 \rightarrow 7 | 1.64E-18 | 1.07E-18 | 1.64E-18 | 13.65 | – |
| Fe XXII | 12.3801 | 19 \rightarrow 3 | 7.57E-19 | 7.57E-19 | 3.14E-19 | 13.57 | – |
| Fe XXI | 12.3816 | 120 \rightarrow 7 | 4.80E-18 | 4.80E-18 | 3.39E-18 | 13.19 | – |
| Ni XX | 12.3827 | 57 \rightarrow 2 | 2.92E-18 | 1.26E-18 | 2.92E-18 | 13.88 | – |
| Ni XXII | 12.3856 | 84 \rightarrow 10 | 6.33E-19 | 1.67E-20 | 6.33E-19 | 13.55 | – |
| Fe XXI | 12.3859 | 149 \rightarrow 11 | 2.65E-18 | 2.65E-18 | 5.25E-19 | 12.69 | – |
| Fe XXI | 12.3882 | 127 \rightarrow 9 | 1.90E-18 | 1.53E-20 | 1.90E-18 | 13.38 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Ni XXII | 12.3888 | 83 \rightarrow 9 | 7.77E-19 | 1.73E-19 | 7.77E-19 | 13.89 | – |
| Fe XX | 12.3903 | 134 \rightarrow 5 | 3.70E-18 | 1.44E-18 | 3.70E-18 | 14.30 | – |
| Fe XXI | 12.3930 | 40 \rightarrow 2 | 9.01E-17 | 9.01E-17 | 1.21E-17 | 12.70 | – |
| Fe XXI | 12.3940 | 79 \rightarrow 6 | 5.58E-18 | 5.58E-18 | 2.81E-18 | 12.80 | – |
| Fe XX | 12.3944 | 133 \rightarrow 5 | 3.60E-18 | 2.26E-19 | 3.60E-18 | 14.23 | – |
| Fe XXI | 12.3962 | 78 \rightarrow 6 | 1.15E-18 | 1.85E-19 | 1.01E-18 | 12.61 | – |
| Fe XX | 12.3976 | 106 \rightarrow 2 | 9.65E-18 | 2.42E-18 | 9.65E-18 | 13.52 | – |
| Fe XXI | 12.3997 | 124 \rightarrow 9 | 6.19E-18 | 2.18E-20 | 6.19E-18 | 13.52 | 12.25 |
| Fe XIX | 12.4013 | 156 \rightarrow 2 | 4.40E-19 | 3.12E-20 | 4.40E-19 | 8.98 | – |
| Fe XXII | 12.4029 | 35 \rightarrow 6 | 1.51E-18 | 1.51E-18 | 6.54E-19 | 13.57 | – |
| Fe XX | 12.4053 | 105 \rightarrow 2 | 2.82E-18 | 4.54E-19 | 2.82E-18 | 13.57 | – |
| Fe XXI | 12.4143 | 55 \rightarrow 4 | 1.11E-16 | 2.23E-18 | 1.11E-16 | 14.21 | 13.07 |
| Fe XXI | 12.4143 | 122 \rightarrow 9 | 3.12E-19 | 1.21E-20 | 3.12E-19 | 12.59 | – |
| Fe XXI | 12.4150 | 149 \rightarrow 12 | 3.59E-18 | 3.59E-18 | 7.11E-19 | 12.69 | – |
| Fe XXI | 12.4192 | 117 \rightarrow 8 | 3.65E-19 | 1.35E-20 | 3.65E-19 | 12.95 | – |
| Fe XX | 12.4209 | 103 \rightarrow 2 | 1.16E-18 | 3.42E-19 | 1.16E-18 | 13.36 | – |
| Fe XXI | 12.4220 | 37 \rightarrow 2 | 7.29E-17 | 2.32E-17 | 6.48E-17 | 12.67 | – |
| Fe XXI | 12.4251 | 144 \rightarrow 11 | 7.00E-19 | 7.00E-19 | 2.12E-19 | 12.63 | – |
| Fe XXI | 12.4252 | 53 \rightarrow 4 | 1.96E-18 | 1.96E-18 | 4.72E-19 | 12.71 | – |
| Fe XX | 12.4335 | 202 \rightarrow 6 | 2.10E-18 | 2.57E-19 | 2.10E-18 | 13.94 | – |
| Ni XXII | 12.4342 | 54 \rightarrow 7 | 9.50E-19 | 9.50E-19 | 4.38E-19 | 13.83 | – |
| Fe XX | 12.4365 | 130 \rightarrow 5 | 1.66E-18 | 3.39E-19 | 1.66E-18 | 13.80 | – |
| Fe XX | 12.4371 | 102 \rightarrow 2 | 1.02E-18 | 2.72E-19 | 1.02E-18 | 13.48 | – |
| Fe XX | 12.4398 | 112 \rightarrow 3 | 1.54E-17 | 7.96E-20 | 1.54E-17 | 13.95 | 12.54 |
| Fe XXI | 12.4398 | 164 \rightarrow 13 | 1.27E-18 | 1.09E-20 | 1.27E-18 | 13.74 | 12.37 |
| Fe XXI | 12.4441 | 145 \rightarrow 12 | 2.29E-18 | 1.51E-18 | 2.00E-18 | 12.68 | – |
| Fe XXI | 12.4442 | 118 \rightarrow 9 | 2.70E-18 | 2.49E-20 | 2.70E-18 | 13.83 | 12.33 |
| Fe XXI | 12.4452 | 163 \rightarrow 13 | 7.97E-19 | 1.07E-20 | 7.97E-19 | 12.77 | – |
| Fe XXIII | 12.4503 | 16 \rightarrow 8 | 2.28E-18 | 1.49E-18 | 2.28E-18 | 13.65 | – |
| Fe XXI | 12.4543 | 144 \rightarrow 12 | 1.54E-18 | 1.54E-18 | 4.65E-19 | 12.63 | – |
| Fe XXII | 12.4625 | 19 \rightarrow 4 | 3.70E-18 | 3.70E-18 | 1.54E-18 | 13.57 | – |
| Fe XXI | 12.4632 | 117 \rightarrow 9 | 2.10E-18 | 1.15E-20 | 2.10E-18 | 12.87 | Bad Fit |
| Fe XXI | 12.4656 | 167 \rightarrow 14 | 2.27E-18 | 2.15E-19 | 2.27E-18 | 13.71 | 12.38 |
| Fe XX | 12.4680 | 196 \rightarrow 6 | 1.01E-17 | 1.01E-17 | 4.07E-18 | 13.63 | – |
| Fe XXI | 12.4687 | 74 \rightarrow 6 | 1.15E-17 | 1.15E-17 | 2.39E-18 | 12.71 | – |
| Fe XXI | 12.4704 | 141 \rightarrow 11 | 6.61E-19 | 1.41E-19 | 6.61E-19 | 13.36 | – |
| Fe XX | 12.4722 | 99 \rightarrow 2 | 1.16E-18 | 3.59E-19 | 1.16E-18 | 13.45 | – |
| Fe XXI | 12.4726 | 158 \rightarrow 13 | 3.06E-18 | 2.40E-19 | 3.06E-18 | 13.86 | 12.36 |
| Fe XXI | 12.4732 | 40 \rightarrow 3 | 5.21E-18 | 5.21E-18 | 6.97E-19 | 12.70 | – |
| Fe XIX | 12.4758 | 153 \rightarrow 3 | 5.56E-19 | 1.57E-19 | 5.56E-19 | 13.41 | 8.95 |
| Fe XX | 12.4760 | 98 \rightarrow 2 | 1.17E-18 | 4.32E-19 | 1.17E-18 | 13.43 | – |
| Fe XXI | 12.4781 | 51 \rightarrow 4 | 1.13E-18 | 1.13E-18 | 3.10E-19 | 12.75 | – |
| Fe XX | 12.4800 | 104 \rightarrow 3 | 3.45E-18 | 1.67E-19 | 3.45E-18 | 13.91 | 12.59 |
| Fe XXI | 12.4835 | 157 \rightarrow 13 | 2.58E-18 | 2.45E-18 | 2.58E-18 | 16.76 | Bad Fit |
| Fe XX | 12.4840 | 103 \rightarrow 3 | 2.16E-18 | 6.37E-19 | 2.16E-18 | 13.36 | – |
| Fe XIX | 12.4941 | 159 \rightarrow 4 | 1.97E-18 | 1.97E-18 | 1.16E-18 | 13.33 | – |
| Fe XXI | 12.4956 | 73 \rightarrow 6 | 8.33E-18 | 8.33E-18 | 1.54E-18 | 12.71 | – |
| Fe XX | 12.4990 | 96 \rightarrow 2 | 7.71E-19 | 1.49E-19 | 7.71E-19 | 13.41 | – |
| Fe XXI | 12.4990 | 36 \rightarrow 3 | 5.72E-17 | 2.67E-17 | 5.22E-17 | 12.24 | – |
| Fe XXI | 12.4999 | 141 \rightarrow 12 | 6.66E-19 | 1.42E-19 | 6.66E-19 | 13.36 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 12.5019 | 37 \rightarrow 3 | 8.83E-18 | 2.81E-18 | 7.85E-18 | 12.67 | – |
| Fe XX | 12.5054 | 101 \rightarrow 3 | 2.29E-18 | 1.52E-19 | 2.29E-18 | 13.89 | 12.61 |
| Fe XXI | 12.5059 | 140 \rightarrow 12 | 8.32E-19 | 1.07E-19 | 8.32E-19 | 13.92 | – |
| Fe XX | 12.5080 | 194 \rightarrow 6 | 2.58E-18 | 2.58E-18 | 1.05E-18 | 13.64 | – |
| Fe XXI | 12.5089 | 48 \rightarrow 4 | 2.26E-17 | 3.15E-19 | 2.26E-17 | 12.58 | – |
| Fe XXI | 12.5089 | 72 \rightarrow 6 | 1.70E-18 | 1.70E-18 | 2.92E-19 | 12.70 | – |
| Fe XXI | 12.5091 | 47 \rightarrow 4 | 3.39E-18 | 1.42E-19 | 3.11E-18 | 12.64 | – |
| Fe XXI | 12.5144 | 154 \rightarrow 13 | 4.38E-19 | 5.62E-20 | 4.38E-19 | 14.24 | 12.66 |
| Fe XXI | 12.5225 | 153 \rightarrow 13 | 4.73E-19 | 1.45E-19 | 4.73E-19 | 12.51 | – |
| Fe XX | 12.5260 | 75 \rightarrow 1 | 1.61E-17 | 1.61E-17 | 6.02E-18 | 13.62 | – |
| Fe XXI | 12.5265 | 137 \rightarrow 11 | 5.45E-19 | 8.51E-20 | 5.45E-19 | 13.89 | 12.35 |
| Fe XXI | 12.5309 | 46 \rightarrow 4 | 7.82E-18 | 1.51E-19 | 7.53E-18 | 12.39 | – |
| Fe XXI | 12.5339 | 139 \rightarrow 12 | 1.14E-18 | 1.10E-19 | 1.14E-18 | 13.86 | 12.34 |
| Fe XX | 12.5358 | 99 \rightarrow 3 | 8.72E-19 | 2.69E-19 | 8.72E-19 | 13.45 | – |
| Fe XXII | 12.5366 | 18 \rightarrow 3 | 2.56E-18 | 1.18E-18 | 2.56E-18 | 13.57 | – |
| Fe XIX | 12.5384 | 128 \rightarrow 1 | 6.29E-19 | 2.39E-19 | 6.29E-19 | 13.98 | – |
| Fe XXI | 12.5449 | 58 \rightarrow 5 | 5.87E-18 | 5.87E-18 | 7.41E-19 | 12.70 | – |
| Fe XX | 12.5536 | 81 \rightarrow 1 | 5.00E-19 | 3.00E-20 | 5.00E-19 | 14.09 | – |
| Fe XXI | 12.5562 | 137 \rightarrow 12 | 1.85E-18 | 2.89E-19 | 1.85E-18 | 13.89 | 12.35 |
| Fe XX | 12.5629 | 96 \rightarrow 3 | 1.21E-18 | 2.34E-19 | 1.21E-18 | 13.41 | – |
| Fe XXI | 12.5675 | 44 \rightarrow 4 | 1.30E-17 | 3.38E-19 | 1.24E-17 | 12.74 | – |
| Fe XXI | 12.5676 | 134 \rightarrow 12 | 5.39E-18 | 2.08E-19 | 5.39E-18 | 13.96 | – |
| Fe XX | 12.5760 | 72 \rightarrow 1 | 3.38E-17 | 3.38E-17 | 1.25E-17 | 13.63 | – |
| Fe XX | 12.5760 | 73 \rightarrow 1 | 4.37E-17 | 4.37E-17 | 1.82E-17 | 13.63 | – |
| Fe XIX | 12.5771 | 171 \rightarrow 5 | 9.08E-19 | 1.72E-19 | 9.08E-19 | 14.47 | 8.94 |
| Fe XXI | 12.5802 | 171 \rightarrow 15 | 9.13E-19 | 3.33E-19 | 9.13E-19 | 13.49 | – |
| Fe XXI | 12.5852 | 125 \rightarrow 11 | 5.81E-19 | 1.87E-19 | 5.81E-19 | 13.10 | – |
| Fe XXII | 12.5864 | 17 \rightarrow 3 | 2.00E-18 | 2.00E-18 | 1.05E-18 | 13.57 | – |
| Fe XXI | 12.5865 | 218 \rightarrow 16 | 3.40E-19 | 1.31E-20 | 3.40E-19 | 13.00 | – |
| Fe XXI | 12.5945 | 111 \rightarrow 8 | 6.63E-18 | 8.62E-20 | 6.10E-18 | 12.45 | – |
| Fe XXI | 12.5996 | 216 \rightarrow 16 | 6.04E-19 | 1.21E-20 | 5.97E-19 | 12.43 | – |
| Fe XIX | 12.5998 | 141 \rightarrow 3 | 5.67E-19 | 4.40E-20 | 5.64E-19 | 13.33 | – |
| Fe XXI | 12.6021 | 56 \rightarrow 5 | 1.55E-17 | 7.87E-18 | 1.55E-17 | 14.88 | – |
| Fe XXI | 12.6035 | 127 \rightarrow 12 | 4.98E-19 | 1.06E-20 | 4.98E-19 | 13.42 | – |
| Fe XXI | 12.6060 | 170 \rightarrow 15 | 6.79E-19 | 1.64E-19 | 6.79E-19 | 14.39 | 12.49 |
| Fe XXI | 12.6063 | 110 \rightarrow 7 | 5.01E-18 | 5.01E-18 | 2.56E-18 | 13.07 | – |
| Fe XX | 12.6075 | 195 \rightarrow 7 | 2.88E-18 | 2.88E-18 | 1.44E-18 | 13.55 | – |
| Fe XXI | 12.6113 | 54 \rightarrow 5 | 7.14E-18 | 4.47E-18 | 7.14E-18 | 14.59 | – |
| Fe XXII | 12.6137 | 27 \rightarrow 6 | 1.89E-18 | 2.74E-20 | 1.89E-18 | 13.57 | – |
| Fe XXI | 12.6154 | 214 \rightarrow 16 | 5.32E-19 | 5.32E-19 | 7.81E-20 | 12.69 | – |
| Fe XXI | 12.6165 | 109 \rightarrow 8 | 3.59E-19 | 1.30E-20 | 3.27E-19 | 12.53 | – |
| Fe XXII | 12.6174 | 49 \rightarrow 10 | 2.73E-18 | 2.73E-18 | 1.22E-18 | 13.57 | – |
| Fe XXII | 12.6191 | 46 \rightarrow 9 | 3.71E-18 | 3.71E-18 | 1.81E-18 | 13.57 | – |
| Fe XX | 12.6210 | 194 \rightarrow 7 | 1.26E-17 | 1.26E-17 | 5.15E-18 | 13.64 | – |
| Fe XX | 12.6303 | 197 \rightarrow 8 | 3.42E-18 | 3.42E-18 | 1.52E-18 | 13.63 | – |
| Fe XXI | 12.6305 | 122 \rightarrow 12 | 1.72E-18 | 4.09E-20 | 1.72E-18 | 12.54 | – |
| Fe XX | 12.6380 | 70 \rightarrow 1 | 4.04E-19 | 1.71E-20 | 4.04E-19 | 13.93 | 12.80 |
| Fe XX | 12.6394 | 86 \rightarrow 2 | 3.85E-19 | 1.46E-20 | 3.85E-19 | 14.01 | – |
| Fe XXI | 12.6398 | 111 \rightarrow 9 | 6.36E-18 | 8.28E-20 | 5.86E-18 | 12.45 | – |
| Fe XX | 12.6437 | 195 \rightarrow 8 | 3.47E-18 | 3.47E-18 | 1.73E-18 | 13.55 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 12.6470 | 69 \rightarrow 1 | 6.73E-19 | 4.52E-20 | 6.73E-19 | 13.58 | – |
| Fe XXII | 12.6489 | 27 \rightarrow 7 | 2.81E-17 | 4.07E-19 | 2.81E-17 | 13.57 | – |
| Fe XXI | 12.6490 | 149 \rightarrow 13 | 2.07E-17 | 2.07E-17 | 4.10E-18 | 12.69 | – |
| Fe XXII | 12.6510 | 46 \rightarrow 10 | 2.44E-18 | 2.44E-18 | 1.19E-18 | 13.57 | – |
| Fe XXI | 12.6518 | 110 \rightarrow 9 | 3.01E-18 | 3.01E-18 | 1.54E-18 | 13.07 | – |
| Fe XXI | 12.6539 | 101 \rightarrow 8 | 6.40E-19 | 1.31E-20 | 6.40E-19 | 12.79 | – |
| Fe XXI | 12.6758 | 40 \rightarrow 4 | 5.97E-19 | 5.97E-19 | 7.99E-20 | 12.70 | – |
| Fe XX | 12.6885 | 213 \rightarrow 9 | 1.34E-18 | 1.08E-19 | 1.34E-18 | 13.99 | – |
| Fe XXI | 12.6966 | 102 \rightarrow 9 | 1.99E-17 | 6.35E-20 | 1.90E-17 | 12.37 | – |
| Fe XXI | 12.6967 | 147 \rightarrow 13 | 1.61E-18 | 4.79E-19 | 1.61E-18 | 13.08 | – |
| Fe XXI | 12.6990 | 146 \rightarrow 13 | 8.51E-19 | 1.56E-20 | 8.51E-19 | 14.00 | 12.39 |
| Fe XXI | 12.6996 | 101 \rightarrow 9 | 1.49E-18 | 1.20E-20 | 1.49E-18 | 13.78 | 12.31 |
| Fe XXI | 12.7038 | 164 \rightarrow 15 | 1.45E-18 | 1.24E-20 | 1.45E-18 | 13.74 | 12.37 |
| Fe XXI | 12.7055 | 37 \rightarrow 4 | 7.63E-18 | 2.43E-18 | 6.78E-18 | 12.67 | – |
| Fe XXII | 12.7114 | 18 \rightarrow 5 | 2.91E-18 | 1.35E-18 | 2.91E-18 | 13.57 | – |
| Fe XXI | 12.7139 | 36 \rightarrow 4 | 2.55E-18 | 1.19E-18 | 2.33E-18 | 12.24 | – |
| Fe XX | 12.7144 | 213 \rightarrow 10 | 1.00E-18 | 8.08E-20 | 1.00E-18 | 13.99 | – |
| Fe XX | 12.7176 | 182 \rightarrow 6 | 4.71E-19 | 7.26E-20 | 4.71E-19 | 13.65 | – |
| Fe XX | 12.7189 | 212 \rightarrow 10 | 4.02E-18 | 4.45E-19 | 4.02E-18 | 14.10 | – |
| Fe XX | 12.7206 | 180 \rightarrow 6 | 3.94E-18 | 2.40E-19 | 3.94E-18 | 14.05 | 12.59 |
| Fe XX | 12.7234 | 85 \rightarrow 3 | 3.40E-18 | 3.08E-20 | 3.40E-18 | 14.20 | – |
| Fe XXI | 12.7322 | 92 \rightarrow 8 | 1.62E-17 | 8.76E-19 | 1.43E-17 | 12.65 | – |
| Fe XIX | 12.7354 | 142 \rightarrow 4 | 2.62E-18 | 6.98E-19 | 2.62E-18 | 13.86 | – |
| Fe XIX | 12.7396 | 140 \rightarrow 4 | 1.04E-18 | 5.94E-19 | 1.04E-18 | 13.59 | – |
| Ni XXII | 12.7404 | 33 \rightarrow 6 | 1.38E-18 | 1.38E-18 | 6.20E-19 | 13.86 | – |
| Fe XXI | 12.7520 | 147 \rightarrow 14 | 6.00E-19 | 1.78E-19 | 6.00E-19 | 13.08 | – |
| Fe XXII | 12.7540 | 23 \rightarrow 6 | 6.13E-17 | 6.13E-17 | 2.42E-17 | 13.57 | – |
| Fe XX | 12.7544 | 63 \rightarrow 1 | 6.95E-18 | 2.09E-18 | 6.95E-18 | 13.47 | – |
| Fe XXI | 12.7546 | 89 \rightarrow 7 | 1.47E-18 | 4.95E-20 | 1.32E-18 | 12.59 | – |
| Fe XIX | 12.7568 | 135 \rightarrow 4 | 2.87E-18 | 1.60E-18 | 2.87E-18 | 14.05 | – |
| Fe XX | 12.7576 | 62 \rightarrow 1 | 7.28E-19 | 1.50E-19 | 7.28E-19 | 13.89 | – |
| Fe XXI | 12.7578 | 214 \rightarrow 17 | 4.55E-19 | 4.55E-19 | 6.68E-20 | 12.69 | – |
| Fe XXI | 12.7585 | 145 \rightarrow 14 | 1.08E-18 | 7.16E-19 | 9.44E-19 | 12.68 | – |
| Fe XIX | 12.7642 | 134 \rightarrow 4 | 2.43E-18 | 4.82E-19 | 2.43E-18 | 13.92 | – |
| Fe XXI | 12.7687 | 212 \rightarrow 18 | 5.80E-19 | 3.54E-20 | 5.11E-19 | 12.68 | – |
| Fe XXI | 12.7692 | 144 \rightarrow 14 | 9.38E-19 | 9.38E-19 | 2.84E-19 | 12.63 | – |
| Fe XXI | 12.7784 | 92 \rightarrow 9 | 1.46E-18 | 7.89E-20 | 1.28E-18 | 12.65 | – |
| Fe XIX | 12.7799 | 132 \rightarrow 4 | 8.77E-19 | 3.85E-19 | 8.77E-19 | 13.91 | – |
| Fe XX | 12.7808 | 81 \rightarrow 2 | 1.05E-17 | 6.27E-19 | 1.05E-17 | 14.09 | – |
| Fe XX | 12.7820 | 80 \rightarrow 2 | 8.03E-19 | 5.94E-20 | 8.03E-19 | 14.13 | – |
| Fe XXI | 12.7858 | 86 \rightarrow 7 | 9.60E-18 | 9.60E-18 | 5.24E-18 | 12.75 | – |
| Fe XXI | 12.7859 | 86 \rightarrow 8 | 8.23E-18 | 8.23E-18 | 4.49E-18 | 12.75 | – |
| Fe XXI | 12.7861 | 223 \rightarrow 19 | 5.81E-19 | 1.33E-20 | 5.81E-19 | 13.93 | 12.35 |
| Fe XX | 12.7866 | 79 \rightarrow 2 | 4.87E-18 | 6.51E-19 | 4.87E-18 | 13.98 | – |
| Fe XX | 12.7881 | 185 \rightarrow 7 | 6.55E-19 | 6.72E-20 | 6.55E-19 | 13.91 | – |
| Fe XX | 12.7945 | 171 \rightarrow 6 | 3.08E-18 | 1.51E-18 | 3.08E-18 | 13.58 | – |
| Fe XIX | 12.7955 | 156 \rightarrow 5 | 9.21E-19 | 6.54E-20 | 9.21E-19 | 8.98 | – |
| Fe XXII | 12.8084 | 27 \rightarrow 8 | 1.63E-18 | 2.36E-20 | 1.63E-18 | 13.57 | – |
| Fe XIX | 12.8132 | 128 \rightarrow 4 | 5.28E-18 | 2.01E-18 | 5.28E-18 | 13.98 | – |
| Fe XX | 12.8145 | 207 \rightarrow 9 | 1.17E-18 | 2.93E-19 | 1.17E-18 | 13.87 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 12.8169 | 167 \rightarrow 6 | 2.13E-18 | 2.55E-20 | 2.13E-18 | 13.92 | 12.59 |
| Fe XXI | 12.8171 | 141 \rightarrow 14 | 1.29E-18 | 2.74E-19 | 1.29E-18 | 13.36 | - |
| Fe XX | 12.8176 | 183 \rightarrow 7 | 2.18E-18 | 2.25E-19 | 2.18E-18 | 13.63 | - |
| Fe XXI | 12.8220 | 83 \rightarrow 7 | 6.62E-17 | 6.62E-17 | 8.79E-18 | 12.71 | - |
| Fe XXI | 12.8235 | 140 \rightarrow 14 | 3.28E-18 | 4.24E-19 | 3.28E-18 | 13.92 | - |
| Fe XX | 12.8239 | 182 \rightarrow 7 | 2.23E-18 | 3.44E-19 | 2.23E-18 | 13.65 | - |
| Fe XX | 12.8240 | 60 \rightarrow 1 | 1.16E-16 | 1.16E-16 | 4.61E-17 | 13.61 | - |
| Fe XX | 12.8270 | 59 \rightarrow 1 | 1.83E-17 | 1.83E-17 | 1.09E-17 | 13.40 | - |
| Fe XX | 12.8311 | 73 \rightarrow 2 | 6.95E-18 | 6.95E-18 | 2.90E-18 | 13.63 | - |
| Fe XX | 12.8318 | 86 \rightarrow 4 | 2.88E-17 | 1.73E-19 | 2.88E-17 | 13.99 | - |
| Fe XXI | 12.8355 | 83 \rightarrow 8 | 1.08E-17 | 1.08E-17 | 1.43E-18 | 12.71 | - |
| Fe XX | 12.8381 | 179 \rightarrow 7 | 2.45E-18 | 1.27E-18 | 2.45E-18 | 14.11 | - |
| Fe XXI | 12.8386 | 109 \rightarrow 10 | 2.14E-18 | 7.77E-20 | 1.95E-18 | 12.53 | - |
| Fe XXI | 12.8403 | 205 \rightarrow 17 | 8.55E-19 | 8.55E-19 | 1.99E-19 | 12.71 | - |
| Fe XX | 12.8411 | 71 \rightarrow 2 | 9.34E-18 | 5.18E-19 | 9.34E-18 | 13.71 | - |
| Fe XXI | 12.8422 | 221 \rightarrow 19 | 4.43E-19 | 1.18E-20 | 4.43E-19 | 12.78 | - |
| Fe XXI | 12.8452 | 110 \rightarrow 11 | 5.99E-18 | 5.99E-18 | 3.06E-18 | 13.07 | - |
| Fe XX | 12.8460 | 58 \rightarrow 1 | 2.83E-16 | 2.83E-16 | 1.08E-16 | 13.63 | - |
| Fe XX | 12.8476 | 81 \rightarrow 3 | 1.19E-18 | 7.12E-20 | 1.19E-18 | 14.09 | - |
| Fe XX | 12.8488 | 80 \rightarrow 3 | 3.55E-18 | 2.63E-19 | 3.55E-18 | 14.13 | - |
| Fe XIX | 12.8529 | 125 \rightarrow 4 | 1.20E-18 | 7.86E-19 | 1.20E-18 | 14.11 | - |
| Fe XX | 12.8550 | 183 \rightarrow 8 | 7.65E-19 | 7.87E-20 | 7.65E-19 | 13.63 | - |
| Fe XXI | 12.8556 | 109 \rightarrow 11 | 4.08E-18 | 1.48E-19 | 3.72E-18 | 12.53 | - |
| Fe XXI | 12.8563 | 85 \rightarrow 9 | 2.71E-18 | 1.42E-20 | 2.57E-18 | 12.38 | - |
| Fe XIX | 12.8574 | 111 \rightarrow 1 | 5.65E-19 | 1.99E-19 | 5.54E-19 | 13.26 | - |
| Fe XXI | 12.8603 | 82 \rightarrow 7 | 8.23E-18 | 8.23E-18 | 1.07E-18 | 12.69 | - |
| Fe XXI | 12.8636 | 194 \rightarrow 16 | 5.91E-19 | 9.97E-20 | 5.43E-19 | 12.33 | - |
| Fe XX | 12.8640 | 56 \rightarrow 1 | 2.36E-16 | 2.36E-16 | 9.79E-17 | 13.65 | - |
| Fe XXI | 12.8640 | 111 \rightarrow 12 | 4.97E-18 | 6.46E-20 | 4.57E-18 | 12.45 | - |
| Ni XXII | 12.8644 | 33 \rightarrow 7 | 9.95E-19 | 9.95E-19 | 4.46E-19 | 13.86 | - |
| Fe XX | 12.8684 | 70 \rightarrow 2 | 4.15E-17 | 1.75E-18 | 4.15E-17 | 13.93 | 12.80 |
| Fe XIX | 12.8697 | 123 \rightarrow 4 | 1.66E-18 | 8.32E-19 | 1.66E-18 | 13.96 | - |
| Fe XX | 12.8704 | 175 \rightarrow 7 | 1.29E-18 | 5.48E-19 | 1.29E-18 | 13.82 | - |
| Fe XXI | 12.8749 | 40 \rightarrow 5 | 3.36E-18 | 3.36E-18 | 4.50E-19 | 12.70 | - |
| Fe XXI | 12.8764 | 137 \rightarrow 14 | 4.56E-19 | 7.12E-20 | 4.56E-19 | 13.89 | 12.35 |
| Fe XXI | 12.8765 | 110 \rightarrow 12 | 8.23E-18 | 8.23E-18 | 4.20E-18 | 13.07 | - |
| Fe XX | 12.8776 | 69 \rightarrow 2 | 3.18E-17 | 2.14E-18 | 3.18E-17 | 13.58 | - |
| Fe XXI | 12.8778 | 80 \rightarrow 7 | 5.18E-19 | 1.21E-19 | 4.50E-19 | 12.70 | - |
| Fe XXI | 12.8780 | 80 \rightarrow 8 | 1.57E-18 | 3.67E-19 | 1.36E-18 | 12.70 | - |
| Fe XX | 12.8788 | 178 \rightarrow 8 | 1.05E-18 | 1.05E-18 | 6.73E-19 | 13.46 | - |
| Fe XX | 12.8817 | 204 \rightarrow 9 | 1.88E-18 | 6.61E-20 | 1.88E-18 | 14.21 | 12.90 |
| Fe XXI | 12.8825 | 83 \rightarrow 9 | 2.97E-18 | 2.97E-18 | 3.94E-19 | 12.71 | - |
| Fe XXI | 12.8869 | 109 \rightarrow 12 | 1.15E-18 | 4.17E-20 | 1.05E-18 | 12.53 | - |
| Fe XXI | 12.8883 | 134 \rightarrow 14 | 2.12E-18 | 8.18E-20 | 2.12E-18 | 13.96 | - |
| Fe XX | 12.8908 | 160 \rightarrow 6 | 1.99E-18 | 4.02E-19 | 1.99E-18 | 13.45 | - |
| Fe XX | 12.8951 | 74 \rightarrow 3 | 1.41E-16 | 3.10E-18 | 1.41E-16 | 13.96 | 12.54 |
| Fe XXI | 12.9053 | 214 \rightarrow 19 | 6.39E-19 | 6.39E-19 | 9.38E-20 | 12.69 | - |
| Fe XX | 12.9076 | 170 \rightarrow 7 | 1.56E-18 | 2.61E-19 | 1.56E-18 | 13.74 | - |
| Fe XX | 12.9084 | 204 \rightarrow 10 | 7.01E-19 | 2.47E-20 | 7.01E-19 | 14.21 | 12.90 |
| Fe XX | 12.9095 | 216 \rightarrow 11 | 6.16E-19 | 8.17E-20 | 6.16E-19 | 14.09 | - |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 12.9120 | 51 \rightarrow 1 | 7.35E-17 | 7.35E-17 | 3.97E-17 | 13.68 | – |
| Fe XX | 12.9120 | 215 \rightarrow 11 | 1.15E-18 | 1.12E-19 | 1.15E-18 | 14.18 | – |
| Fe XX | 12.9131 | 203 \rightarrow 10 | 3.09E-18 | 4.97E-19 | 3.09E-18 | 14.04 | 12.62 |
| Fe XX | 12.9184 | 157 \rightarrow 6 | 1.67E-18 | 4.86E-20 | 1.67E-18 | 13.92 | 12.80 |
| Fe XX | 12.9204 | 168 \rightarrow 7 | 5.74E-19 | 8.38E-20 | 5.74E-19 | 13.91 | 12.61 |
| Fe XXI | 12.9259 | 101 \rightarrow 12 | 5.24E-18 | 4.22E-20 | 5.24E-18 | 13.78 | 12.31 |
| Fe XXI | 12.9301 | 97 \rightarrow 11 | 1.71E-18 | 1.49E-19 | 1.53E-18 | 12.72 | – |
| Fe XIX | 12.9311 | 106 \rightarrow 1 | 1.20E-17 | 1.20E-17 | 5.93E-18 | 13.46 | – |
| Fe XIX | 12.9330 | 105 \rightarrow 1 | 1.50E-17 | 1.50E-17 | 7.91E-18 | 13.48 | – |
| Fe XX | 12.9330 | 153 \rightarrow 6 | 1.57E-18 | 6.89E-19 | 1.57E-18 | 13.20 | – |
| Fe XX | 12.9361 | 70 \rightarrow 3 | 4.19E-17 | 1.77E-18 | 4.19E-17 | 13.93 | 12.80 |
| Fe XX | 12.9389 | 86 \rightarrow 5 | 9.30E-18 | 5.61E-20 | 9.30E-18 | 13.99 | – |
| Fe XXI | 12.9409 | 24 \rightarrow 2 | 4.65E-19 | 7.25E-20 | 4.65E-19 | 14.03 | 12.56 |
| Fe XX | 12.9423 | 165 \rightarrow 7 | 1.21E-18 | 2.59E-19 | 1.21E-18 | 13.49 | – |
| Ni XXI | 12.9438 | 16 \rightarrow 4 | 9.31E-19 | 5.11E-19 | 9.31E-19 | 14.09 | – |
| Fe XIX | 12.9450 | 104 \rightarrow 1 | 6.80E-18 | 6.80E-18 | 3.57E-18 | 13.50 | – |
| Fe XXI | 12.9454 | 96 \rightarrow 11 | 1.66E-18 | 2.98E-19 | 1.59E-18 | 12.34 | – |
| Fe XX | 12.9455 | 69 \rightarrow 3 | 7.47E-18 | 5.02E-19 | 7.47E-18 | 13.58 | – |
| Fe XXI | 12.9469 | 149 \rightarrow 15 | 1.17E-18 | 1.17E-18 | 2.31E-19 | 12.69 | – |
| Fe XX | 12.9492 | 150 \rightarrow 6 | 8.65E-18 | 4.79E-19 | 8.65E-18 | 13.52 | – |
| Fe XXI | 12.9495 | 76 \rightarrow 9 | 3.31E-18 | 4.36E-20 | 2.94E-18 | 12.63 | – |
| Fe XIX | 12.9526 | 112 \rightarrow 2 | 3.12E-18 | 4.31E-19 | 2.75E-18 | 8.89 | – |
| Fe XXII | 12.9530 | 23 \rightarrow 8 | 2.44E-17 | 2.44E-17 | 9.62E-18 | 13.57 | – |
| Fe XXI | 12.9545 | 122 \rightarrow 14 | 4.24E-19 | 1.01E-20 | 4.24E-19 | 12.54 | – |
| Fe XXI | 12.9572 | 75 \rightarrow 8 | 1.43E-18 | 2.11E-20 | 1.43E-18 | 13.79 | – |
| Fe XX | 12.9583 | 85 \rightarrow 5 | 4.08E-17 | 3.70E-19 | 4.08E-17 | 14.20 | – |
| Fe XXI | 12.9618 | 97 \rightarrow 12 | 8.48E-19 | 7.39E-20 | 7.62E-19 | 12.72 | – |
| Fe XXI | 12.9649 | 74 \rightarrow 8 | 1.12E-18 | 1.12E-18 | 2.33E-19 | 12.71 | – |
| Fe XX | 12.9650 | 48 \rightarrow 1 | 8.77E-17 | 8.77E-17 | 3.80E-17 | 13.64 | – |
| Fe XX | 12.9654 | 47 \rightarrow 1 | 3.65E-18 | 3.65E-18 | 2.48E-18 | 13.46 | – |
| Fe XX | 12.9659 | 149 \rightarrow 6 | 9.61E-18 | 6.91E-18 | 9.50E-18 | 13.40 | – |
| Fe XXI | 12.9718 | 147 \rightarrow 15 | 9.07E-19 | 2.69E-19 | 9.07E-19 | 13.08 | – |
| Fe XXI | 12.9742 | 146 \rightarrow 15 | 1.18E-18 | 2.17E-20 | 1.18E-18 | 14.00 | 12.39 |
| Fe XVIII | 12.9743 | 91 \rightarrow 2 | 8.65E-19 | 2.97E-19 | 8.65E-19 | 13.51 | – |
| Fe XIX | 12.9747 | 112 \rightarrow 3 | 6.74E-19 | 9.29E-20 | 5.94E-19 | 8.89 | – |
| Fe XX | 12.9788 | 80 \rightarrow 4 | 3.35E-18 | 2.48E-19 | 3.35E-18 | 14.13 | – |
| Fe XXI | 12.9819 | 89 \rightarrow 10 | 3.59E-18 | 1.21E-19 | 3.23E-18 | 12.59 | – |
| Fe XXI | 12.9831 | 23 \rightarrow 2 | 4.89E-18 | 3.86E-19 | 4.89E-18 | 12.64 | – |
| Fe XX | 12.9836 | 79 \rightarrow 4 | 1.22E-18 | 1.63E-19 | 1.22E-18 | 13.98 | – |
| Fe XX | 12.9898 | 217 \rightarrow 12 | 3.13E-18 | 5.35E-19 | 3.13E-18 | 14.16 | – |
| Fe XX | 12.9920 | 45 \rightarrow 1 | 2.15E-17 | 2.15E-17 | 1.22E-17 | 13.62 | – |
| Fe XX | 12.9920 | 63 \rightarrow 2 | 7.62E-17 | 2.29E-17 | 7.62E-17 | 13.47 | – |
| Fe XX | 12.9925 | 67 \rightarrow 3 | 2.44E-17 | 9.68E-19 | 2.44E-17 | 14.03 | 12.63 |
| Fe XX | 12.9929 | 161 \rightarrow 7 | 7.42E-19 | 1.78E-19 | 7.42E-19 | 13.46 | – |
| Fe XXI | 12.9930 | 41 \rightarrow 6 | 7.66E-18 | 1.73E-19 | 7.35E-18 | 12.38 | – |
| Fe XXI | 12.9938 | 73 \rightarrow 7 | 4.45E-19 | 4.45E-19 | 8.22E-20 | 12.71 | – |
| Fe XXI | 12.9940 | 73 \rightarrow 8 | 3.29E-18 | 3.29E-18 | 6.07E-19 | 12.71 | – |
| Fe XX | 12.9956 | 195 \rightarrow 9 | 1.37E-18 | 1.37E-18 | 6.83E-19 | 13.55 | – |
| Fe XX | 12.9991 | 194 \rightarrow 9 | 5.17E-18 | 5.17E-18 | 2.11E-18 | 13.64 | – |
| Fe XIX | 13.0017 | 111 \rightarrow 3 | 4.44E-18 | 1.57E-18 | 4.35E-18 | 13.26 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 13.0051 | 75 \rightarrow 9 | 1.35E-18 | 1.99E-20 | 1.35E-18 | 13.79 | – |
| Fe XIX | 13.0062 | 109 \rightarrow 3 | 2.61E-18 | 1.99E-19 | 2.56E-18 | 13.28 | 8.95 |
| Fe XXI | 13.0082 | 72 \rightarrow 7 | 4.67E-18 | 4.67E-18 | 8.04E-19 | 12.70 | – |
| Fe XXI | 13.0084 | 72 \rightarrow 8 | 5.15E-19 | 5.15E-19 | 8.86E-20 | 12.70 | – |
| Fe XXI | 13.0116 | 195 \rightarrow 17 | 1.34E-18 | 1.34E-18 | 2.13E-19 | 12.71 | – |
| Fe XIX | 13.0119 | 108 \rightarrow 3 | 8.76E-19 | 7.12E-20 | 8.65E-19 | 13.30 | – |
| Fe XXII | 13.0122 | 27 \rightarrow 9 | 6.35E-18 | 9.21E-20 | 6.35E-18 | 13.57 | – |
| Fe XXI | 13.0142 | 195 \rightarrow 18 | 7.43E-19 | 7.43E-19 | 1.18E-19 | 12.71 | – |
| Fe XIX | 13.0220 | 97 \rightarrow 1 | 2.02E-17 | 2.02E-17 | 9.75E-18 | 13.45 | – |
| Ni XXI | 13.0230 | 88 \rightarrow 6 | 3.13E-19 | 1.57E-20 | 3.13E-19 | 13.57 | – |
| Fe XX | 13.0240 | 196 \rightarrow 10 | 2.02E-17 | 2.02E-17 | 8.11E-18 | 13.63 | – |
| Fe XX | 13.0240 | 66 \rightarrow 3 | 1.81E-17 | 1.81E-17 | 7.72E-18 | 13.65 | – |
| Fe XVIII | 13.0273 | 87 \rightarrow 2 | 1.89E-18 | 7.93E-19 | 1.89E-18 | 13.51 | – |
| Ni XXI | 13.0275 | 11 \rightarrow 1 | 2.41E-18 | 2.41E-18 | 1.44E-18 | 13.80 | – |
| Fe XX | 13.0281 | 157 \rightarrow 7 | 7.33E-19 | 2.13E-20 | 7.33E-19 | 13.92 | 12.80 |
| Fe XXI | 13.0313 | 89 \rightarrow 12 | 1.08E-18 | 3.65E-20 | 9.72E-19 | 12.59 | – |
| Fe XXI | 13.0316 | 86 \rightarrow 11 | 3.38E-18 | 3.38E-18 | 1.84E-18 | 12.75 | – |
| Fe XX | 13.0328 | 156 \rightarrow 7 | 9.95E-19 | 5.41E-20 | 9.95E-19 | 13.89 | 12.83 |
| Fe XX | 13.0375 | 139 \rightarrow 6 | 1.66E-18 | 4.48E-19 | 1.66E-18 | 13.50 | – |
| Fe XX | 13.0377 | 155 \rightarrow 7 | 8.20E-19 | 4.62E-19 | 8.20E-19 | 13.45 | – |
| Fe XIX | 13.0395 | 96 \rightarrow 1 | 1.67E-18 | 1.67E-18 | 9.58E-19 | 13.53 | – |
| Fe XX | 13.0398 | 71 \rightarrow 4 | 9.44E-18 | 5.23E-19 | 9.44E-18 | 13.71 | – |
| Fe XXI | 13.0444 | 22 \rightarrow 1 | 1.24E-17 | 1.24E-17 | 4.74E-18 | 12.81 | – |
| Fe XXI | 13.0458 | 140 \rightarrow 15 | 6.81E-19 | 8.80E-20 | 6.81E-19 | 13.92 | – |
| Fe XXII | 13.0460 | 27 \rightarrow 10 | 3.76E-18 | 5.45E-20 | 3.76E-18 | 13.57 | – |
| Fe XXI | 13.0558 | 68 \rightarrow 8 | 5.42E-19 | 1.15E-20 | 5.42E-19 | 14.08 | 12.65 |
| Fe XX | 13.0580 | 63 \rightarrow 3 | 2.29E-17 | 6.88E-18 | 2.29E-17 | 13.47 | – |
| Fe XX | 13.0610 | 42 \rightarrow 1 | 6.90E-17 | 6.90E-17 | 3.18E-17 | 13.65 | – |
| Fe XX | 13.0614 | 62 \rightarrow 3 | 2.97E-18 | 6.12E-19 | 2.97E-18 | 13.89 | – |
| Fe XXI | 13.0625 | 23 \rightarrow 3 | 1.06E-17 | 8.35E-19 | 1.06E-17 | 12.64 | – |
| Fe XX | 13.0630 | 136 \rightarrow 6 | 1.98E-18 | 1.15E-18 | 1.98E-18 | 13.30 | – |
| Ni XXII | 13.0720 | 43 \rightarrow 10 | 9.31E-19 | 4.37E-20 | 9.31E-19 | 14.24 | 12.98 |
| Fe XX | 13.0763 | 155 \rightarrow 8 | 8.52E-19 | 4.80E-19 | 8.52E-19 | 13.45 | – |
| Fe XXI | 13.0768 | 65 \rightarrow 7 | 1.65E-18 | 2.40E-19 | 1.62E-18 | 12.39 | – |
| Fe XXI | 13.0770 | 65 \rightarrow 8 | 1.76E-18 | 2.56E-19 | 1.73E-18 | 12.39 | – |
| Fe XX | 13.0775 | 69 \rightarrow 4 | 8.46E-18 | 5.68E-19 | 8.46E-18 | 13.58 | – |
| Fe XXI | 13.0819 | 38 \rightarrow 6 | 3.25E-18 | 5.54E-19 | 3.04E-18 | 12.60 | – |
| Fe XXI | 13.0831 | 83 \rightarrow 11 | 1.34E-17 | 1.34E-17 | 1.78E-18 | 12.71 | – |
| Fe XX | 13.0842 | 219 \rightarrow 13 | 1.53E-18 | 4.10E-19 | 1.53E-18 | 14.10 | – |
| Fe XX | 13.0872 | 81 \rightarrow 5 | 5.07E-17 | 3.04E-18 | 5.07E-17 | 14.09 | – |
| Fe XX | 13.0884 | 80 \rightarrow 5 | 3.13E-17 | 2.32E-18 | 3.13E-17 | 14.13 | – |
| Fe XXI | 13.0902 | 64 \rightarrow 7 | 4.96E-19 | 3.75E-20 | 4.89E-19 | 12.75 | – |
| Fe XX | 13.0910 | 148 \rightarrow 7 | 9.71E-19 | 2.35E-19 | 9.71E-19 | 13.48 | – |
| Fe XX | 13.0932 | 79 \rightarrow 5 | 1.01E-17 | 1.35E-18 | 1.01E-17 | 13.98 | – |
| Fe XX | 13.0954 | 147 \rightarrow 7 | 3.81E-18 | 3.81E-18 | 2.45E-18 | 13.74 | – |
| Fe XX | 13.1000 | 39 \rightarrow 1 | 1.35E-17 | 1.35E-17 | 7.53E-18 | 13.67 | – |
| Fe XX | 13.1000 | 61 \rightarrow 3 | 5.03E-17 | 8.10E-18 | 5.03E-17 | 13.97 | 12.53 |
| Fe XXI | 13.1045 | 68 \rightarrow 9 | 1.28E-18 | 2.71E-20 | 1.28E-18 | 14.08 | 12.65 |
| Fe XIX | 13.1090 | 94 \rightarrow 1 | 2.46E-18 | 2.46E-18 | 1.26E-18 | 13.48 | – |
| Fe XXI | 13.1090 | 82 \rightarrow 11 | 1.60E-18 | 1.60E-18 | 2.07E-19 | 12.69 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XIX | 13.1100 | 93 \rightarrow 1 | 3.17E-18 | 3.17E-18 | 1.55E-18 | 13.45 | – |
| Fe XXI | 13.1155 | 83 \rightarrow 12 | 1.07E-17 | 1.07E-17 | 1.42E-18 | 12.71 | – |
| Fe XX | 13.1244 | 187 \rightarrow 9 | 2.47E-18 | 1.26E-19 | 2.47E-18 | 14.31 | 13.12 |
| Ni XXI | 13.1245 | 82 \rightarrow 6 | 2.02E-18 | 2.02E-18 | 9.90E-19 | 13.66 | – |
| Fe XXI | 13.1258 | 65 \rightarrow 9 | 5.25E-19 | 7.64E-20 | 5.15E-19 | 12.39 | – |
| Fe XXI | 13.1272 | 80 \rightarrow 11 | 5.67E-19 | 1.33E-19 | 4.93E-19 | 12.70 | – |
| Ni XXII | 13.1275 | 40 \rightarrow 10 | 4.53E-19 | 2.85E-20 | 4.53E-19 | 14.32 | 13.09 |
| Fe XX | 13.1370 | 58 \rightarrow 3 | 1.19E-17 | 1.19E-17 | 4.55E-18 | 13.63 | – |
| Fe XX | 13.1370 | 51 \rightarrow 2 | 4.19E-17 | 4.19E-17 | 2.27E-17 | 13.68 | – |
| Fe XXI | 13.1384 | 77 \rightarrow 11 | 3.68E-19 | 2.30E-20 | 3.28E-19 | 12.61 | – |
| Fe XX | 13.1454 | 145 \rightarrow 8 | 7.85E-19 | 1.35E-19 | 7.85E-19 | 14.23 | – |
| Fe XX | 13.1521 | 187 \rightarrow 10 | 3.46E-18 | 1.76E-19 | 3.46E-18 | 14.31 | 13.12 |
| Fe XX | 13.1530 | 56 \rightarrow 3 | 4.14E-17 | 4.14E-17 | 1.72E-17 | 13.65 | – |
| Fe XX | 13.1583 | 208 \rightarrow 12 | 3.70E-18 | 1.94E-18 | 3.70E-18 | 13.82 | – |
| Fe XXI | 13.1599 | 80 \rightarrow 12 | 2.92E-18 | 6.82E-19 | 2.53E-18 | 12.70 | – |
| Fe XXI | 13.1649 | 109 \rightarrow 13 | 3.45E-19 | 1.25E-20 | 3.14E-19 | 12.53 | – |
| Fe XXI | 13.1671 | 22 \rightarrow 2 | 7.05E-18 | 7.05E-18 | 2.70E-18 | 12.81 | – |
| Fe XXI | 13.1678 | 34 \rightarrow 6 | 7.50E-18 | 7.50E-18 | 2.35E-18 | 12.71 | – |
| Fe XXI | 13.1736 | 33 \rightarrow 6 | 1.51E-18 | 6.19E-20 | 1.51E-18 | 14.22 | 13.08 |
| Fe XX | 13.1784 | 186 \rightarrow 10 | 9.38E-18 | 3.94E-18 | 9.38E-18 | 14.23 | – |
| Fe XX | 13.1790 | 70 \rightarrow 5 | 5.05E-18 | 2.13E-19 | 5.05E-18 | 13.93 | 12.80 |
| Fe XVIII | 13.1839 | 80 \rightarrow 1 | 7.38E-19 | 3.05E-19 | 7.38E-19 | 13.51 | – |
| Fe XX | 13.1876 | 185 \rightarrow 9 | 7.12E-18 | 7.30E-19 | 7.12E-18 | 13.91 | – |
| Fe XX | 13.1882 | 64 \rightarrow 4 | 3.64E-18 | 3.64E-18 | 1.75E-18 | 13.55 | – |
| Fe XX | 13.1887 | 69 \rightarrow 5 | 1.19E-18 | 8.02E-20 | 1.19E-18 | 13.58 | – |
| Fe XX | 13.1913 | 206 \rightarrow 12 | 1.22E-18 | 6.84E-20 | 1.22E-18 | 14.05 | 12.59 |
| Fe XX | 13.1958 | 62 \rightarrow 4 | 2.66E-17 | 5.48E-18 | 2.66E-17 | 13.89 | – |
| Fe XXII | 13.1966 | 23 \rightarrow 10 | 7.89E-19 | 7.89E-19 | 3.11E-19 | 13.57 | – |
| Fe XIX | 13.1995 | 198 \rightarrow 7 | 2.10E-18 | 1.19E-19 | 2.10E-18 | 14.35 | 8.96 |
| Fe XX | 13.2032 | 48 \rightarrow 2 | 4.45E-18 | 4.45E-18 | 1.93E-18 | 13.64 | – |
| Fe XX | 13.2040 | 205 \rightarrow 12 | 2.09E-18 | 1.40E-19 | 2.09E-18 | 13.96 | 12.59 |
| Fe XXI | 13.2057 | 101 \rightarrow 13 | 4.56E-18 | 3.67E-20 | 4.56E-18 | 13.78 | 12.31 |
| Fe XX | 13.2135 | 199 \rightarrow 11 | 2.71E-18 | 2.71E-18 | 1.55E-18 | 13.40 | – |
| Fe XXII | 13.2170 | 18 \rightarrow 7 | 1.26E-17 | 5.84E-18 | 1.26E-17 | 13.57 | – |
| Fe XX | 13.2190 | 183 \rightarrow 9 | 5.52E-19 | 5.68E-20 | 5.52E-19 | 13.63 | – |
| Fe XX | 13.2217 | 45 \rightarrow 2 | 5.28E-18 | 5.28E-18 | 3.00E-18 | 13.62 | – |
| Fe XX | 13.2240 | 52 \rightarrow 3 | 7.61E-18 | 5.35E-18 | 7.61E-18 | 12.97 | – |
| Fe XX | 13.2241 | 51 \rightarrow 3 | 7.68E-18 | 7.68E-18 | 4.15E-18 | 13.68 | – |
| Fe XIX | 13.2262 | 89 \rightarrow 1 | 4.31E-19 | 1.75E-20 | 4.31E-19 | 13.89 | – |
| Fe XXI | 13.2358 | 106 \rightarrow 14 | 8.47E-19 | 3.02E-20 | 8.14E-19 | 12.72 | – |
| Fe XXII | 13.2360 | 17 \rightarrow 6 | 1.68E-17 | 1.68E-17 | 8.84E-18 | 13.57 | – |
| Fe XXI | 13.2408 | 24 \rightarrow 4 | 9.29E-18 | 1.45E-18 | 9.29E-18 | 14.03 | 12.56 |
| Fe XXI | 13.2426 | 75 \rightarrow 12 | 9.12E-19 | 1.35E-20 | 9.12E-19 | 13.79 | – |
| Fe XXI | 13.2431 | 97 \rightarrow 13 | 8.05E-19 | 7.02E-20 | 7.23E-19 | 12.72 | – |
| Fe XX | 13.2441 | 197 \rightarrow 11 | 2.31E-18 | 2.31E-18 | 1.03E-18 | 13.63 | – |
| Fe XXI | 13.2487 | 22 \rightarrow 3 | 2.23E-17 | 2.23E-17 | 8.54E-18 | 12.81 | – |
| Fe XX | 13.2571 | 180 \rightarrow 10 | 7.69E-19 | 4.69E-20 | 7.69E-19 | 14.05 | 12.59 |
| Fe XX | 13.2588 | 195 \rightarrow 11 | 1.81E-18 | 1.81E-18 | 9.03E-19 | 13.55 | – |
| Fe XXI | 13.2591 | 96 \rightarrow 13 | 4.93E-19 | 8.82E-20 | 4.69E-19 | 12.34 | – |
| Fe XIX | 13.2714 | 92 \rightarrow 3 | 6.06E-19 | 1.12E-20 | 6.06E-19 | 14.39 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 13.2740 | 60 \rightarrow 4 | 1.35E-17 | 1.35E-17 | 5.36E-18 | 13.61 | – |
| Fe XX | 13.2740 | 59 \rightarrow 4 | 1.93E-17 | 1.93E-17 | 1.15E-17 | 13.40 | – |
| Fe XX | 13.2746 | 48 \rightarrow 3 | 1.01E-18 | 1.01E-18 | 4.40E-19 | 13.64 | – |
| Fe XXI | 13.2837 | 32 \rightarrow 6 | 9.66E-19 | 5.59E-20 | 9.30E-19 | 12.40 | – |
| Fe XXI | 13.2850 | 23 \rightarrow 4 | 3.06E-18 | 2.41E-19 | 3.06E-18 | 12.64 | – |
| Fe XXI | 13.2898 | 31 \rightarrow 6 | 6.53E-19 | 5.24E-20 | 6.20E-19 | 12.71 | – |
| Ni XXI | 13.2903 | 110 \rightarrow 9 | 5.93E-19 | 1.62E-19 | 5.93E-19 | 14.15 | – |
| Fe XIX | 13.2929 | 190 \rightarrow 6 | 1.74E-18 | 1.74E-18 | 1.17E-18 | 13.29 | – |
| Fe XX | 13.2932 | 45 \rightarrow 3 | 6.59E-18 | 6.59E-18 | 3.75E-18 | 13.62 | – |
| Fe XX | 13.3017 | 116 \rightarrow 6 | 7.63E-18 | 7.63E-18 | 2.90E-18 | 13.63 | – |
| Fe XIX | 13.3050 | 85 \rightarrow 1 | 1.45E-18 | 4.55E-19 | 1.45E-18 | 13.38 | – |
| Fe XX | 13.3055 | 63 \rightarrow 5 | 7.36E-19 | 2.21E-19 | 7.36E-19 | 13.47 | – |
| Fe XX | 13.3089 | 42 \rightarrow 2 | 1.56E-17 | 1.56E-17 | 7.17E-18 | 13.65 | – |
| Fe XX | 13.3091 | 62 \rightarrow 5 | 3.28E-18 | 6.76E-19 | 3.28E-18 | 13.89 | – |
| Fe XX | 13.3101 | 199 \rightarrow 12 | 1.02E-18 | 1.02E-18 | 5.86E-19 | 13.40 | – |
| Fe XX | 13.3110 | 210 \rightarrow 13 | 1.56E-18 | 9.07E-20 | 1.56E-18 | 14.32 | 13.29 |
| Fe XXII | 13.3144 | 18 \rightarrow 8 | 1.28E-18 | 5.92E-19 | 1.28E-18 | 13.57 | – |
| Fe XXI | 13.3157 | 89 \rightarrow 13 | 1.08E-18 | 3.65E-20 | 9.74E-19 | 12.59 | – |
| Fe XX | 13.3158 | 193 \rightarrow 11 | 3.69E-18 | 1.58E-18 | 3.69E-18 | 14.17 | – |
| Fe XX | 13.3167 | 169 \rightarrow 9 | 7.42E-19 | 2.90E-19 | 7.42E-19 | 13.75 | – |
| Fe XIX | 13.3191 | 189 \rightarrow 6 | 6.40E-18 | 6.40E-18 | 4.50E-18 | 13.09 | – |
| Fe XXI | 13.3280 | 29 \rightarrow 6 | 1.13E-18 | 1.34E-19 | 1.07E-18 | 12.74 | – |
| Fe XX | 13.3283 | 168 \rightarrow 9 | 3.47E-18 | 5.07E-19 | 3.47E-18 | 13.91 | 12.61 |
| Fe XX | 13.3305 | 207 \rightarrow 13 | 9.18E-19 | 2.29E-19 | 9.18E-19 | 13.87 | – |
| Fe XXI | 13.3341 | 65 \rightarrow 11 | 5.77E-19 | 8.38E-20 | 5.65E-19 | 12.39 | – |
| Fe XIX | 13.3423 | 194 \rightarrow 7 | 1.11E-18 | 1.11E-18 | 6.64E-19 | 13.32 | – |
| Fe XIX | 13.3431 | 81 \rightarrow 1 | 6.35E-19 | 2.51E-20 | 4.93E-19 | 8.84 | – |
| Fe XX | 13.3470 | 39 \rightarrow 2 | 1.27E-17 | 1.27E-17 | 7.06E-18 | 13.67 | – |
| Fe XXI | 13.3481 | 64 \rightarrow 11 | 4.86E-19 | 3.67E-20 | 4.79E-19 | 12.75 | – |
| Fe XX | 13.3517 | 165 \rightarrow 9 | 2.86E-18 | 6.15E-19 | 2.86E-18 | 13.49 | – |
| Fe XXI | 13.3542 | 52 \rightarrow 7 | 7.42E-19 | 1.22E-20 | 7.13E-19 | 12.38 | – |
| Fe XX | 13.3569 | 168 \rightarrow 10 | 5.24E-18 | 7.65E-19 | 5.24E-18 | 13.91 | 12.61 |
| Fe XX | 13.3617 | 167 \rightarrow 10 | 9.59E-18 | 1.15E-19 | 9.59E-18 | 13.92 | 12.59 |
| Fe XVIII | 13.3626 | 80 \rightarrow 2 | 2.12E-18 | 8.76E-19 | 2.12E-18 | 13.51 | – |
| Fe XXI | 13.3677 | 65 \rightarrow 12 | 1.90E-18 | 2.76E-19 | 1.86E-18 | 12.39 | – |
| Fe XIX | 13.3702 | 193 \rightarrow 7 | 1.65E-18 | 1.65E-18 | 1.12E-18 | 13.16 | – |
| Fe XIX | 13.3705 | 187 \rightarrow 6 | 1.51E-18 | 4.87E-20 | 1.51E-18 | 13.39 | 8.96 |
| Fe XX | 13.3720 | 189 \rightarrow 11 | 2.05E-18 | 1.05E-18 | 2.05E-18 | 13.97 | – |
| Fe XIX | 13.3750 | 79 \rightarrow 1 | 4.13E-18 | 1.23E-18 | 4.13E-18 | 13.44 | – |
| Fe XIX | 13.3757 | 90 \rightarrow 3 | 1.16E-17 | 4.48E-19 | 1.16E-17 | 13.64 | – |
| Fe XX | 13.3766 | 60 \rightarrow 5 | 1.70E-18 | 1.70E-18 | 6.74E-19 | 13.61 | – |
| Fe XX | 13.3804 | 165 \rightarrow 10 | 1.11E-18 | 2.39E-19 | 1.11E-18 | 13.49 | – |
| Fe XX | 13.3814 | 42 \rightarrow 3 | 2.69E-18 | 2.69E-18 | 1.24E-18 | 13.65 | – |
| Ni XX | 13.3820 | 17 \rightarrow 2 | 6.85E-19 | 1.88E-19 | 6.85E-19 | 13.88 | – |
| Fe XX | 13.3850 | 111 \rightarrow 6 | 6.57E-17 | 6.57E-17 | 2.44E-17 | 13.63 | – |
| Fe XX | 13.3899 | 59 \rightarrow 5 | 5.09E-18 | 5.09E-18 | 3.04E-18 | 13.40 | – |
| Fe XVIII | 13.3948 | 70 \rightarrow 1 | 8.83E-18 | 8.83E-18 | 6.46E-18 | 13.51 | – |
| Fe XIX | 13.4026 | 190 \rightarrow 7 | 2.58E-18 | 2.58E-18 | 1.72E-18 | 13.29 | – |
| Fe XXI | 13.4036 | 83 \rightarrow 13 | 4.23E-18 | 4.23E-18 | 5.61E-19 | 12.71 | – |
| Fe XIX | 13.4043 | 78 \rightarrow 1 | 6.22E-19 | 1.57E-19 | 6.22E-19 | 13.82 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XXI | 13.4054 | 52 \rightarrow 9 | 3.07E-17 | 5.04E-19 | 2.95E-17 | 12.38 | – |
| Fe XX | 13.4055 | 161 \rightarrow 9 | 1.40E-18 | 3.35E-19 | 1.40E-18 | 13.46 | – |
| Fe XX | 13.4056 | 109 \rightarrow 6 | 2.26E-18 | 2.26E-18 | 8.42E-19 | 13.63 | – |
| Fe XVIII | 13.4063 | 79 \rightarrow 2 | 3.70E-18 | 1.59E-19 | 3.70E-18 | 13.51 | – |
| Fe XX | 13.4091 | 107 \rightarrow 6 | 1.92E-17 | 1.92E-17 | 7.10E-18 | 13.63 | – |
| Fe XX | 13.4181 | 116 \rightarrow 7 | 1.20E-17 | 1.20E-17 | 4.59E-18 | 13.63 | – |
| Fe XX | 13.4182 | 47 \rightarrow 4 | 2.69E-18 | 2.69E-18 | 1.83E-18 | 13.46 | – |
| Fe XIX | 13.4223 | 92 \rightarrow 4 | 9.50E-19 | 1.43E-20 | 9.50E-19 | 14.51 | 13.37 |
| Fe XIX | 13.4276 | 86 \rightarrow 2 | 3.56E-18 | 7.15E-20 | 3.56E-18 | 13.32 | 8.96 |
| Fe XIX | 13.4301 | 188 \rightarrow 7 | 3.53E-18 | 1.56E-19 | 3.53E-18 | 8.95 | – |
| Fe XXI | 13.4308 | 82 \rightarrow 13 | 1.61E-17 | 1.61E-17 | 2.09E-18 | 12.69 | – |
| Fe XX | 13.4324 | 45 \rightarrow 4 | 4.55E-18 | 4.55E-18 | 2.59E-18 | 13.62 | – |
| Fe XX | 13.4403 | 158 \rightarrow 9 | 8.73E-18 | 2.23E-18 | 8.73E-18 | 13.51 | – |
| Fe XX | 13.4440 | 116 \rightarrow 8 | 8.75E-18 | 8.75E-18 | 3.33E-18 | 13.63 | – |
| Fe XXII | 13.4440 | 17 \rightarrow 8 | 1.32E-17 | 1.32E-17 | 6.99E-18 | 13.57 | – |
| Fe XXI | 13.4500 | 80 \rightarrow 13 | 1.48E-18 | 3.46E-19 | 1.29E-18 | 12.70 | – |
| Fe XVIII | 13.4510 | 67 \rightarrow 1 | 4.86E-18 | 4.86E-18 | 3.55E-18 | 13.51 | – |
| Fe XIX | 13.4514 | 86 \rightarrow 3 | 2.49E-17 | 4.99E-19 | 2.49E-17 | 13.32 | 8.96 |
| Fe XXI | 13.4536 | 45 \rightarrow 7 | 1.96E-18 | 2.22E-20 | 1.70E-18 | 12.69 | – |
| Fe XXI | 13.4538 | 45 \rightarrow 8 | 3.16E-17 | 3.57E-19 | 2.74E-17 | 12.69 | – |
| Fe XX | 13.4573 | 254 \rightarrow 14 | 8.15E-19 | 8.15E-19 | 3.91E-19 | 13.65 | – |
| Fe XXI | 13.4582 | 24 \rightarrow 5 | 2.81E-18 | 4.39E-19 | 2.81E-18 | 14.03 | 12.56 |
| Fe XIX | 13.4596 | 85 \rightarrow 3 | 9.34E-18 | 2.93E-18 | 9.34E-18 | 13.38 | – |
| Fe XIX | 13.4620 | 74 \rightarrow 1 | 5.67E-17 | 5.67E-17 | 3.21E-17 | 13.36 | – |
| Fe XXI | 13.4672 | 107 \rightarrow 15 | 2.89E-18 | 1.43E-18 | 2.89E-18 | 16.15 | Bad Fit |
| Fe XX | 13.4693 | 158 \rightarrow 10 | 1.85E-18 | 4.71E-19 | 1.85E-18 | 13.51 | – |
| Fe XXI | 13.4728 | 106 \rightarrow 15 | 6.09E-19 | 2.17E-20 | 5.86E-19 | 12.72 | – |
| Fe XIX | 13.4746 | 81 \rightarrow 2 | 3.92E-17 | 1.55E-18 | 3.05E-17 | 8.84 | – |
| Fe XXI | 13.4776 | 22 \rightarrow 4 | 1.82E-18 | 1.82E-18 | 6.97E-19 | 12.81 | – |
| Fe XX | 13.4780 | 51 \rightarrow 5 | 1.74E-18 | 1.74E-18 | 9.42E-19 | 13.68 | – |
| Fe XIX | 13.4851 | 84 \rightarrow 3 | 8.63E-18 | 1.07E-19 | 8.59E-18 | 13.32 | – |
| Fe XIX | 13.4876 | 186 \rightarrow 7 | 1.14E-18 | 3.74E-19 | 1.14E-18 | 13.23 | – |
| Fe XIX | 13.4969 | 73 \rightarrow 1 | 4.15E-18 | 2.84E-18 | 4.15E-18 | 13.96 | – |
| Fe XIX | 13.4970 | 71 \rightarrow 1 | 9.97E-17 | 9.97E-17 | 5.33E-17 | 13.47 | – |
| Fe XXI | 13.5035 | 101 \rightarrow 15 | 1.07E-18 | 1.29E-20 | 1.07E-18 | 12.77 | – |
| Fe XXI | 13.5070 | 42 \rightarrow 7 | 1.16E-16 | 1.16E-16 | 1.34E-17 | 12.70 | – |
| Fe XIX | 13.5146 | 72 \rightarrow 1 | 2.56E-18 | 9.41E-19 | 2.53E-18 | 13.20 | – |
| Fe XX | 13.5151 | 249 \rightarrow 14 | 9.85E-19 | 9.85E-19 | 4.34E-19 | 13.63 | – |
| Fe XX | 13.5167 | 110 \rightarrow 7 | 2.61E-18 | 2.61E-18 | 9.76E-19 | 13.63 | – |
| Fe XIX | 13.5180 | 68 \rightarrow 1 | 2.20E-16 | 2.20E-16 | 1.07E-16 | 13.44 | – |
| Fe XX | 13.5199 | 23 \rightarrow 1 | 5.63E-19 | 4.96E-20 | 5.63E-19 | 14.03 | 12.72 |
| Fe XIX | 13.5211 | 182 \rightarrow 6 | 7.43E-18 | 2.38E-18 | 7.43E-18 | 13.96 | – |
| Fe XIX | 13.5289 | 90 \rightarrow 4 | 2.69E-17 | 1.03E-18 | 2.69E-17 | 13.64 | – |
| Fe XIX | 13.5312 | 79 \rightarrow 3 | 2.35E-17 | 6.98E-18 | 2.35E-17 | 13.44 | – |
| Fe XIX | 13.5313 | 181 \rightarrow 6 | 1.89E-18 | 1.65E-19 | 1.89E-18 | 13.90 | – |
| Fe XIX | 13.5323 | 89 \rightarrow 4 | 7.35E-17 | 2.99E-18 | 7.35E-17 | 13.89 | – |
| Fe XXII | 13.5347 | 18 \rightarrow 9 | 8.69E-18 | 4.02E-18 | 8.69E-18 | 13.57 | – |
| Fe XX | 13.5350 | 109 \rightarrow 7 | 1.66E-17 | 1.66E-17 | 6.18E-18 | 13.63 | – |
| Fe XX | 13.5350 | 107 \rightarrow 7 | 2.91E-17 | 2.91E-17 | 1.08E-17 | 13.63 | – |
| Fe XXI | 13.5363 | 75 \rightarrow 13 | 2.06E-18 | 1.18E-20 | 2.06E-18 | 13.76 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|---------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 13.5498 | 45 \rightarrow 5 | 4.63E-18 | 4.63E-18 | 2.63E-18 | 13.62 | – |
| Ne IX | 13.5503 | 6 \rightarrow 1 | 6.49E-19 | 1.56E-19 | 6.38E-19 | 12.72 | – |
| Fe XIX | 13.5510 | 65 \rightarrow 1 | 1.75E-17 | 1.42E-17 | 1.67E-17 | 13.21 | – |
| Ne IX | 13.5531 | 5 \rightarrow 1 | 1.70E-17 | 3.83E-18 | 1.70E-17 | 12.74 | – |
| Fe XX | 13.5557 | 145 \rightarrow 10 | 1.29E-18 | 2.22E-19 | 1.29E-18 | 14.23 | – |
| Fe XX | 13.5583 | 110 \rightarrow 8 | 1.28E-17 | 1.28E-17 | 4.77E-18 | 13.63 | – |
| Fe XX | 13.5654 | 109 \rightarrow 8 | 1.25E-17 | 1.25E-17 | 4.67E-18 | 13.63 | – |
| Fe XXII | 13.5714 | 18 \rightarrow 10 | 4.46E-18 | 2.06E-18 | 4.46E-18 | 13.57 | – |
| Fe XIX | 13.5727 | 77 \rightarrow 3 | 4.18E-18 | 5.00E-19 | 4.18E-18 | 13.51 | – |
| Fe XXI | 13.5740 | 39 \rightarrow 7 | 1.97E-17 | 1.97E-17 | 4.85E-18 | 12.61 | – |
| Fe XXI | 13.5851 | 41 \rightarrow 9 | 3.27E-19 | 1.33E-20 | 3.14E-19 | 12.40 | – |
| Fe XX | 13.5876 | 94 \rightarrow 6 | 2.29E-18 | 3.86E-20 | 2.29E-18 | 13.98 | 12.55 |
| Fe XXII | 13.5928 | 17 \rightarrow 9 | 1.21E-18 | 1.21E-18 | 6.36E-19 | 13.57 | – |
| Fe XXI | 13.5992 | 75 \rightarrow 14 | 2.32E-17 | 3.09E-20 | 2.32E-17 | 14.08 | 12.58 |
| Fe XIX | 13.6064 | 86 \rightarrow 4 | 4.89E-19 | 1.02E-20 | 4.88E-19 | 13.32 | 8.97 |
| Fe XX | 13.6124 | 92 \rightarrow 6 | 8.05E-18 | 8.05E-18 | 2.98E-18 | 13.63 | – |
| Fe XIX | 13.6148 | 85 \rightarrow 4 | 1.24E-18 | 3.89E-19 | 1.24E-18 | 13.38 | – |
| Fe XX | 13.6150 | 91 \rightarrow 6 | 6.33E-18 | 6.33E-18 | 2.35E-18 | 13.63 | – |
| Fe XX | 13.6169 | 90 \rightarrow 6 | 2.77E-18 | 2.77E-18 | 1.03E-18 | 13.63 | – |
| Fe XIX | 13.6209 | 170 \rightarrow 6 | 1.09E-18 | 7.38E-19 | 1.09E-18 | 13.92 | – |
| Fe XXI | 13.6227 | 52 \rightarrow 11 | 6.87E-18 | 1.13E-19 | 6.61E-18 | 12.38 | – |
| Fe XX | 13.6273 | 88 \rightarrow 6 | 1.05E-18 | 6.96E-19 | 1.05E-18 | 13.70 | – |
| Fe XIX | 13.6333 | 74 \rightarrow 3 | 1.37E-18 | 1.37E-18 | 7.76E-19 | 13.36 | – |
| Fe XIX | 13.6426 | 61 \rightarrow 1 | 3.68E-18 | 2.01E-18 | 3.00E-18 | 8.77 | – |
| Fe XIX | 13.6450 | 57 \rightarrow 1 | 3.48E-17 | 3.48E-17 | 1.96E-17 | 13.40 | – |
| Fe XIX | 13.6451 | 181 \rightarrow 7 | 1.36E-18 | 1.19E-19 | 1.36E-18 | 13.90 | – |
| Fe XIX | 13.6491 | 180 \rightarrow 7 | 7.13E-19 | 1.83E-20 | 7.13E-19 | 14.33 | 13.46 |
| Fe XIX | 13.6496 | 72 \rightarrow 2 | 2.34E-18 | 8.62E-19 | 2.32E-18 | 13.20 | – |
| Fe XIX | 13.6547 | 81 \rightarrow 4 | 1.76E-18 | 6.94E-20 | 1.36E-18 | 8.84 | – |
| Fe XIX | 13.6560 | 73 \rightarrow 3 | 1.87E-18 | 1.28E-18 | 1.87E-18 | 13.96 | – |
| Fe XXI | 13.6578 | 52 \rightarrow 12 | 1.46E-17 | 2.39E-19 | 1.40E-17 | 12.38 | – |
| Fe XIX | 13.6648 | 200 \rightarrow 9 | 1.22E-18 | 1.98E-19 | 1.22E-18 | 13.71 | Bad Fit |
| Fe XIX | 13.6742 | 72 \rightarrow 3 | 1.73E-17 | 6.37E-18 | 1.71E-17 | 13.20 | – |
| Fe XIX | 13.6752 | 71 \rightarrow 3 | 1.31E-17 | 1.31E-17 | 7.02E-18 | 13.47 | – |
| Fe XIX | 13.6821 | 70 \rightarrow 3 | 5.05E-18 | 7.81E-19 | 5.01E-18 | 13.32 | – |
| Fe XIX | 13.6881 | 79 \rightarrow 4 | 1.54E-17 | 4.57E-18 | 1.54E-17 | 13.44 | – |
| Fe XIX | 13.6917 | 199 \rightarrow 9 | 5.57E-19 | 1.14E-19 | 5.57E-19 | 13.47 | – |
| Ni XX | 13.6953 | 10 \rightarrow 2 | 2.57E-18 | 1.44E-18 | 2.57E-18 | 13.88 | – |
| Ne IX | 13.6990 | 2 \rightarrow 1 | 1.39E-17 | 1.39E-17 | 5.08E-20 | 12.74 | – |
| Fe XIX | 13.6991 | 92 \rightarrow 5 | 1.87E-17 | 2.80E-19 | 1.87E-17 | 14.51 | 13.37 |
| Fe XXI | 13.7067 | 45 \rightarrow 10 | 6.43E-18 | 7.25E-20 | 5.57E-18 | 12.69 | – |
| Fe XX | 13.7090 | 94 \rightarrow 7 | 7.37E-18 | 1.24E-19 | 7.37E-18 | 13.98 | 12.55 |
| Fe XIX | 13.7188 | 78 \rightarrow 4 | 1.16E-17 | 2.93E-18 | 1.16E-17 | 13.82 | – |
| Fe XIX | 13.7259 | 174 \rightarrow 7 | 1.13E-18 | 1.13E-18 | 7.61E-19 | 13.23 | – |
| Fe XXI | 13.7261 | 45 \rightarrow 11 | 5.70E-18 | 6.43E-20 | 4.94E-18 | 12.69 | – |
| Fe XXI | 13.7288 | 33 \rightarrow 8 | 5.83E-19 | 2.38E-20 | 5.83E-19 | 14.22 | 13.08 |
| Fe XIX | 13.7305 | 180 \rightarrow 8 | 4.10E-19 | 1.05E-20 | 4.10E-19 | 14.33 | 13.46 |
| Fe XIX | 13.7306 | 77 \rightarrow 4 | 5.81E-18 | 6.96E-19 | 5.81E-18 | 13.51 | – |
| Fe XIX | 13.7315 | 65 \rightarrow 3 | 3.45E-17 | 2.80E-17 | 3.29E-17 | 13.21 | – |
| Fe XX | 13.7367 | 84 \rightarrow 6 | 2.00E-18 | 1.03E-20 | 2.00E-18 | 13.27 | Bad Fit |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|--------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 13.7388 | 90 \rightarrow 7 | 1.14E-18 | 1.14E-18 | 4.24E-19 | 13.63 | – |
| Fe XXI | 13.7390 | 82 \rightarrow 15 | 5.90E-19 | 5.90E-19 | 7.67E-20 | 12.69 | – |
| Fe XX | 13.7401 | 89 \rightarrow 7 | 1.93E-18 | 1.93E-18 | 7.18E-19 | 13.63 | – |
| Fe XIX | 13.7590 | 61 \rightarrow 2 | 9.29E-18 | 5.06E-18 | 7.56E-18 | 8.77 | – |
| Fe XIX | 13.7590 | 74 \rightarrow 4 | 1.64E-17 | 1.64E-17 | 9.32E-18 | 13.36 | – |
| Fe XX | 13.7595 | 123 \rightarrow 9 | 4.28E-18 | 1.27E-19 | 4.28E-18 | 14.35 | 13.46 |
| Fe XXI | 13.7618 | 45 \rightarrow 12 | 6.86E-19 | 1.38E-20 | 5.94E-19 | 12.71 | – |
| Fe XX | 13.7640 | 24 \rightarrow 2 | 2.22E-18 | 3.42E-19 | 2.22E-18 | 13.89 | – |
| Fe XX | 13.7670 | 19 \rightarrow 1 | 5.56E-17 | 5.56E-17 | 3.70E-17 | 13.78 | – |
| Fe XX | 13.7705 | 83 \rightarrow 6 | 1.32E-18 | 2.95E-19 | 1.32E-18 | 13.53 | – |
| Fe XIX | 13.7717 | 179 \rightarrow 8 | 6.82E-19 | 2.50E-19 | 6.82E-19 | 13.42 | – |
| Fe XX | 13.7718 | 122 \rightarrow 9 | 1.31E-18 | 4.02E-20 | 1.31E-18 | 13.96 | 12.54 |
| Fe XX | 13.7723 | 32 \rightarrow 4 | 2.60E-18 | 1.95E-19 | 2.60E-18 | 14.09 | – |
| Fe XXI | 13.7826 | 33 \rightarrow 9 | 1.48E-17 | 6.05E-19 | 1.48E-17 | 14.22 | 13.08 |
| Fe XX | 13.7838 | 23 \rightarrow 2 | 6.23E-18 | 5.49E-19 | 6.23E-18 | 14.03 | 12.72 |
| Fe XX | 13.7924 | 88 \rightarrow 8 | 2.86E-18 | 1.89E-18 | 2.86E-18 | 13.70 | – |
| Fe XIX | 13.7950 | 73 \rightarrow 4 | 1.45E-17 | 9.89E-18 | 1.45E-17 | 13.96 | – |
| Fe XIX | 13.7950 | 53 \rightarrow 1 | 8.73E-17 | 8.73E-17 | 4.37E-17 | 13.47 | – |
| Fe XXI | 13.7965 | 42 \rightarrow 11 | 1.24E-17 | 1.24E-17 | 1.44E-18 | 12.70 | – |
| Fe XX | 13.8023 | 122 \rightarrow 10 | 5.77E-18 | 1.77E-19 | 5.77E-18 | 13.96 | 12.54 |
| Fe XIX | 13.8116 | 52 \rightarrow 1 | 7.68E-19 | 2.57E-19 | 6.91E-19 | 8.91 | – |
| Fe XX | 13.8116 | 145 \rightarrow 11 | 1.93E-18 | 3.33E-19 | 1.93E-18 | 14.23 | – |
| Fe XX | 13.8261 | 158 \rightarrow 12 | 5.67E-19 | 1.45E-19 | 5.67E-19 | 13.51 | – |
| Fe XIX | 13.8344 | 72 \rightarrow 4 | 1.38E-18 | 5.07E-19 | 1.36E-18 | 13.20 | – |
| Fe XIX | 13.8390 | 50 \rightarrow 1 | 1.52E-17 | 1.52E-17 | 1.05E-17 | 13.71 | – |
| Fe XX | 13.8415 | 24 \rightarrow 3 | 8.60E-19 | 1.32E-19 | 8.60E-19 | 13.89 | – |
| Fe XX | 13.8430 | 17 \rightarrow 1 | 2.62E-17 | 2.62E-17 | 1.60E-17 | 13.70 | – |
| Fe XIX | 13.8457 | 68 \rightarrow 4 | 4.21E-18 | 4.21E-18 | 2.04E-18 | 13.44 | – |
| Ni XX | 13.8476 | 65 \rightarrow 3 | 5.90E-19 | 1.36E-20 | 5.90E-19 | 13.88 | – |
| Fe XXI | 13.8484 | 32 \rightarrow 8 | 2.94E-18 | 1.70E-19 | 2.83E-18 | 12.40 | – |
| Fe XIX | 13.8486 | 196 \rightarrow 9 | 2.19E-18 | 7.83E-19 | 2.18E-18 | 13.24 | – |
| Fe XXI | 13.8495 | 75 \rightarrow 15 | 4.34E-18 | 1.19E-20 | 4.34E-18 | 13.74 | Bad Fit |
| Fe XXI | 13.8551 | 31 \rightarrow 8 | 2.05E-18 | 1.65E-19 | 1.95E-18 | 12.71 | – |
| Fe XX | 13.8599 | 82 \rightarrow 6 | 2.84E-18 | 5.81E-19 | 2.84E-18 | 13.18 | – |
| Fe XX | 13.8608 | 84 \rightarrow 7 | 3.91E-18 | 1.79E-20 | 3.91E-18 | 13.95 | 12.53 |
| Fe XX | 13.8616 | 23 \rightarrow 3 | 1.57E-17 | 1.38E-18 | 1.57E-17 | 14.03 | 12.72 |
| Fe XXI | 13.8745 | 30 \rightarrow 8 | 2.05E-18 | 2.05E-19 | 2.05E-18 | 13.74 | 12.39 |
| Fe XX | 13.8895 | 116 \rightarrow 10 | 3.15E-18 | 3.15E-18 | 1.20E-18 | 13.63 | – |
| Fe XIX | 13.8909 | 86 \rightarrow 5 | 1.52E-18 | 3.04E-20 | 1.51E-18 | 13.32 | 8.96 |
| Fe XX | 13.8958 | 32 \rightarrow 5 | 2.65E-18 | 2.00E-19 | 2.65E-18 | 14.09 | – |
| Fe XXI | 13.8964 | 29 \rightarrow 7 | 3.56E-18 | 4.22E-19 | 3.36E-18 | 12.74 | – |
| Fe XXI | 13.8966 | 29 \rightarrow 8 | 9.35E-18 | 1.11E-18 | 8.84E-18 | 12.74 | – |
| Fe XXI | 13.8974 | 39 \rightarrow 11 | 2.33E-18 | 2.33E-18 | 5.73E-19 | 12.61 | – |
| Fe XXI | 13.9032 | 32 \rightarrow 9 | 2.51E-17 | 1.45E-18 | 2.41E-17 | 12.40 | – |
| Ni XXI | 13.9052 | 37 \rightarrow 6 | 3.19E-18 | 3.19E-18 | 1.57E-18 | 13.66 | – |
| Fe XX | 13.9075 | 78 \rightarrow 6 | 1.42E-18 | 3.09E-19 | 1.42E-18 | 13.36 | – |
| Fe XX | 13.9171 | 145 \rightarrow 12 | 2.22E-18 | 3.82E-19 | 2.22E-18 | 14.23 | – |
| Fe XXI | 13.9295 | 30 \rightarrow 9 | 8.30E-18 | 8.31E-19 | 8.30E-18 | 13.74 | 12.39 |
| Fe XX | 13.9391 | 83 \rightarrow 8 | 6.39E-19 | 1.43E-19 | 6.39E-19 | 13.53 | – |
| Fe XIX | 13.9525 | 52 \rightarrow 2 | 1.09E-17 | 3.67E-18 | 9.84E-18 | 8.91 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XIX | 13.9546 | 45 \rightarrow 1 | 3.97E-18 | 3.85E-18 | 2.68E-18 | 13.82 | – |
| Fe XIX | 13.9549 | 44 \rightarrow 1 | 1.34E-17 | 1.34E-17 | 7.84E-18 | 13.57 | – |
| Fe XIX | 13.9551 | 43 \rightarrow 1 | 9.41E-18 | 9.41E-18 | 5.84E-18 | 13.62 | – |
| Fe XIX | 13.9571 | 152 \rightarrow 6 | 8.91E-18 | 5.26E-18 | 8.67E-18 | 13.23 | – |
| Fe XX | 13.9620 | 16 \rightarrow 1 | 2.35E-17 | 2.35E-17 | 1.27E-17 | 13.64 | – |
| Fe XIX | 13.9685 | 61 \rightarrow 4 | 3.71E-18 | 2.02E-18 | 3.02E-18 | 8.77 | – |
| Fe XXI | 13.9705 | 52 \rightarrow 13 | 1.28E-18 | 2.11E-20 | 1.23E-18 | 12.38 | – |
| Fe XIX | 13.9783 | 52 \rightarrow 3 | 5.00E-18 | 1.68E-18 | 4.50E-18 | 8.91 | – |
| Fe XX | 13.9822 | 20 \rightarrow 2 | 2.44E-18 | 1.01E-18 | 2.44E-18 | 13.45 | – |
| Fe XIX | 13.9852 | 149 \rightarrow 6 | 5.88E-18 | 1.54E-18 | 5.72E-18 | 13.15 | 8.91 |
| Fe XIX | 13.9857 | 57 \rightarrow 4 | 1.22E-18 | 1.22E-18 | 6.87E-19 | 13.40 | – |
| Ni XIX | 13.9929 | 10 \rightarrow 1 | 9.56E-19 | 3.33E-19 | 9.56E-19 | 14.38 | – |
| Fe XXI | 14.0080 | 28 \rightarrow 7 | 9.31E-17 | 9.31E-17 | 1.16E-17 | 12.71 | – |
| Fe XXI | 14.0124 | 33 \rightarrow 11 | 5.22E-19 | 2.13E-20 | 5.22E-19 | 14.22 | 13.08 |
| Fe XIX | 14.0340 | 50 \rightarrow 3 | 1.03E-17 | 1.03E-17 | 7.12E-18 | 13.71 | – |
| Fe XX | 14.0347 | 78 \rightarrow 7 | 5.97E-19 | 1.30E-19 | 5.97E-19 | 13.36 | – |
| Fe XIX | 14.0401 | 154 \rightarrow 7 | 6.05E-18 | 1.29E-19 | 5.66E-18 | 8.95 | – |
| Ni XXI | 14.0448 | 37 \rightarrow 7 | 9.80E-19 | 9.80E-19 | 4.83E-19 | 13.66 | – |
| Fe XXI | 14.0496 | 33 \rightarrow 12 | 7.13E-19 | 2.91E-20 | 7.13E-19 | 14.22 | 13.08 |
| Fe XIX | 14.0501 | 148 \rightarrow 6 | 9.73E-18 | 9.73E-18 | 5.04E-18 | 13.48 | – |
| Fe XIX | 14.0557 | 147 \rightarrow 6 | 3.89E-18 | 3.89E-18 | 1.90E-18 | 13.45 | – |
| Fe XX | 14.0620 | 20 \rightarrow 3 | 1.29E-17 | 5.34E-18 | 1.29E-17 | 13.45 | – |
| Fe XXI | 14.0627 | 26 \rightarrow 8 | 1.36E-17 | 1.03E-17 | 1.16E-17 | 12.62 | – |
| Fe XX | 14.0629 | 100 \rightarrow 9 | 9.65E-19 | 2.05E-19 | 9.65E-19 | 14.27 | – |
| Fe XIX | 14.0636 | 185 \rightarrow 9 | 5.90E-19 | 1.10E-19 | 5.90E-19 | 13.26 | – |
| Fe XIX | 14.0717 | 145 \rightarrow 6 | 1.26E-17 | 1.26E-17 | 7.57E-18 | 13.53 | – |
| Ni XIX | 14.0767 | 7 \rightarrow 1 | 1.17E-18 | 4.34E-19 | 1.17E-18 | 14.38 | – |
| Fe XIX | 14.0850 | 74 \rightarrow 5 | 9.05E-19 | 9.05E-19 | 5.13E-19 | 13.36 | – |
| Fe XIX | 14.0917 | 150 \rightarrow 7 | 9.50E-19 | 1.07E-19 | 9.37E-19 | 13.29 | – |
| Fe XIX | 14.0931 | 143 \rightarrow 6 | 5.27E-18 | 5.21E-18 | 3.24E-18 | 13.69 | – |
| Fe XX | 14.0943 | 97 \rightarrow 9 | 5.02E-18 | 5.85E-20 | 5.02E-18 | 13.92 | – |
| Fe XX | 14.0947 | 100 \rightarrow 10 | 8.19E-18 | 1.74E-18 | 8.19E-18 | 14.27 | – |
| Fe XX | 14.0961 | 146 \rightarrow 13 | 1.17E-18 | 5.61E-20 | 1.17E-18 | 13.88 | – |
| Fe XIX | 14.1128 | 250 \rightarrow 10 | 3.47E-19 | 1.97E-20 | 3.26E-19 | 8.96 | – |
| Fe XX | 14.1199 | 24 \rightarrow 5 | 9.34E-18 | 1.44E-18 | 9.34E-18 | 13.89 | – |
| Fe XXI | 14.1235 | 31 \rightarrow 10 | 1.49E-18 | 1.20E-19 | 1.42E-18 | 12.71 | – |
| Fe XX | 14.1285 | 19 \rightarrow 3 | 1.41E-17 | 1.41E-17 | 9.36E-18 | 13.78 | – |
| Fe XIX | 14.1286 | 72 \rightarrow 5 | 7.93E-19 | 2.91E-19 | 7.84E-19 | 13.20 | – |
| Fe XVIII | 14.1369 | 61 \rightarrow 2 | 4.47E-17 | 1.08E-18 | 4.47E-17 | 13.51 | – |
| Fe XXI | 14.1370 | 32 \rightarrow 11 | 2.81E-18 | 1.62E-19 | 2.70E-18 | 12.40 | – |
| Fe XX | 14.1373 | 17 \rightarrow 2 | 2.51E-18 | 2.51E-18 | 1.54E-18 | 13.70 | – |
| Fe XX | 14.1408 | 23 \rightarrow 5 | 3.45E-18 | 3.04E-19 | 3.45E-18 | 14.03 | 12.72 |
| Fe XIX | 14.1418 | 53 \rightarrow 4 | 8.91E-19 | 8.91E-19 | 4.46E-19 | 13.47 | – |
| Fe XVIII | 14.1419 | 58 \rightarrow 1 | 7.99E-18 | 2.54E-18 | 7.99E-18 | 13.51 | – |
| Fe XXI | 14.1440 | 31 \rightarrow 11 | 3.86E-18 | 3.10E-19 | 3.67E-18 | 12.71 | – |
| Fe XIX | 14.1478 | 133 \rightarrow 6 | 1.75E-18 | 1.75E-18 | 1.15E-18 | 13.63 | – |
| Fe XXI | 14.1534 | 42 \rightarrow 13 | 4.89E-19 | 4.89E-19 | 5.68E-20 | 12.70 | – |
| Fe XVIII | 14.1580 | 57 \rightarrow 1 | 1.42E-17 | 5.76E-18 | 1.42E-17 | 13.51 | – |
| Fe XIX | 14.1585 | 131 \rightarrow 6 | 4.19E-18 | 4.19E-18 | 2.79E-18 | 13.66 | – |
| Fe XX | 14.1630 | 116 \rightarrow 11 | 3.80E-18 | 3.80E-18 | 1.45E-18 | 13.63 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XVIII | 14.1635 | 108 \rightarrow 3 | 3.01E-18 | 1.91E-18 | 3.01E-18 | 13.51 | – |
| Fe XX | 14.1642 | 123 \rightarrow 12 | 9.29E-19 | 2.75E-20 | 9.29E-19 | 14.35 | 13.46 |
| Fe XXI | 14.1666 | 29 \rightarrow 10 | 1.27E-18 | 1.50E-19 | 1.20E-18 | 12.74 | – |
| Fe XIX | 14.1728 | 148 \rightarrow 7 | 4.59E-18 | 4.59E-18 | 2.38E-18 | 13.48 | – |
| Fe XXI | 14.1739 | 25 \rightarrow 7 | 4.03E-18 | 4.03E-18 | 2.25E-18 | 12.93 | – |
| Fe XXI | 14.1749 | 32 \rightarrow 12 | 6.30E-18 | 3.64E-19 | 6.05E-18 | 12.40 | – |
| Fe XX | 14.1772 | 122 \rightarrow 12 | 2.98E-18 | 9.12E-20 | 2.98E-18 | 13.96 | 12.54 |
| Fe XIX | 14.1785 | 150 \rightarrow 8 | 1.95E-18 | 2.19E-19 | 1.92E-18 | 13.29 | – |
| Fe XIX | 14.1785 | 147 \rightarrow 7 | 4.78E-18 | 4.78E-18 | 2.33E-18 | 13.45 | – |
| Fe XXI | 14.1819 | 31 \rightarrow 12 | 2.08E-18 | 1.67E-19 | 1.98E-18 | 12.71 | – |
| Fe XIX | 14.1873 | 146 \rightarrow 7 | 2.52E-18 | 2.52E-18 | 1.32E-18 | 13.42 | – |
| Fe XXI | 14.1873 | 29 \rightarrow 11 | 7.68E-19 | 9.10E-20 | 7.25E-19 | 12.74 | – |
| Fe XIX | 14.1926 | 183 \rightarrow 9 | 6.70E-19 | 2.01E-20 | 6.70E-19 | 13.89 | – |
| Fe XX | 14.1990 | 120 \rightarrow 12 | 1.96E-18 | 8.94E-19 | 1.96E-18 | 13.99 | – |
| Fe XVIII | 14.2007 | 105 \rightarrow 3 | 1.94E-18 | 8.13E-19 | 1.94E-18 | 13.51 | – |
| Fe XX | 14.2015 | 94 \rightarrow 10 | 1.38E-18 | 2.33E-20 | 1.38E-18 | 13.98 | 12.55 |
| Fe XXI | 14.2022 | 30 \rightarrow 12 | 1.72E-17 | 1.72E-18 | 1.72E-17 | 13.74 | 12.39 |
| Fe XVIII | 14.2080 | 56 \rightarrow 1 | 1.58E-16 | 1.58E-16 | 1.15E-16 | 13.51 | – |
| Fe XIX | 14.2097 | 144 \rightarrow 7 | 1.12E-18 | 1.07E-19 | 1.12E-18 | 14.62 | 8.88 |
| Fe XX | 14.2180 | 20 \rightarrow 4 | 4.16E-18 | 1.73E-18 | 4.16E-18 | 13.45 | – |
| Fe XX | 14.2191 | 17 \rightarrow 3 | 2.19E-18 | 2.19E-18 | 1.34E-18 | 13.70 | – |
| Fe XIX | 14.2205 | 181 \rightarrow 9 | 1.04E-18 | 9.05E-20 | 1.04E-18 | 13.90 | – |
| Fe XX | 14.2228 | 57 \rightarrow 6 | 6.16E-18 | 2.80E-18 | 6.16E-18 | 14.43 | – |
| Fe XIX | 14.2250 | 180 \rightarrow 9 | 8.86E-19 | 2.27E-20 | 8.86E-19 | 14.33 | 13.46 |
| Fe XIX | 14.2393 | 136 \rightarrow 7 | 5.49E-19 | 1.55E-19 | 5.22E-19 | 9.09 | – |
| Fe XXI | 14.2596 | 39 \rightarrow 13 | 1.13E-18 | 1.13E-18 | 2.79E-19 | 12.61 | – |
| Fe XX | 14.2670 | 54 \rightarrow 6 | 8.93E-17 | 8.93E-17 | 3.65E-17 | 13.60 | – |
| Fe XX | 14.2682 | 16 \rightarrow 2 | 3.68E-18 | 3.68E-18 | 1.99E-18 | 13.64 | – |
| Fe XIX | 14.2685 | 61 \rightarrow 5 | 1.04E-18 | 5.68E-19 | 8.48E-19 | 8.77 | – |
| Fe XX | 14.2692 | 116 \rightarrow 12 | 3.48E-18 | 3.48E-18 | 1.33E-18 | 13.63 | – |
| Fe XIX | 14.3091 | 117 \rightarrow 6 | 6.66E-18 | 6.66E-18 | 4.28E-18 | 13.20 | – |
| Fe XIX | 14.3249 | 137 \rightarrow 8 | 3.64E-19 | 1.22E-20 | 3.64E-19 | 13.34 | – |
| Fe XXI | 14.3252 | 28 \rightarrow 11 | 4.32E-19 | 4.32E-19 | 5.37E-20 | 12.71 | – |
| Fe XX | 14.3314 | 84 \rightarrow 9 | 9.26E-19 | 2.07E-20 | 9.26E-19 | 13.35 | – |
| Fe XX | 14.3318 | 49 \rightarrow 6 | 3.32E-17 | 3.32E-17 | 1.91E-17 | 13.38 | – |
| Fe XVIII | 14.3430 | 58 \rightarrow 2 | 3.50E-17 | 1.11E-17 | 3.50E-17 | 13.51 | – |
| Fe XVIII | 14.3430 | 57 \rightarrow 2 | 4.38E-17 | 1.78E-17 | 4.38E-17 | 13.51 | – |
| Fe XX | 14.3496 | 20 \rightarrow 5 | 1.76E-18 | 7.32E-19 | 1.76E-18 | 13.45 | – |
| Fe XX | 14.3558 | 57 \rightarrow 7 | 2.99E-18 | 1.36E-18 | 2.99E-18 | 14.43 | – |
| Fe XX | 14.3562 | 123 \rightarrow 13 | 3.26E-18 | 9.65E-20 | 3.26E-18 | 14.35 | 13.46 |
| Fe XX | 14.3644 | 84 \rightarrow 10 | 2.51E-17 | 1.15E-19 | 2.51E-17 | 13.95 | 12.53 |
| Fe XXII | 14.3652 | 21 \rightarrow 14 | 1.89E-18 | 1.89E-18 | 9.32E-19 | 13.57 | – |
| Fe XX | 14.3681 | 83 \rightarrow 9 | 3.00E-17 | 6.70E-18 | 3.00E-17 | 13.53 | – |
| Fe XX | 14.3715 | 100 \rightarrow 11 | 3.45E-18 | 7.33E-19 | 3.45E-18 | 14.27 | – |
| Fe XIX | 14.3744 | 25 \rightarrow 1 | 1.41E-18 | 3.27E-19 | 1.41E-18 | 13.67 | – |
| Fe XXI | 14.3807 | 33 \rightarrow 13 | 1.89E-18 | 7.72E-20 | 1.89E-18 | 14.22 | 13.08 |
| Fe XX | 14.4028 | 57 \rightarrow 8 | 1.88E-18 | 8.52E-19 | 1.88E-18 | 14.43 | – |
| Fe XX | 14.4044 | 97 \rightarrow 11 | 5.17E-18 | 6.02E-20 | 5.17E-18 | 13.92 | – |
| Fe XVIII | 14.4104 | 48 \rightarrow 1 | 1.91E-18 | 1.05E-18 | 1.91E-18 | 13.51 | – |
| Fe XX | 14.4207 | 54 \rightarrow 7 | 3.63E-17 | 3.63E-17 | 1.49E-17 | 13.60 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XIX | 14.4276 | 113 \rightarrow 6 | 1.11E-18 | 5.35E-20 | 1.11E-18 | 13.30 | – |
| Fe XIX | 14.4364 | 117 \rightarrow 7 | 6.37E-18 | 6.37E-18 | 4.10E-18 | 13.20 | – |
| Fe XXI | 14.4516 | 33 \rightarrow 14 | 1.34E-17 | 5.49E-19 | 1.34E-17 | 14.22 | 13.08 |
| Fe XXI | 14.4552 | 25 \rightarrow 10 | 3.42E-18 | 3.42E-18 | 1.91E-18 | 12.93 | – |
| Fe XX | 14.4600 | 54 \rightarrow 8 | 2.36E-17 | 2.36E-17 | 9.62E-18 | 13.60 | – |
| Fe XX | 14.4600 | 49 \rightarrow 7 | 2.16E-17 | 2.16E-17 | 1.25E-17 | 13.38 | – |
| Fe XXII | 14.4648 | 22 \rightarrow 15 | 1.24E-18 | 2.08E-19 | 1.24E-18 | 13.57 | – |
| Fe XXI | 14.4767 | 25 \rightarrow 11 | 3.73E-18 | 3.73E-18 | 2.09E-18 | 12.93 | – |
| Fe XIX | 14.4818 | 114 \rightarrow 7 | 8.03E-19 | 1.98E-20 | 8.03E-19 | 8.91 | – |
| Fe XX | 14.4859 | 100 \rightarrow 12 | 1.16E-18 | 2.46E-19 | 1.16E-18 | 14.27 | – |
| Fe XXI | 14.4961 | 42 \rightarrow 15 | 1.71E-18 | 1.71E-18 | 1.98E-19 | 12.70 | – |
| Fe XIX | 14.4977 | 21 \rightarrow 1 | 5.91E-19 | 1.14E-19 | 5.91E-19 | 8.92 | 13.69 |
| Fe XX | 14.5044 | 41 \rightarrow 6 | 7.72E-18 | 8.02E-19 | 7.72E-18 | 13.55 | – |
| Fe XXI | 14.5120 | 32 \rightarrow 13 | 2.41E-18 | 1.40E-19 | 2.32E-18 | 12.40 | – |
| Fe XVIII | 14.5146 | 42 \rightarrow 1 | 1.42E-18 | 9.97E-19 | 1.42E-18 | 13.51 | – |
| Fe XX | 14.5146 | 49 \rightarrow 8 | 8.89E-18 | 8.89E-18 | 5.13E-18 | 13.38 | – |
| Fe XX | 14.5215 | 40 \rightarrow 6 | 1.43E-18 | 8.31E-20 | 1.43E-18 | 14.07 | 12.74 |
| Fe XVIII | 14.5340 | 41 \rightarrow 1 | 4.67E-17 | 4.67E-17 | 3.41E-17 | 13.51 | – |
| Fe XX | 14.5507 | 38 \rightarrow 6 | 1.15E-18 | 3.27E-19 | 1.15E-18 | 13.70 | – |
| Fe XIX | 14.5550 | 25 \rightarrow 3 | 7.10E-18 | 1.65E-18 | 7.10E-18 | 13.67 | – |
| Fe XIX | 14.5571 | 113 \rightarrow 7 | 5.16E-19 | 2.50E-20 | 5.16E-19 | 13.30 | – |
| Fe XXI | 14.5842 | 32 \rightarrow 14 | 6.80E-19 | 3.93E-20 | 6.54E-19 | 12.40 | – |
| Fe XX | 14.5987 | 94 \rightarrow 12 | 5.98E-19 | 1.01E-20 | 5.98E-19 | 13.98 | 12.55 |
| Fe XVIII | 14.6006 | 102 \rightarrow 3 | 5.96E-18 | 2.02E-18 | 5.96E-18 | 13.51 | – |
| Fe XIX | 14.6071 | 110 \rightarrow 6 | 1.56E-18 | 4.15E-19 | 1.56E-18 | 13.95 | – |
| Fe XXI | 14.6076 | 39 \rightarrow 15 | 5.58E-18 | 5.58E-18 | 1.37E-18 | 12.61 | – |
| Fe XXI | 14.6132 | 30 \rightarrow 14 | 4.38E-19 | 4.38E-20 | 4.38E-19 | 13.74 | 12.39 |
| Fe XVIII | 14.6160 | 48 \rightarrow 2 | 6.82E-18 | 3.75E-18 | 6.82E-18 | 13.51 | – |
| Fe XIX | 14.6359 | 16 \rightarrow 1 | 1.61E-18 | 8.49E-19 | 1.61E-18 | 13.87 | – |
| Fe XX | 14.6428 | 41 \rightarrow 7 | 5.35E-18 | 5.55E-19 | 5.35E-18 | 13.55 | – |
| Fe XIX | 14.6531 | 21 \rightarrow 2 | 4.34E-18 | 8.40E-19 | 4.34E-18 | 8.92 | 13.69 |
| Fe XIX | 14.6814 | 21 \rightarrow 3 | 1.15E-18 | 2.22E-19 | 1.15E-18 | 8.92 | 13.69 |
| Fe XX | 14.6867 | 100 \rightarrow 13 | 7.54E-19 | 1.60E-19 | 7.54E-19 | 14.27 | – |
| Fe XX | 14.6905 | 83 \rightarrow 11 | 1.51E-18 | 3.38E-19 | 1.51E-18 | 13.53 | – |
| Fe XX | 14.6916 | 41 \rightarrow 8 | 3.25E-18 | 3.37E-19 | 3.25E-18 | 13.55 | – |
| Ni XIX | 14.6953 | 3 \rightarrow 1 | 2.58E-17 | 1.82E-17 | 2.58E-17 | 14.38 | – |
| Fe XIX | 14.6993 | 20 \rightarrow 3 | 2.03E-18 | 1.88E-19 | 2.03E-18 | 13.37 | 8.96 |
| Fe XIX | 14.7018 | 26 \rightarrow 4 | 4.62E-18 | 5.83E-19 | 4.62E-18 | 13.85 | – |
| Fe XXI | 14.7104 | 28 \rightarrow 13 | 4.72E-18 | 4.72E-18 | 5.88E-19 | 12.71 | – |
| Fe XX | 14.7114 | 35 \rightarrow 6 | 1.13E-17 | 4.35E-18 | 1.13E-17 | 13.21 | – |
| Fe XIX | 14.7206 | 102 \rightarrow 6 | 9.87E-19 | 3.48E-19 | 9.87E-19 | 13.94 | – |
| Fe XVIII | 14.7260 | 100 \rightarrow 3 | 5.96E-18 | 5.96E-18 | 4.29E-18 | 13.51 | – |
| Ni XIX | 14.7362 | 2 \rightarrow 1 | 1.59E-17 | 1.59E-17 | 2.73E-18 | 14.31 | – |
| Fe XIX | 14.7367 | 25 \rightarrow 4 | 6.94E-18 | 1.61E-18 | 6.94E-18 | 13.67 | – |
| Fe XIX | 14.7398 | 110 \rightarrow 7 | 1.02E-18 | 2.72E-19 | 1.02E-18 | 13.95 | – |
| Fe XIX | 14.7420 | 100 \rightarrow 6 | 1.07E-18 | 1.07E-18 | 6.87E-19 | 13.25 | – |
| Fe XX | 14.7540 | 33 \rightarrow 6 | 5.26E-17 | 5.26E-17 | 2.05E-17 | 13.63 | – |
| Fe XX | 14.7709 | 84 \rightarrow 12 | 1.49E-18 | 1.54E-20 | 1.49E-18 | 13.31 | – |
| Fe XIX | 14.8232 | 16 \rightarrow 3 | 3.80E-18 | 2.00E-18 | 3.80E-18 | 13.87 | – |
| Fe XX | 14.8538 | 35 \rightarrow 7 | 1.03E-18 | 3.97E-19 | 1.03E-18 | 13.21 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XIX | 14.8639 | 137 \rightarrow 9 | 1.44E-18 | 4.82E-20 | 1.44E-18 | 13.34 | – |
| Fe XIX | 14.8663 | 21 \rightarrow 4 | 3.25E-18 | 6.30E-19 | 3.25E-18 | 8.92 | 13.69 |
| Fe XIX | 14.8680 | 100 \rightarrow 7 | 2.88E-18 | 2.88E-18 | 1.84E-18 | 13.25 | – |
| Fe XXI | 14.8701 | 25 \rightarrow 13 | 1.37E-18 | 1.37E-18 | 7.63E-19 | 12.93 | – |
| Fe XXI | 14.8725 | 32 \rightarrow 15 | 7.13E-19 | 4.12E-20 | 6.86E-19 | 12.40 | – |
| Fe XX | 14.8936 | 55 \rightarrow 9 | 3.96E-18 | 8.09E-20 | 3.96E-18 | 13.94 | – |
| Fe XX | 14.8968 | 57 \rightarrow 10 | 6.03E-18 | 2.74E-18 | 6.03E-18 | 14.43 | – |
| Fe XX | 14.9196 | 33 \rightarrow 7 | 3.78E-17 | 3.78E-17 | 1.47E-17 | 13.63 | – |
| Fe XXI | 14.9281 | 29 \rightarrow 15 | 6.36E-19 | 7.53E-20 | 6.00E-19 | 12.74 | – |
| Fe XX | 14.9467 | 26 \rightarrow 6 | 2.21E-17 | 2.21E-17 | 1.16E-17 | 13.66 | – |
| Ni XX | 14.9574 | 38 \rightarrow 3 | 4.30E-19 | 1.15E-20 | 4.30E-19 | 13.88 | – |
| Fe XIX | 14.9610 | 12 \rightarrow 1 | 3.36E-17 | 3.33E-17 | 2.26E-17 | 13.75 | – |
| Fe XX | 14.9703 | 33 \rightarrow 8 | 2.33E-17 | 2.33E-17 | 9.06E-18 | 13.63 | – |
| Fe XIX | 14.9823 | 99 \rightarrow 8 | 7.44E-19 | 1.93E-19 | 7.44E-19 | 13.38 | – |
| Fe XIX | 15.0117 | 16 \rightarrow 4 | 2.77E-17 | 1.46E-17 | 2.77E-17 | 13.87 | – |
| Fe XX | 15.0164 | 49 \rightarrow 10 | 3.72E-18 | 3.72E-18 | 2.15E-18 | 13.38 | – |
| Fe XIX | 15.0345 | 26 \rightarrow 5 | 5.77E-18 | 7.29E-19 | 5.77E-18 | 13.85 | – |
| Fe XX | 15.0470 | 22 \rightarrow 6 | 2.03E-17 | 2.03E-17 | 1.06E-17 | 13.65 | – |
| Fe XIX | 15.0535 | 119 \rightarrow 9 | 2.18E-18 | 4.31E-19 | 2.15E-18 | 13.31 | – |
| Fe XIX | 15.0790 | 11 \rightarrow 1 | 6.92E-17 | 6.92E-17 | 4.13E-17 | 13.59 | – |
| Fe XXI | 15.0809 | 28 \rightarrow 15 | 5.44E-19 | 5.44E-19 | 6.77E-20 | 12.71 | – |
| Fe XIX | 15.1036 | 88 \rightarrow 6 | 9.18E-18 | 1.08E-19 | 9.07E-18 | 13.31 | – |
| Fe XX | 15.1090 | 44 \rightarrow 9 | 4.50E-18 | 3.00E-19 | 4.50E-18 | 13.87 | – |
| Fe XX | 15.1236 | 43 \rightarrow 9 | 4.64E-18 | 2.01E-19 | 4.64E-18 | 13.97 | 12.55 |
| Fe XIX | 15.1317 | 114 \rightarrow 9 | 1.54E-18 | 3.79E-20 | 1.54E-18 | 8.91 | – |
| Fe XIX | 15.1340 | 12 \rightarrow 2 | 6.86E-18 | 6.80E-18 | 4.61E-18 | 13.75 | – |
| Fe XX | 15.1460 | 25 \rightarrow 7 | 6.49E-18 | 6.49E-18 | 4.19E-18 | 13.68 | – |
| Fe XX | 15.1460 | 43 \rightarrow 10 | 3.67E-17 | 1.59E-18 | 3.67E-17 | 13.97 | 12.55 |
| Fe XX | 15.1690 | 41 \rightarrow 9 | 1.43E-17 | 1.49E-18 | 1.43E-17 | 13.55 | – |
| Fe XIX | 15.1770 | 12 \rightarrow 3 | 8.17E-18 | 8.10E-18 | 5.50E-18 | 13.75 | – |
| Fe XIX | 15.1770 | 91 \rightarrow 7 | 8.27E-18 | 3.65E-20 | 6.28E-18 | 8.83 | – |
| Ni XX | 15.1910 | 30 \rightarrow 3 | 6.40E-19 | 7.55E-20 | 6.40E-19 | 13.88 | – |
| Fe XIX | 15.1980 | 82 \rightarrow 6 | 5.91E-17 | 5.91E-17 | 2.83E-17 | 13.44 | – |
| Fe XX | 15.2044 | 22 \rightarrow 7 | 3.99E-18 | 3.99E-18 | 2.08E-18 | 13.65 | – |
| Fe XX | 15.2060 | 41 \rightarrow 10 | 2.30E-18 | 2.39E-19 | 2.30E-18 | 13.55 | – |
| Fe XX | 15.2197 | 38 \rightarrow 9 | 2.91E-18 | 8.26E-19 | 2.91E-18 | 13.70 | – |
| Fe XX | 15.2248 | 40 \rightarrow 10 | 1.85E-17 | 1.08E-18 | 1.85E-17 | 14.07 | 12.74 |
| Fe XIX | 15.2455 | 88 \rightarrow 7 | 4.50E-18 | 5.28E-20 | 4.45E-18 | 13.31 | – |
| Fe XXI | 15.2489 | 25 \rightarrow 15 | 1.68E-18 | 1.68E-18 | 9.41E-19 | 12.93 | – |
| Fe XX | 15.2569 | 38 \rightarrow 10 | 2.05E-18 | 5.82E-19 | 2.05E-18 | 13.70 | – |
| Fe XX | 15.2570 | 22 \rightarrow 8 | 2.21E-18 | 2.21E-18 | 1.15E-18 | 13.65 | – |
| Fe XX | 15.2791 | 54 \rightarrow 11 | 8.11E-19 | 8.11E-19 | 3.31E-19 | 13.60 | – |
| Fe XVIII | 15.2794 | 17 \rightarrow 1 | 2.70E-18 | 6.99E-19 | 2.70E-18 | 13.51 | – |
| Fe XX | 15.3060 | 21 \rightarrow 7 | 1.90E-18 | 1.90E-18 | 1.02E-18 | 13.65 | – |
| Fe XIX | 15.3085 | 11 \rightarrow 3 | 2.89E-18 | 2.89E-18 | 1.72E-18 | 13.59 | – |
| Fe XX | 15.3344 | 57 \rightarrow 12 | 1.87E-18 | 8.50E-19 | 1.87E-18 | 14.43 | – |
| Fe XIX | 15.3471 | 88 \rightarrow 8 | 3.67E-18 | 4.31E-20 | 3.63E-18 | 13.31 | – |
| Fe XIX | 15.3506 | 75 \rightarrow 6 | 1.25E-17 | 1.25E-17 | 6.27E-18 | 13.45 | – |
| Fe XX | 15.3594 | 21 \rightarrow 8 | 4.52E-18 | 4.52E-18 | 2.42E-18 | 13.65 | – |
| Fe XIX | 15.3654 | 82 \rightarrow 7 | 1.61E-17 | 1.61E-17 | 7.71E-18 | 13.44 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|---------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 15.3688 | 55 \rightarrow 12 | 2.39E-18 | 4.88E-20 | 2.39E-18 | 13.94 | – |
| Fe XX | 15.3955 | 35 \rightarrow 9 | 1.28E-18 | 4.94E-19 | 1.28E-18 | 13.21 | – |
| Fe XIX | 15.4136 | 110 \rightarrow 9 | 1.80E-17 | 4.77E-18 | 1.80E-17 | 13.95 | – |
| Fe XIX | 15.4171 | 80 \rightarrow 7 | 5.02E-19 | 1.19E-19 | 4.91E-19 | 13.21 | 8.92 |
| Fe XX | 15.4336 | 35 \rightarrow 10 | 3.53E-18 | 1.36E-18 | 3.53E-18 | 13.21 | – |
| Fe XX | 15.4613 | 49 \rightarrow 12 | 1.12E-18 | 1.12E-18 | 6.46E-19 | 13.38 | – |
| Fe XIX | 15.4655 | 69 \rightarrow 6 | 2.78E-18 | 2.78E-18 | 1.35E-18 | 13.45 | – |
| Fe XX | 15.4659 | 44 \rightarrow 11 | 2.49E-18 | 1.67E-19 | 2.49E-18 | 13.87 | – |
| Fe XVIII | 15.4855 | 78 \rightarrow 3 | 3.71E-18 | 1.63E-19 | 3.71E-18 | 13.51 | – |
| Fe XIX | 15.4972 | 75 \rightarrow 7 | 1.23E-18 | 1.23E-18 | 6.14E-19 | 13.45 | – |
| Fe XX | 15.5047 | 33 \rightarrow 10 | 8.35E-19 | 8.35E-19 | 3.25E-19 | 13.63 | – |
| Fe XVIII | 15.5199 | 17 \rightarrow 2 | 1.01E-17 | 2.62E-18 | 1.01E-17 | 13.51 | – |
| Fe XX | 15.5287 | 41 \rightarrow 11 | 1.24E-18 | 1.29E-19 | 1.24E-18 | 13.55 | – |
| Fe XX | 15.5951 | 55 \rightarrow 13 | 2.95E-18 | 6.03E-20 | 2.95E-18 | 13.94 | – |
| Fe XX | 15.5984 | 44 \rightarrow 12 | 5.76E-19 | 3.85E-20 | 5.76E-19 | 13.87 | – |
| Fe XX | 15.6140 | 43 \rightarrow 12 | 8.34E-18 | 3.62E-19 | 8.34E-18 | 13.97 | 12.55 |
| Fe XIX | 15.6744 | 66 \rightarrow 7 | 1.24E-18 | 2.44E-20 | 1.24E-18 | 14.47 | – |
| Fe XX | 15.6903 | 49 \rightarrow 13 | 1.31E-18 | 1.31E-18 | 7.56E-19 | 13.38 | – |
| Fe XX | 15.7163 | 38 \rightarrow 12 | 7.05E-19 | 2.00E-19 | 7.05E-19 | 13.70 | – |
| Fe XX | 15.7176 | 36 \rightarrow 11 | 3.17E-18 | 1.22E-18 | 3.17E-18 | 13.88 | – |
| Fe XVIII | 15.7590 | 8 \rightarrow 1 | 1.16E-17 | 8.39E-18 | 1.16E-17 | 13.51 | – |
| Fe XIX | 15.7693 | 55 \rightarrow 6 | 6.99E-18 | 2.44E-19 | 6.99E-18 | 13.88 | – |
| Fe XX | 15.7725 | 22 \rightarrow 9 | 8.62E-19 | 8.62E-19 | 4.49E-19 | 13.65 | – |
| Fe XIX | 15.8535 | 51 \rightarrow 6 | 3.03E-18 | 1.42E-19 | 3.03E-18 | 13.33 | – |
| Fe XX | 15.8544 | 36 \rightarrow 12 | 1.77E-18 | 6.84E-19 | 1.77E-18 | 13.88 | – |
| Fe XVIII | 15.8700 | 10 \rightarrow 2 | 3.69E-17 | 1.96E-17 | 3.69E-17 | 13.51 | – |
| Fe XX | 15.8819 | 21 \rightarrow 9 | 1.40E-18 | 1.40E-18 | 7.49E-19 | 13.65 | – |
| Fe XIX | 15.9174 | 49 \rightarrow 6 | 7.38E-18 | 2.08E-18 | 7.38E-18 | 13.65 | – |
| Fe XIX | 15.9207 | 48 \rightarrow 6 | 1.73E-18 | 1.07E-19 | 1.73E-18 | 13.33 | – |
| Fe XIX | 15.9240 | 55 \rightarrow 7 | 2.83E-18 | 9.89E-20 | 2.83E-18 | 13.88 | – |
| Fe XIX | 16.0098 | 51 \rightarrow 7 | 4.71E-19 | 2.21E-20 | 4.71E-19 | 13.33 | – |
| Fe XIX | 16.0270 | 48 \rightarrow 7 | 7.01E-18 | 4.35E-19 | 7.01E-18 | 13.33 | – |
| Fe XIX | 16.0270 | 41 \rightarrow 6 | 1.17E-18 | 3.62E-19 | 1.17E-18 | 13.84 | 8.95 |
| Fe XIX | 16.0417 | 40 \rightarrow 6 | 1.60E-18 | 1.46E-19 | 1.60E-18 | 13.39 | 8.95 |
| Fe XVIII | 16.0450 | 8 \rightarrow 2 | 1.25E-17 | 9.06E-18 | 1.25E-17 | 13.51 | – |
| Fe XVIII | 16.0600 | 65 \rightarrow 3 | 8.95E-18 | 1.93E-19 | 8.95E-18 | 13.51 | – |
| Fe XIX | 16.0852 | 47 \rightarrow 7 | 9.62E-18 | 1.11E-19 | 7.33E-18 | 8.84 | – |
| Fe XX | 16.0954 | 36 \rightarrow 13 | 9.67E-19 | 3.73E-19 | 9.67E-19 | 13.88 | – |
| Fe XIX | 16.1100 | 37 \rightarrow 6 | 9.23E-17 | 9.23E-17 | 4.44E-17 | 13.45 | – |
| Fe XIX | 16.1219 | 51 \rightarrow 8 | 5.71E-18 | 2.68E-19 | 5.70E-18 | 13.33 | – |
| Fe XVIII | 16.1590 | 64 \rightarrow 3 | 3.43E-17 | 3.43E-17 | 2.47E-17 | 13.51 | – |
| Fe XIX | 16.1751 | 36 \rightarrow 6 | 7.27E-18 | 1.82E-18 | 7.22E-18 | 13.32 | – |
| Fe XIX | 16.1915 | 48 \rightarrow 8 | 3.14E-18 | 1.95E-19 | 3.14E-18 | 13.33 | – |
| Fe XIX | 16.1990 | 41 \rightarrow 7 | 3.08E-18 | 9.55E-19 | 3.08E-18 | 13.84 | 8.95 |
| Fe XVIII | 16.2262 | 63 \rightarrow 3 | 1.19E-18 | 2.02E-19 | 1.19E-18 | 13.51 | – |
| Fe XVII | 16.2285 | 10 \rightarrow 1 | 5.95E-18 | 2.00E-18 | 5.95E-18 | 14.22 | – |
| Fe XX | 16.2767 | 21 \rightarrow 11 | 1.87E-18 | 1.87E-18 | 1.00E-18 | 13.65 | – |
| Fe XIX | 16.2830 | 37 \rightarrow 7 | 2.84E-17 | 2.84E-17 | 1.36E-17 | 13.45 | – |
| Fe XIX | 16.2847 | 33 \rightarrow 6 | 1.65E-18 | 1.28E-18 | 1.65E-18 | 14.01 | – |
| Fe XIX | 16.3167 | 40 \rightarrow 8 | 4.66E-19 | 4.25E-20 | 4.66E-19 | 13.39 | 8.95 |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|----------------|----------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XVIII | 16.3200 | 62 \rightarrow 3 | 9.59E-18 | 9.59E-18 | 6.96E-18 | 13.51 | – |
| Fe XIX | 16.3380 | 36 \rightarrow 7 | 1.07E-18 | 2.68E-19 | 1.06E-18 | 13.32 | – |
| Fe XIX | 16.3491 | 31 \rightarrow 6 | 1.60E-18 | 9.21E-19 | 1.60E-18 | 13.42 | – |
| Fe XVII | 16.3500 | 7 \rightarrow 1 | 7.25E-18 | 2.59E-18 | 7.25E-18 | 14.22 | – |
| Fe XIX | 16.3938 | 35 \rightarrow 7 | 2.97E-18 | 6.51E-19 | 2.35E-18 | 8.83 | – |
| Fe XIX | 16.3958 | 38 \rightarrow 8 | 9.98E-19 | 1.93E-19 | 9.98E-19 | 13.48 | 8.94 |
| Fe XIX | 16.4385 | 66 \rightarrow 9 | 2.81E-18 | 5.52E-20 | 2.81E-18 | 14.47 | – |
| Fe XIX | 16.4547 | 36 \rightarrow 8 | 7.95E-19 | 2.00E-19 | 7.90E-19 | 13.32 | – |
| Fe XIX | 16.6578 | 23 \rightarrow 6 | 1.84E-18 | 1.84E-18 | 1.02E-18 | 13.54 | – |
| Fe XIX | 16.7133 | 55 \rightarrow 9 | 1.07E-17 | 3.74E-19 | 1.07E-17 | 13.88 | – |
| Fe XIX | 16.7905 | 54 \rightarrow 9 | 1.19E-18 | 5.86E-19 | 1.19E-18 | 13.85 | – |
| Fe XIX | 16.8057 | 19 \rightarrow 6 | 2.96E-18 | 2.96E-18 | 1.68E-18 | 13.56 | – |
| Fe XIX | 16.8079 | 51 \rightarrow 9 | 1.23E-18 | 5.78E-20 | 1.23E-18 | 13.33 | – |
| Fe XIX | 16.8909 | 47 \rightarrow 9 | 1.10E-18 | 1.27E-20 | 8.40E-19 | 8.84 | – |
| Fe XIX | 17.0311 | 39 \rightarrow 9 | 6.61E-18 | 4.16E-18 | 6.61E-18 | 14.05 | – |
| Fe XVII | 17.0510 | 3 \rightarrow 1 | 1.58E-16 | 1.10E-16 | 1.58E-16 | 14.22 | – |
| Fe XVII | 17.0960 | 2 \rightarrow 1 | 9.32E-17 | 9.32E-17 | 1.07E-17 | 14.16 | – |
| Fe XIX | 17.1058 | 38 \rightarrow 9 | 5.07E-19 | 9.80E-20 | 5.07E-19 | 13.48 | 8.94 |
| Fe XVIII | 17.3471 | 38 \rightarrow 3 | 6.43E-18 | 1.55E-19 | 6.43E-18 | 13.51 | – |
| Fe XVIII | 17.6179 | 30 \rightarrow 3 | 9.50E-18 | 1.04E-18 | 9.50E-18 | 13.51 | – |
| Fe XVIII | 17.6230 | 29 \rightarrow 3 | 5.93E-17 | 5.93E-17 | 4.31E-17 | 13.51 | – |
| Fe XIX | 17.7148 | 23 \rightarrow 9 | 8.99E-19 | 8.99E-19 | 5.01E-19 | 13.54 | – |
| Ca XVII | 20.4370 | 19 \rightarrow 4 | 8.79E-19 | 4.00E-19 | 8.79E-19 | 11.91 | – |
| Ca XVI | 21.4500 | 31 \rightarrow 1 | 1.45E-18 | 1.45E-18 | 5.96E-19 | 11.63 | – |
| Ca XVI | 21.6100 | 50 \rightarrow 2 | 9.05E-19 | 8.70E-20 | 8.96E-19 | 11.62 | – |
| O VII | 21.8036 | 5 \rightarrow 1 | 1.02E-17 | 1.97E-18 | 1.02E-17 | 11.61 | – |
| O VII | 22.0977 | 2 \rightarrow 1 | 8.41E-18 | 8.41E-18 | 2.16E-20 | 11.59 | – |
| Ca XVI | 23.6260 | 75 \rightarrow 6 | 4.46E-19 | 4.46E-19 | 1.52E-19 | 11.63 | – |
| Fe XXII | 23.7075 | 150 \rightarrow 16 | 1.13E-18 | 5.57E-19 | 1.13E-18 | 13.57 | – |
| Fe XXII | 23.7466 | 149 \rightarrow 16 | 1.15E-18 | 1.15E-18 | 6.13E-19 | 13.57 | – |
| Fe XXII | 24.5938 | 151 \rightarrow 17 | 1.21E-18 | 1.21E-18 | 6.40E-19 | 13.57 | – |
| Fe XXII | 24.7738 | 152 \rightarrow 18 | 1.00E-18 | 2.89E-19 | 1.00E-18 | 13.57 | – |
| Fe XXI | 25.0502 | 478 \rightarrow 23 | 7.22E-19 | 2.81E-20 | 7.10E-19 | 12.43 | – |
| Fe XXI | 25.0843 | 455 \rightarrow 22 | 3.27E-18 | 3.27E-18 | 4.12E-19 | 12.70 | – |
| Fe XXI | 25.1361 | 481 \rightarrow 24 | 7.24E-19 | 2.81E-20 | 7.24E-19 | 14.11 | 12.72 |
| Fe XXI | 25.2267 | 477 \rightarrow 24 | 3.61E-19 | 1.27E-20 | 3.43E-19 | 12.73 | – |
| Fe XXI | 25.9399 | 460 \rightarrow 25 | 1.15E-18 | 1.15E-18 | 1.59E-19 | 12.70 | – |
| Fe XXI | 25.9939 | 581 \rightarrow 42 | 5.17E-19 | 5.17E-19 | 5.65E-20 | 12.70 | – |
| Fe XXI | 26.1418 | 491 \rightarrow 29 | 3.79E-19 | 1.02E-20 | 3.77E-19 | 12.76 | – |
| Fe XXI | 26.2206 | 490 \rightarrow 30 | 6.36E-19 | 9.86E-20 | 6.36E-19 | 13.87 | 12.42 |
| Fe XXI | 26.2907 | 492 \rightarrow 32 | 5.59E-19 | 1.20E-20 | 5.43E-19 | 12.41 | – |
| Fe XXI | 26.3216 | 460 \rightarrow 26 | 4.11E-19 | 4.11E-19 | 5.67E-20 | 12.70 | – |
| Fe XXI | 26.3466 | 458 \rightarrow 26 | 7.57E-19 | 4.12E-19 | 6.49E-19 | 12.63 | – |
| Fe XXI | 26.3613 | 459 \rightarrow 27 | 8.59E-19 | 3.33E-19 | 8.20E-19 | 12.33 | – |
| Fe XXI | 26.4408 | 460 \rightarrow 28 | 1.97E-18 | 1.97E-18 | 2.71E-19 | 12.70 | – |
| Fe XXI | 26.6481 | 497 \rightarrow 33 | 5.25E-19 | 1.02E-20 | 5.25E-19 | 13.90 | – |
| Fe XXI | 26.8230 | 599 \rightarrow 58 | 4.28E-19 | 4.28E-19 | 4.80E-20 | 12.70 | – |
| Fe XX | 26.8659 | 560 \rightarrow 19 | 2.05E-18 | 2.05E-18 | 8.17E-19 | 13.63 | – |
| Fe XX | 26.8911 | 514 \rightarrow 16 | 1.44E-18 | 1.44E-18 | 7.94E-19 | 13.65 | – |
| Fe XX | 26.8996 | 648 \rightarrow 24 | 5.15E-19 | 8.29E-20 | 5.15E-19 | 14.24 | – |

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|--------|----------------|------------------------|----------------|----------------------|-----------------------|------------|------------|
| Fe XX | 26.9158 | 538 \rightarrow 17 | 8.72E-19 | 8.72E-19 | 4.05E-19 | 13.64 | – |
| Fe XX | 26.9300 | 646 \rightarrow 23 | 7.41E-19 | 1.83E-20 | 7.41E-19 | 14.00 | 12.58 |
| Fe XXI | 27.4615 | 553 \rightarrow 58 | 4.72E-19 | 4.72E-19 | 5.05E-20 | 12.70 | – |
| Fe XXI | 27.7534 | 503 \rightarrow 46 | 3.56E-19 | 1.30E-20 | 3.56E-19 | 13.51 | 12.27 |
| Fe XXI | 27.9297 | 604 \rightarrow 74 | 3.99E-19 | 3.99E-19 | 6.81E-20 | 12.70 | – |
| Fe XXI | 27.9663 | 465 \rightarrow 40 | 1.82E-18 | 1.82E-18 | 3.37E-19 | 12.71 | – |
| Fe XX | 28.1523 | 590 \rightarrow 29 | 9.07E-19 | 9.07E-19 | 4.26E-19 | 13.66 | – |
| Fe XX | 28.2745 | 559 \rightarrow 26 | 1.13E-18 | 1.13E-18 | 4.76E-19 | 13.63 | – |
| Fe XX | 28.4167 | 533 \rightarrow 22 | 1.41E-18 | 1.41E-18 | 7.33E-19 | 13.66 | – |
| Fe XXI | 28.4315 | 455 \rightarrow 40 | 5.36E-19 | 5.36E-19 | 6.75E-20 | 12.70 | – |
| Fe XX | 28.4500 | 654 \rightarrow 40 | 4.61E-19 | 5.13E-20 | 4.61E-19 | 14.15 | 12.86 |
| C VI | 28.4652 | 7 \rightarrow 1 | 1.69E-17 | 1.17E-17 | 1.69E-17 | 14.08 | – |
| C VI | 28.4663 | 6 \rightarrow 1 | 8.14E-18 | 5.58E-18 | 8.14E-18 | 14.08 | – |
| Fe XX | 28.4911 | 594 \rightarrow 33 | 7.12E-19 | 7.12E-19 | 2.75E-19 | 13.62 | – |
| Fe XX | 28.5033 | 592 \rightarrow 33 | 8.92E-19 | 8.92E-19 | 3.60E-19 | 13.64 | – |
| Fe XXI | 28.5277 | 606 \rightarrow 83 | 1.13E-18 | 1.13E-18 | 1.30E-19 | 12.70 | – |
| Fe XX | 28.6361 | 1017 \rightarrow 159 | 6.35E-19 | 6.35E-19 | 2.44E-19 | 13.62 | – |
| Fe XX | 28.6476 | 658 \rightarrow 43 | 3.88E-19 | 1.10E-20 | 3.88E-19 | 13.37 | – |
| Fe XX | 28.7147 | 862 \rightarrow 112 | 3.63E-19 | 1.93E-20 | 3.63E-19 | 13.41 | – |
| Fe XIX | 29.0354 | 468 \rightarrow 13 | 9.41E-19 | 9.41E-19 | 5.28E-19 | 13.41 | – |
| N VI | 29.0843 | 5 \rightarrow 1 | 3.42E-19 | 5.33E-20 | 3.41E-19 | 11.04 | – |
| Fe XX | 29.8385 | 694 \rightarrow 73 | 7.27E-19 | 7.27E-19 | 2.71E-19 | 13.62 | – |
| Fe XX | 30.4523 | 543 \rightarrow 42 | 1.28E-18 | 1.28E-18 | 6.20E-19 | 13.64 | – |

Density-sensitive lines at $T = 10^{7.5}$ K

Table 4: Temperature = $3.16228e + 07$ K

| Ion | λ (Å) | Transition | Peak Λ | Λ (Low n) | Λ (High n) | $\log n_0$ | $\log n_1$ |
|----------|---------------|--------------------|----------------|----------------------|-----------------------|------------|------------|
| S XV | 5.0631 | 6 \rightarrow 1 | 1.15E-18 | 6.75E-19 | 1.15E-18 | 14.90 | – |
| S XV | 5.0665 | 5 \rightarrow 1 | 1.63E-18 | 9.49E-19 | 1.63E-18 | 14.91 | – |
| S XV | 5.1015 | 2 \rightarrow 1 | 2.63E-18 | 2.63E-18 | 1.46E-18 | 14.90 | – |
| Si XIII | 6.6882 | 5 \rightarrow 1 | 1.67E-18 | 5.81E-19 | 1.67E-18 | 14.45 | – |
| Si XIII | 6.7403 | 2 \rightarrow 1 | 1.95E-18 | 1.95E-18 | 4.40E-19 | 14.45 | – |
| Fe XXII | 8.9748 | 72 \rightarrow 1 | 8.43E-19 | 8.43E-19 | 4.04E-19 | 13.58 | – |
| Fe XXII | 9.0271 | 73 \rightarrow 2 | 6.27E-19 | 9.84E-20 | 6.27E-19 | 13.58 | – |
| Mg XI | 9.2312 | 5 \rightarrow 1 | 5.41E-19 | 1.32E-19 | 5.41E-19 | 13.83 | – |
| Mg XI | 9.3143 | 2 \rightarrow 1 | 4.95E-19 | 4.95E-19 | 2.43E-20 | 13.83 | – |
| Ni XXIV | 10.0932 | 21 \rightarrow 1 | 8.60E-19 | 8.60E-19 | 4.19E-19 | 13.84 | – |
| Ni XXIV | 10.2223 | 22 \rightarrow 2 | 5.88E-19 | 6.32E-20 | 5.88E-19 | 13.84 | – |
| Fe XXII | 11.4270 | 32 \rightarrow 1 | 1.72E-18 | 1.72E-18 | 6.70E-19 | 13.58 | – |
| Fe XXII | 11.4332 | 40 \rightarrow 2 | 9.90E-19 | 1.36E-20 | 9.90E-19 | 13.61 | – |
| Fe XXIII | 11.4580 | 19 \rightarrow 4 | 5.44E-18 | 2.42E-18 | 5.44E-18 | 13.75 | – |
| Fe XXII | 11.4900 | 30 \rightarrow 1 | 9.26E-19 | 9.26E-19 | 3.78E-19 | 13.58 | – |
| Fe XXII | 11.7700 | 21 \rightarrow 1 | 6.88E-18 | 6.88E-18 | 3.21E-18 | 13.58 | – |
| Fe XXII | 11.9320 | 22 \rightarrow 2 | 4.87E-18 | 5.16E-19 | 4.87E-18 | 13.58 | – |
| Fe XXII | 11.9770 | 21 \rightarrow 2 | 1.28E-18 | 1.28E-18 | 5.96E-19 | 13.58 | – |
| Fe XXII | 12.0545 | 56 \rightarrow 7 | 1.12E-18 | 1.01E-20 | 1.12E-18 | 13.60 | – |
| Fe XXII | 12.2100 | 49 \rightarrow 6 | 1.11E-18 | 1.11E-18 | 4.75E-19 | 13.58 | – |
| Fe XXI | 12.2840 | 40 \rightarrow 1 | 1.48E-18 | 1.48E-18 | 1.85E-19 | 12.66 | – |
| Fe XXI | 12.3270 | 46 \rightarrow 3 | 3.68E-19 | 1.09E-20 | 3.44E-19 | 12.35 | – |
| Fe XXII | 12.6489 | 27 \rightarrow 7 | 9.68E-19 | 1.60E-20 | 9.68E-19 | 13.58 | – |
| Fe XXII | 12.7540 | 23 \rightarrow 6 | 2.08E-18 | 2.08E-18 | 7.98E-19 | 13.58 | – |
| Fe XXII | 12.9530 | 23 \rightarrow 8 | 8.28E-19 | 8.28E-19 | 3.17E-19 | 13.58 | – |
| C VI | 28.4652 | 7 \rightarrow 1 | 3.94E-18 | 2.70E-18 | 3.94E-18 | 14.20 | – |
| C VI | 28.4663 | 6 \rightarrow 1 | 1.90E-18 | 1.29E-18 | 1.90E-18 | 14.20 | – |

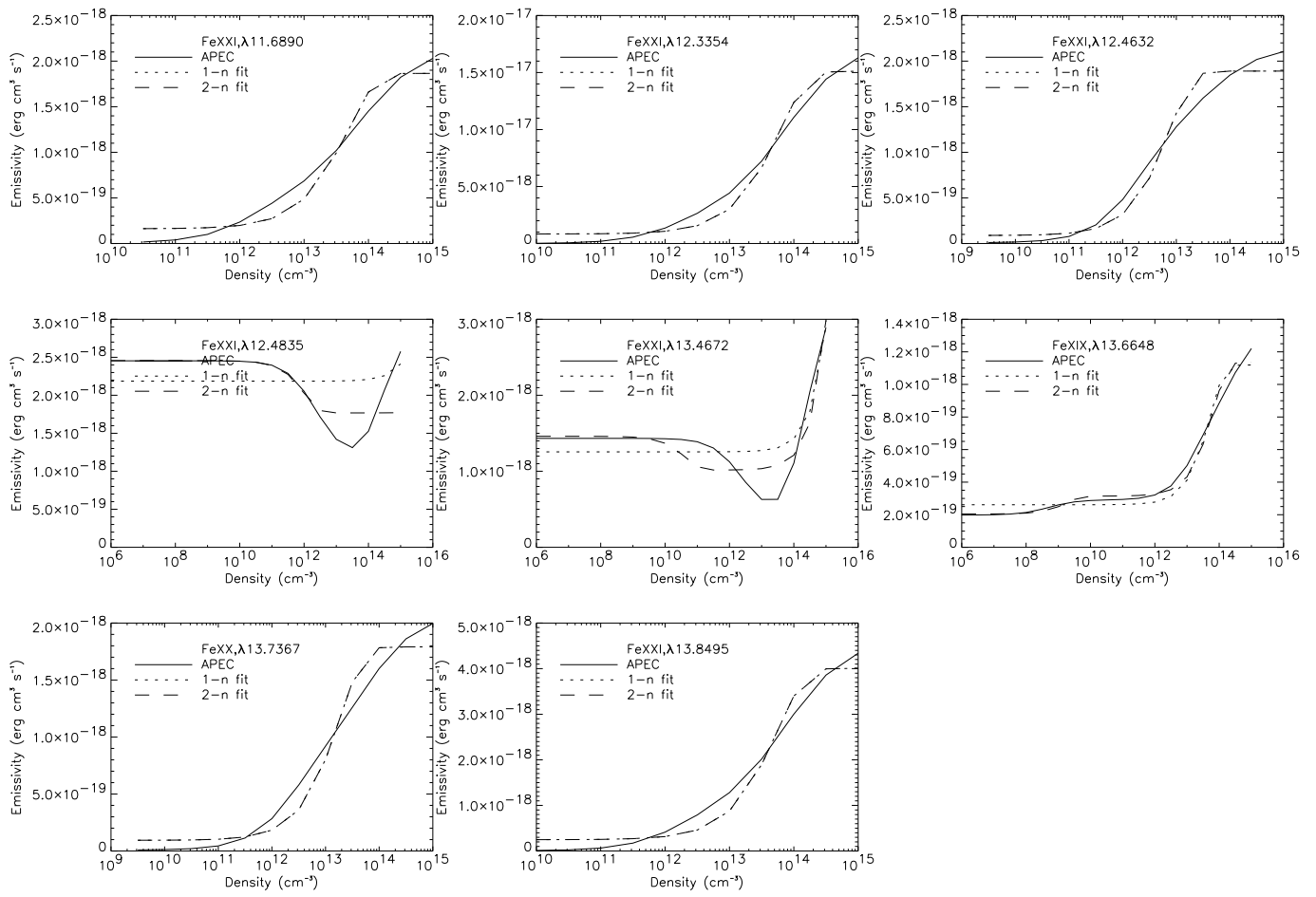


Figure 1: Poorly-fitting emission curves

Poorly-fitting emission curves