Predicted XUV Line Intensities
CHIANTI database - Version 10.1

Calculated with Constant pressure= 1.00e+16 (cm^{-3} K)
2000.2 to 8342.0 Å
Number of lines: 533
Minimum intensity = 32.9000
Units are: erg cm-2 sr-1 s-1
Lines marked with a "s" are satellite lines from autoionizing levels.
Lines marked with a * do not have observed energy levels
and have approximate wavelengths.
Calculated: Mon Jun 26 10:32:13 2023

Ionization Fractions file: `chianti.ioneq`
ionization equilibrium: CHIANTI
produced as part of the CHIANTI atomic data base collaboration
Created on Tue May 30 16:53:01 2023
comment:
Prepared for the release of CHIANTI 10.1.

Elemental Abundance file: `sun_photospheric_2015_scott.abund`
created for the CHIANTI atomic database by Peter Young, 16-Aug-2017
abundances (F to Ca):
Scott et al., 2015, A&A, 573, A25
DOI: 10.1051/0004-6361/201424109
abundances (Sc to Ni):
Scott et al., 2015, A&A, 573, A26
DOI: 10.1051/0004-6361/201424110
abundances (Cu & Zn):
Grevesse et al., 2015, A&A, 573, A27
DOI: 10.1051/0004-6361/201424111
abundances (other elements):
Asplund, M., Grevesse, N., Sauval, A.J., & Scott, P. 2009, ARAA, 47, 481
DOI: 10.1146/annurev.astro.46.060407.145222
comment:
This updates the Asplund et al. (2009) results for elements F and higher. The changes
are mostly small.

Minimum abundance = 3.63078e-08

Differential Emission Measure file: `flare_ext.dem`
filename: flare.dem
dem: Dere, K.P., Cook, J.W., 1979, ApJ, 229, 772
comment: composite of August 9 1553 and 1554 UT data of an M2 X-ray class

flare
comment: modifies at high temperature (7.3 to 8.0) by G.Del Zanna to calculate
the emissivities of the hottest ions.
produced as part of the Arcetri/Cambridge/NRL 'CHIANTI' atomic data base collaboration
K.P.Dere and G. Del Zanna - Aug 2002

Calculation performed with population lookup tables.

Table 1: *Line List*

Ion	λ (Å)	Transition	T_{max}	Int
Fe III	2000.2240	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3I_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3K_6$	4.55	5.49e+02
Fe III	2001.8101	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_2$	4.50	8.96e+01
Fe III	2004.1530	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_2$	4.50	3.14e+02
Fe III	2005.7360	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_1$	4.50	1.13e+02
Fe III	2006.3600	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_4$	4.55	3.83e+01
Fe III	2006.9160	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_2$	4.50	1.68e+02
Fe III	2008.5040	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_1$	4.50	2.47e+02
Fe III	2009.1180	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_0$	4.50	1.23e+02
C III	2010.7410	$2s\ 3p\ ^3P_2$ - $2s\ 4s\ ^3S_1$	4.95	3.82e+01
Fe III	2013.3280	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_3$	4.55	6.83e+01
O III	2014.0540	$2s^2\ 2p\ 3d\ ^1F_3$ - $2s^2\ 2p\ 4f\ ^1G_4$	5.05	3.83e+01
Fe III	2017.3571	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.55	5.45e+01
Fe III	2023.4189	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_4$	4.55	3.68e+01
Fe III	2024.1650	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5F_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_5$	4.55	3.40e+01
Fe III	2026.2200	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1F_3$	4.55	1.65e+02
Fe III	2026.6960	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.55	4.27e+01
Ne III *	2029.6730	$2s^2\ 2p^3\ (^2D)\ 3s\ ^1D_2$ - $2s^2\ 2p^3\ (^2D)\ 3p\ ^3P_2$	5.10	3.38e+01
Fe III	2033.7111	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_2$	4.55	3.66e+01
Fe III	2035.6440	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5F_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.55	1.00e+02
Fe III	2036.5770	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_3$	4.55	1.79e+02
Fe III	2036.6680	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3I_5$	4.55	1.36e+02
Fe III	2037.8101	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_1$	4.55	3.71e+01
Fe III	2038.7490	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_2$	4.55	1.12e+02
Fe III	2040.1840	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1H_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1I_6$	4.55	4.81e+01
Fe III	2041.4250	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_0$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_1$	4.55	4.60e+01
Fe III	2042.8970	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_2$	4.55	9.40e+01
Fe IX	2043.0090	$3s^2\ 3p^5\ 3d\ ^3P_2$ - $3s^2\ 3p^5\ 3d\ ^3D_2$	5.95	5.59e+01
Fe III	2046.6010	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_5$	4.50	1.36e+02
Fe III	2054.1809	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_3$	4.55	7.61e+01
Cr II	2056.2571	$3d^5\ ^6S_{5/2}$ - $3d^4\ (^5D)\ 4p\ ^6P_{7/2}$	4.50	3.58e+01
Fe III	2056.5210	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_4$	4.55	9.85e+01
Fe III	2057.7190	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_2$	4.55	1.89e+02
Fe III	2058.8669	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_2$	4.55	5.48e+01
Fe III	2059.2319	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1I_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1K_7$	4.55	6.36e+02
Si II	2059.3049	$3s\ 3p^2\ ^2D_{5/2}$ - $3s^2\ 5p\ ^2P_{3/2}$	4.50	1.24e+02
Si II	2059.6731	$3s\ 3p^2\ ^2D_{3/2}$ - $3s^2\ 5p\ ^2P_{1/2}$	4.50	6.92e+01
Fe III	2060.3430	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_3$	4.55	2.45e+02
Fe III	2062.2170	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5S_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5P_1$	4.50	8.60e+02
Fe III	2062.2681	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_3$	4.55	4.35e+01
Fe III	2062.4170	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_4$	4.55	3.96e+02
Mg III	2065.5659	$2s^2\ 2p^5\ 3s\ ^3P_2$ - $2s^2\ 2p^5\ 3p\ ^3D_3$	5.15	5.07e+01
Fe III	2068.9109	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5S_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5P_2$	4.50	1.43e+03
Fe III	2070.4709	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1F_3$	4.55	3.87e+01
Fe III	2071.2000	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1I_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1H_5$	4.55	2.32e+02
Si II	2072.6760	$3s\ 3p^2\ ^2D_{3/2}$ - $3s^2\ 4f\ ^2F_{5/2}$	4.50	7.98e+01
O II	2072.9209	$2s\ 2p^4\ ^2D_{5/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{3/2}$	4.70	5.32e+01
Si II	2073.3621	$3s\ 3p^2\ ^2D_{5/2}$ - $3s^2\ 4f\ ^2F_{7/2}$	4.50	1.16e+02
Fe III	2076.9939	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_5$	4.55	4.08e+01
Fe III	2078.4180	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_4$	4.55	6.87e+01

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
Fe III	2079.6550	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5S_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5P_3$	4.50	1.97e+03
Al II	2082.1399	$3s\ 3p\ ^3P_1$ - $3p^2\ ^1D_2$	4.50	5.65e+01
Fe III	2085.0190	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_4$	4.50	6.22e+02
Ni XV	2086.1760	$3s^2\ 3p^2\ ^3P_1$ - $3s^2\ 3p^2\ ^1D_2$	6.40	3.34e+01
Al II	2087.5259	$3s\ 3p\ ^3P_2$ - $3p^2\ ^1D_2$	4.50	1.06e+02
Fe III	2087.8049	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_3$	4.55	9.81e+01
Fe III	2088.5720	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_1$	4.55	5.14e+01
S III	2089.7810	$3s^2\ 3p\ 3d\ ^3F_4$ - $3s^2\ 3p\ 4p\ ^3D_3$	4.80	3.32e+02
Fe III	2090.8081	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_5$	4.50	4.05e+02
Fe III	2090.9041	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_4$	4.50	1.94e+02
Cr XIX	2091.5691	$2s^2\ 2p^2\ ^3P_0$ - $2s^2\ 2p^2\ ^3P_1$	7.00	9.41e+02
Fe III	2091.9851	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_2$	4.55	6.48e+01
C III	2092.6411	$2s\ 3d\ ^3D_3$ - $2s\ 4p\ ^3P_2$	4.95	1.09e+02
C III	2092.7241	$2s\ 3d\ ^3D_2$ - $2s\ 4p\ ^3P_1$	4.95	5.81e+01
Fe III	2093.6230	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_3$	4.55	6.91e+01
Fe III	2095.8120	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_3$	4.50	3.95e+02
Fe III	2095.9961	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_3$	4.55	4.98e+01
S III	2097.9890	$3s^2\ 3p\ 3d\ ^3F_3$ - $3s^2\ 3p\ 4p\ ^3D_2$	4.80	1.41e+02
Fe III	2098.1521	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.50	9.55e+02
Fe III	2098.3630	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_4$	4.50	5.19e+02
S III	2098.5090	$3s^2\ 3p\ 3d\ ^3F_2$ - $3s^2\ 3p\ 4p\ ^3D_1$	4.80	1.06e+02
Fe III	2099.9980	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_4$	4.55	7.52e+01
Fe III	2101.6389	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3F_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_5$	4.55	9.41e+01
Co XXII	2104.3770	$2s^2\ 2p^2\ ^3P_1$ - $2s^2\ 2p^2\ ^3P_2$	7.10	6.38e+01
Fe III	2107.9880	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3F_2$	4.50	2.06e+02
Fe III	2110.9121	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_3$	4.50	3.38e+01
Fe III	2114.5850	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1G_4$	4.55	4.30e+01
Fe III	2117.2170	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_3$	4.50	7.19e+01
Fe III	2119.0840	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_0$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_1$	4.50	5.08e+01
Fe III	2120.9180	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_1$	4.50	4.87e+01
Fe III	2122.6919	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_2$	4.50	9.32e+01
Fe III	2124.9290	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_2$	4.50	6.05e+01
Fe III	2135.5339	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1I_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3I_5$	4.55	3.30e+01
Fe III	2136.1951	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3G_5$	4.55	4.71e+01
N II	2139.6831	$2s^2\ 2p^2\ ^3P_1$ - $2s\ 2p^3\ ^5S_2$	4.55	2.80e+02
N II	2143.4480	$2s^2\ 2p^2\ ^3P_2$ - $2s\ 2p^3\ ^5S_2$	4.55	6.90e+02
Fe III	2144.1470	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_3$	4.50	4.90e+01
Fe III	2144.1931	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_3$	4.50	1.38e+02
Fe III	2144.5149	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_4$	4.50	1.73e+02
Fe III	2144.9609	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5F_5$	4.50	1.74e+02
Fe III	2146.7241	$3s^2\ 3p^6\ 3d^5\ 4s\ ^5D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^5D_2$	4.50	3.41e+01
Si VII	2147.3970	$2s^2\ 2p^4\ ^3P_2$ - $2s^2\ 2p^4\ ^1D_2$	5.80	5.35e+01
Fe III	2148.9390	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3P_2$	4.55	3.80e+01
Si IX	2149.9871	$2s^2\ 2p^2\ ^3P_2$ - $2s^2\ 2p^2\ ^1D_2$	6.10	6.82e+01
Fe III	2152.4580	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1G_4$	4.55	1.69e+02
Fe III	2158.3870	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_1$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3P_0$	4.55	3.81e+01
Fe III	2159.1599	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1G_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1G_4$	4.55	3.55e+01
C III	2163.6079	$2s\ 3d\ ^1D_2$ - $2s\ 4f\ ^1F_3$	4.95	4.75e+01
C II	2174.5310	$2s^2\ 3s\ ^2S_{1/2}$ - $2s^2\ 4p\ ^2P_{3/2}$	4.60	4.54e+01

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
Fe III	2175.3320	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3P_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3P_2$	4.55	5.06e+01
Al II	2193.2900	$3s\ 3d\ ^3D_3$ - $3p\ 3d\ ^3F_4$	4.50	4.68e+01
Fe III	2209.5640	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1D_2$	4.55	1.29e+02
O III *	2230.3899	$2s\ 2p^2\ 3s\ ^5P_2$ - $2s\ 2p^2\ 3p\ ^5S_2$	5.05	4.34e+01
O III *	2238.6841	$2s\ 2p^2\ 3s\ ^5P_3$ - $2s\ 2p^2\ 3p\ ^5S_2$	5.05	6.09e+01
Fe III	2262.2891	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1F_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1D_2$	4.55	7.08e+01
C V	2271.5911	$1s\ 2s\ ^3S_1$ - $1s\ 2p\ ^3P_2$	6.00	8.49e+01
Fe III	2272.9700	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_4$	4.55	5.67e+01
C V	2278.6311	$1s\ 2s\ ^3S_1$ - $1s\ 2p\ ^3P_1$	6.00	3.61e+01
Fe III	2279.4680	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_5$	4.55	6.01e+01
C III	2297.5779	$2s\ 2p\ ^1P_1$ - $2p^2\ ^1D_2$	4.90	2.98e+04
Fe XXI	2298.0000	$2s^2\ 2p^2\ ^3P_1$ - $2s^2\ 2p^2\ ^3P_2$	7.10	3.32e+04
O II	2301.0410	$2s^2\ 2p^2\ 3s\ ^2P_{3/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{3/2}$	4.75	7.12e+01
Fe III	2307.3589	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3H_6$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.55	3.74e+01
O III	2316.1931	$2s^2\ 2p\ 3d\ ^3D_3$ - $2s^2\ 2p\ 4p\ ^3P_2$	5.05	5.41e+01
Fe III	2322.4541	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1H_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1I_6$	4.55	1.66e+02
C II	2324.2729	$2s^2\ 2p\ ^2P_{1/2}$ - $2s\ 2p^2\ ^4P_{3/2}$	4.50	3.49e+01
C II	2325.4080	$2s^2\ 2p\ ^2P_{1/2}$ - $2s\ 2p^2\ ^4P_{1/2}$	4.50	7.43e+02
C II	2326.1221	$2s^2\ 2p\ ^2P_{3/2}$ - $2s\ 2p^2\ ^4P_{5/2}$	4.50	1.61e+03
Fe III	2327.6541	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_4$	4.55	9.28e+01
C II	2327.7029	$2s^2\ 2p\ ^2P_{3/2}$ - $2s\ 2p^2\ ^4P_{3/2}$	4.50	2.11e+02
Fe II	2328.1111	$3d^6\ (^5D)\ 4s\ ^6D_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{3/2}$	4.50	7.05e+01
C II	2328.8420	$2s^2\ 2p\ ^2P_{3/2}$ - $2s\ 2p^2\ ^4P_{1/2}$	4.50	8.42e+02
Fe II	2333.5161	$3d^6\ (^5D)\ 4s\ ^6D_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{5/2}$	4.50	2.00e+02
Si II	2335.1230	$3s^2\ 3p\ ^2P_{1/2}$ - $3s\ 3p^2\ ^4P_{1/2}$	4.50	5.21e+02
Si II	2335.3210	$3s^2\ 3p\ ^2P_{3/2}$ - $3s\ 3p^2\ ^4P_{5/2}$	4.50	7.94e+02
Fe III	2337.4871	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_4$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_5$	4.55	8.63e+01
Fe II	2338.7251	$3d^6\ (^5D)\ 4s\ ^6D_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{3/2}$	4.50	1.04e+02
Fe II	2344.2141	$3d^6\ (^5D)\ 4s\ ^6D_{9/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{7/2}$	4.50	4.01e+02
Si II	2344.9199	$3s^2\ 3p\ ^2P_{3/2}$ - $3s\ 3p^2\ ^4P_{3/2}$	4.50	2.98e+02
Fe II	2345.0010	$3d^6\ (^5D)\ 4s\ ^6D_{1/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{3/2}$	4.50	7.33e+01
Fe II	2346.0569	$3d^6\ (^3H)\ 4s\ ^4H_{13/2}$ - $3d^6\ (^3F2)\ 4p\ ^4G_{11/2}$	4.50	3.89e+01
Fe II	2348.8340	$3d^7\ ^4F_{9/2}$ - $3d^6\ (^5D)\ 4p\ ^4D_{7/2}$	4.50	2.91e+02
Fe II	2349.0220	$3d^6\ (^5D)\ 4s\ ^6D_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{5/2}$	4.50	1.39e+02
Si II	2350.8921	$3s^2\ 3p\ ^2P_{3/2}$ - $3s\ 3p^2\ ^4P_{1/2}$	4.50	4.34e+02
Fe III	2353.3291	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_2$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_2$	4.55	4.03e+01
Fe III	2354.5420	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3D_3$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3D_3$	4.55	7.06e+01
Fe II	2359.8279	$3d^6\ (^5D)\ 4s\ ^6D_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{5/2}$	4.50	4.48e+01
Fe II	2360.7209	$3d^7\ ^4F_{9/2}$ - $3d^6\ (^5D)\ 4p\ ^4F_{9/2}$	4.50	3.68e+01
Fe III	2361.0071	$3s^2\ 3p^6\ 3d^5\ 4s\ ^3G_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^3H_6$	4.55	6.89e+01
Fe II	2361.0149	$3d^7\ ^4F_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^4D_{5/2}$	4.50	1.80e+02
Fe II	2362.7419	$3d^7\ ^4F_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^4F_{7/2}$	4.50	8.72e+01
Fe II	2365.5520	$3d^6\ (^5D)\ 4s\ ^6D_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^6P_{7/2}$	4.50	1.11e+02
Fe II	2367.3159	$3d^7\ ^4F_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^4F_{5/2}$	4.50	5.66e+01
Fe II	2369.3191	$3d^7\ ^4F_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^4D_{3/2}$	4.50	1.14e+02
Fe II	2371.2219	$3d^7\ ^4F_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^4F_{3/2}$	4.50	4.29e+01
Fe II	2374.4609	$3d^6\ (^5D)\ 4s\ ^6D_{9/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{9/2}$	4.50	1.40e+02
Fe II	2375.9180	$3d^7\ ^4F_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^4D_{1/2}$	4.50	6.90e+01
Fe II	2382.7649	$3d^6\ (^5D)\ 4s\ ^6D_{9/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{11/2}$	4.50	8.78e+02

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
Fe II	2383.9709	$3d^7\ ^4F_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^4D_{5/2}$	4.50	3.68e+01
Fe II	2389.3579	$3d^6\ (^5D)\ 4s\ ^6D_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{7/2}$	4.50	2.03e+02
Fe III	2390.2571	$3s^2\ 3p^6\ 3d^5\ 4s\ ^1H_5$ - $3s^2\ 3p^6\ 3d^5\ 4p\ ^1G_4$	4.55	5.58e+01
Fe II	2396.1499	$3d^6\ (^5D)\ 4s\ ^6D_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{3/2}$	4.50	3.54e+01
Fe II	2396.3560	$3d^6\ (^5D)\ 4s\ ^6D_{7/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{9/2}$	4.50	5.96e+02
S IV	2399.5200	$3s^2\ 4p\ ^2P_{3/2}$ - $3s^2\ 4d\ ^2D_{5/2}$	5.05	5.27e+01
Fe II	2399.9729	$3d^6\ (^5D)\ 4s\ ^6D_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{5/2}$	4.50	2.04e+02
Fe II	2405.6189	$3d^6\ (^5D)\ 4s\ ^6D_{5/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{7/2}$	4.50	3.75e+02
Fe XII	2406.4141	$3s^2\ 3p^3\ ^4S_{3/2}$ - $3s^2\ 3p^3\ ^2D_{3/2}$	6.20	1.92e+02
Fe II	2407.3940	$3d^6\ (^5D)\ 4s\ ^6D_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{3/2}$	4.50	1.65e+02
Fe II	2411.2529	$3d^6\ (^5D)\ 4s\ ^6D_{3/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{5/2}$	4.50	2.07e+02
Fe II	2411.8020	$3d^6\ (^5D)\ 4s\ ^6D_{1/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{1/2}$	4.50	1.10e+02
Fe II	2414.0449	$3d^6\ (^5D)\ 4s\ ^6D_{1/2}$ - $3d^6\ (^5D)\ 4p\ ^6F_{3/2}$	4.50	8.87e+01
Fe II	2424.8831	$3d^6\ (^3F2)\ 4s\ ^4F_{9/2}$ - $3d^6\ (^3F2)\ 4p\ ^4G_{11/2}$	4.50	1.32e+02
O II	2426.3069	$2s^2\ 2p^2\ 3s\ ^2D_{5/2}$ - $2s^2\ 2p^2\ 4p\ ^2D_{5/2}$	4.75	7.06e+01
Fe II	2429.0300	$3d^6\ (^3D)\ 4s\ ^4D_{7/2}$ - $3d^6\ (^3D)\ 4p\ ^4D_{7/2}$	4.50	4.42e+01
Fe II	2429.1021	$3d^6\ (^3D)\ 4s\ ^4D_{7/2}$ - $3d^6\ (^3D)\ 4p\ ^4F_{9/2}$	4.50	9.25e+01
Fe II	2430.8169	$3d^6\ (^3F2)\ 4s\ ^4F_{7/2}$ - $3d^6\ (^3F2)\ 4p\ ^4G_{9/2}$	4.50	1.00e+02
Fe II	2432.9990	$3d^6\ (^3F2)\ 4s\ ^4F_{5/2}$ - $3d^6\ (^3F2)\ 4p\ ^4G_{7/2}$	4.50	7.63e+01
O II	2434.2810	$2s^2\ 2p^2\ 3s\ ^2P_{1/2}$ - $2s^2\ 2p^2\ 3p\ ^2D_{3/2}$	4.75	1.45e+02
Fe II	2435.6909	$3d^6\ (^3F2)\ 4s\ ^4F_{3/2}$ - $3d^6\ (^3F2)\ 4p\ ^4G_{5/2}$	4.50	5.66e+01
O II	2436.7959	$2s^2\ 2p^2\ 3s\ ^2D_{3/2}$ - $2s^2\ 2p^2\ 4p\ ^2D_{3/2}$	4.75	4.52e+01
Fe II	2440.0420	$3d^6\ (^3G)\ 4s\ ^4G_{11/2}$ - $3d^6\ (^3G)\ 4p\ ^4H_{13/2}$	4.50	1.64e+02
Fe II	2441.1631	$3d^6\ (^3D)\ 4s\ ^4D_{5/2}$ - $3d^6\ (^3D)\ 4p\ ^4F_{7/2}$	4.50	5.70e+01
Fe II	2445.2571	$3d^6\ (^3P2)\ 4s\ ^4P_{5/2}$ - $3d^6\ (^3P2)\ 4p\ ^4D_{7/2}$	4.50	7.71e+01
O II	2446.2681	$2s^2\ 2p^2\ 3s\ ^2P_{3/2}$ - $2s^2\ 2p^2\ 3p\ ^2D_{5/2}$	4.75	2.57e+02
Fe II	2446.3140	$3d^6\ (^3P2)\ 4s\ ^4P_{3/2}$ - $3d^6\ (^3P2)\ 4p\ ^4D_{5/2}$	4.50	4.13e+01
Fe II	2446.5381	$3d^6\ (^3D)\ 4s\ ^4D_{3/2}$ - $3d^6\ (^3D)\ 4p\ ^4F_{5/2}$	4.50	3.78e+01
O III	2455.7051	$2s^2\ 2p\ 3s\ ^1P_1$ - $2s^2\ 2p\ 3p\ ^1S_0$	5.00	1.19e+02
Fe II	2459.5281	$3d^6\ (^3G)\ 4s\ ^4G_{9/2}$ - $3d^6\ (^3G)\ 4p\ ^4H_{11/2}$	4.50	1.40e+02
Fe II	2462.0291	$3d^6\ (^3G)\ 4s\ ^4G_{5/2}$ - $3d^6\ (^3G)\ 4p\ ^4H_{7/2}$	4.50	8.97e+01
Fe II	2462.6069	$3d^6\ (^3G)\ 4s\ ^4G_{7/2}$ - $3d^6\ (^3G)\ 4p\ ^4H_{9/2}$	4.50	1.12e+02
Fe II	2464.0271	$3d^6\ (^3G)\ 4s\ ^4G_{11/2}$ - $3d^6\ (^3G)\ 4p\ ^4F_{9/2}$	4.50	6.11e+01
Fe II	2464.7571	$3d^6\ (^3G)\ 4s\ ^4G_{9/2}$ - $3d^6\ (^3G)\ 4p\ ^4F_{7/2}$	4.50	4.80e+01
Fe II	2466.6580	$3d^6\ (^3G)\ 4s\ ^4G_{7/2}$ - $3d^6\ (^3G)\ 4p\ ^4F_{5/2}$	4.50	3.59e+01
Fe II	2467.5669	$3d^6\ (^3F2)\ 4s\ ^4F_{5/2}$ - $3d^6\ (^3F2)\ 4p\ ^4D_{3/2}$	4.50	4.25e+01
Fe II	2471.4170	$3d^6\ (^3F2)\ 4s\ ^4F_{7/2}$ - $3d^6\ (^3F2)\ 4p\ ^4D_{5/2}$	4.50	6.32e+01
Fe II	2480.9070	$3d^6\ (^3F2)\ 4s\ ^4F_{9/2}$ - $3d^6\ (^3F2)\ 4p\ ^4D_{7/2}$	4.50	9.60e+01
Fe II	2490.5820	$3d^6\ (^3G)\ 4s\ ^4G_{11/2}$ - $3d^6\ (^3G)\ 4p\ ^4G_{11/2}$	4.50	1.09e+02
Fe II	2493.9360	$3d^6\ (^3H)\ 4s\ ^4H_{11/2}$ - $3d^6\ (^3H)\ 4p\ ^4I_{13/2}$	4.50	2.55e+02
Fe II	2494.0139	$3d^6\ (^3H)\ 4s\ ^4H_{13/2}$ - $3d^6\ (^3H)\ 4p\ ^4I_{15/2}$	4.50	2.56e+02
O IV	2494.1450	$2s\ 2p\ 3s\ ^4P_{1/2}$ - $2s\ 2p\ 3p\ ^4P_{3/2}$	5.20	4.36e+01
O IV	2494.5061	$2s\ 2p\ 3s\ ^4P_{3/2}$ - $2s\ 2p\ 3p\ ^4P_{5/2}$	5.20	4.19e+01
Fe II	2498.5730	$3d^6\ (^3G)\ 4s\ ^4G_{5/2}$ - $3d^6\ (^3G)\ 4p\ ^4G_{5/2}$	4.50	5.11e+01
Fe IX	2498.8379	$3s^2\ 3p^5\ 3d\ ^3F_4$ - $3s^2\ 3p^5\ 3d\ ^1F_3$	5.95	9.28e+01
Fe II	2499.6521	$3d^6\ (^3H)\ 4s\ ^4H_{9/2}$ - $3d^6\ (^3H)\ 4p\ ^4I_{11/2}$	4.50	2.34e+02
Fe II	2503.1470	$3d^6\ (^3G)\ 4s\ ^4G_{7/2}$ - $3d^6\ (^3G)\ 4p\ ^4G_{7/2}$	4.50	6.21e+01
Fe II	2506.8491	$3d^6\ (^3G)\ 4s\ ^4G_{9/2}$ - $3d^6\ (^3G)\ 4p\ ^4G_{9/2}$	4.50	8.12e+01
O IV	2508.4851	$2s\ 2p\ 3s\ ^4P_{3/2}$ - $2s\ 2p\ 3p\ ^4P_{1/2}$	5.20	3.29e+01

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
C II	2509.8811	2s $2p^2$ $^2P_{1/2}$ - $2p^3$ $^2D_{3/2}$	4.60	3.01e+02
O IV	2509.9709	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4P_{5/2}$	5.20	9.94e+01
C II	2512.4910	2s $2p^2$ $^2P_{3/2}$ - $2p^3$ $^2D_{3/2}$	4.60	5.89e+01
Fe II	2512.5181	$3d^6$ (^{3}H) 4s $^4H_{7/2}$ - $3d^6$ (^{3}H) 4p $^4I_{9/2}$	4.50	1.94e+02
C II	2512.8140	2s $2p^2$ $^2P_{3/2}$ - $2p^3$ $^2D_{5/2}$	4.60	9.85e+01
O IV	2518.1311	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4P_{3/2}$	5.20	5.14e+01
Fe II	2526.1479	$3d^6$ (^{3}H) 4s $^4H_{13/2}$ - $3d^6$ (^{3}H) 4p $^4H_{13/2}$	4.50	2.02e+02
Fe II	2527.0549	$3d^6$ (^{3}P2) 4s $^4P_{5/2}$ - $3d^6$ (^{3}P2) 4p $^4P_{5/2}$	4.50	5.22e+01
Fe III	2527.9080	$3s^2$ $3p^6$ $3d^5$ 4s $^3D_3$ - $3s^2$ $3p^6$ $3d^5$ 4p $^3G_4$	4.55	3.47e+01
Fe II	2530.3059	$3d^6$ (^{3}F2) 4s $^4F_{9/2}$ - $3d^6$ (^{3}F2) 4p $^4F_{9/2}$	4.50	1.16e+02
Fe II	2534.3889	$3d^6$ (^{3}H) 4s $^4H_{11/2}$ - $3d^6$ (^{3}H) 4p $^4H_{11/2}$	4.50	2.07e+02
Fe II	2535.1809	$3d^6$ (^{3}H) 4s $^4H_{7/2}$ - $3d^6$ (^{3}H) 4p $^4H_{7/2}$	4.50	1.12e+02
Fe II	2537.5681	$3d^6$ (^{3}H) 4s $^4H_{9/2}$ - $3d^6$ (^{3}H) 4p $^4H_{9/2}$	4.50	1.34e+02
Fe II	2539.5620	$3d^6$ (^{3}H) 4s $^4H_{11/2}$ - $3d^6$ (^{3}H) 4p $^4G_{9/2}$	4.50	8.54e+01
Fe II	2539.6731	$3d^6$ (^{3}H) 4s $^4H_{9/2}$ - $3d^6$ (^{3}H) 4p $^4G_{7/2}$	4.50	7.18e+01
Fe II	2539.7571	$3d^6$ (^{3}H) 4s $^4H_{13/2}$ - $3d^6$ (^{3}H) 4p $^4G_{11/2}$	4.50	1.06e+02
Si III	2542.5820	3s 3p $^1P_1$ - $3p^2$ $^1D_2$	4.70	2.39e+04
Fe II	2542.5991	$3d^6$ (^{3}H) 4s $^4H_{7/2}$ - $3d^6$ (^{3}H) 4p $^4G_{5/2}$	4.50	7.11e+01
Fe II	2547.4360	$3d^6$ (^{3}F2) 4s $^4F_{7/2}$ - $3d^6$ (^{3}F2) 4p $^4F_{7/2}$	4.50	7.78e+01
Fe II	2550.1599	$3d^6$ (^{3}F2) 4s $^4F_{3/2}$ - $3d^6$ (^{3}F2) 4p $^4F_{3/2}$	4.50	4.06e+01
Fe II	2550.2261	$3d^6$ (^{3}F2) 4s $^4F_{5/2}$ - $3d^6$ (^{3}F2) 4p $^4F_{5/2}$	4.50	5.21e+01
O III	2558.8010	$2s^2$ 2p 3d $^1F_3$ - $2s^2$ 2p 4p $^1D_2$	5.05	4.89e+01
Mn XX	2559.5090	$2s^2$ $2p^2$ $^3P_1$ - $2s^2$ $2p^2$ $^3P_2$	7.05	1.81e+02
Si III	2559.9609	3s 3d $^1D_2$ - 3s 4f $^1F_3$	4.80	5.10e+01
Fe II	2563.3040	$3d^6$ (^{5}D) 4s $^4D_{7/2}$ - $3d^6$ (^{5}D) 4p $^4P_{5/2}$	4.50	2.85e+02
Fe II	2564.2451	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4P_{3/2}$	4.50	1.43e+02
Fe XII	2566.7749	$3s^2$ $3p^3$ $^2D_{3/2}$ - $3s^2$ $3p^3$ $^2P_{3/2}$	6.20	8.48e+01
Fe II	2567.6831	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4P_{1/2}$	4.50	5.52e+01
Fe II	2578.6951	$3d^6$ (^{5}D) 4s $^4D_{1/2}$ - $3d^6$ (^{5}D) 4p $^4P_{1/2}$	4.50	5.43e+01
Fe XIII	2579.5400	$3s^2$ $3p^2$ $^3P_1$ - $3s^2$ $3p^2$ $^1D_2$	6.25	2.88e+02
Fe II	2583.3569	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4P_{3/2}$	4.50	7.04e+01
Fe II	2586.6499	$3d^6$ (^{5}D) 4s $^6D_{9/2}$ - $3d^6$ (^{5}D) 4p $^6D_{7/2}$	4.50	1.86e+02
Fe II	2592.3181	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4P_{5/2}$	4.50	6.14e+01
Fe III	2596.3979	$3s^2$ $3p^6$ $3d^5$ 4s $^3I_7$ - $3s^2$ $3p^6$ $3d^5$ 4p $^3H_6$	4.50	4.14e+01
Ne III *	2597.3989	$2s^2$ $2p^3$ (^{4}S) 3s $^5S_2$ - $2s^2$ $2p^3$ (^{4}S) 3p $^5P_3$	5.05	3.29e+01
Fe II	2599.1470	$3d^6$ (^{5}D) 4s $^6D_{7/2}$ - $3d^6$ (^{5}D) 4p $^6D_{5/2}$	4.50	2.54e+02
Fe II	2600.1731	$3d^6$ (^{5}D) 4s $^6D_{9/2}$ - $3d^6$ (^{5}D) 4p $^6D_{9/2}$	4.50	7.72e+02
Fe II	2607.8660	$3d^6$ (^{5}D) 4s $^6D_{5/2}$ - $3d^6$ (^{5}D) 4p $^6D_{3/2}$	4.50	2.30e+02
Fe II	2612.6541	$3d^6$ (^{5}D) 4s $^6D_{7/2}$ - $3d^6$ (^{5}D) 4p $^6D_{7/2}$	4.50	3.47e+02
Fe II	2614.6050	$3d^6$ (^{5}D) 4s $^6D_{3/2}$ - $3d^6$ (^{5}D) 4p $^6D_{1/2}$	4.50	1.47e+02
Fe II	2618.3989	$3d^6$ (^{5}D) 4s $^6D_{5/2}$ - $3d^6$ (^{5}D) 4p $^6D_{5/2}$	4.50	9.85e+01
Fe II	2622.4519	$3d^6$ (^{5}D) 4s $^6D_{1/2}$ - $3d^6$ (^{5}D) 4p $^6D_{1/2}$	4.50	4.15e+01
Fe II	2626.4509	$3d^6$ (^{5}D) 4s $^6D_{7/2}$ - $3d^6$ (^{5}D) 4p $^6D_{9/2}$	4.50	1.68e+02
Fe II	2629.0779	$3d^6$ (^{5}D) 4s $^6D_{1/2}$ - $3d^6$ (^{5}D) 4p $^6D_{3/2}$	4.50	1.44e+02
Fe II	2631.8320	$3d^6$ (^{5}D) 4s $^6D_{3/2}$ - $3d^6$ (^{5}D) 4p $^6D_{5/2}$	4.50	2.25e+02
Fe II	2632.1079	$3d^6$ (^{5}D) 4s $^6D_{5/2}$ - $3d^6$ (^{5}D) 4p $^6D_{7/2}$	4.50	2.42e+02
Al II	2632.3340	$3p^2$ $^1D_2$ - 3s 4f $^1F_3$	4.50	4.77e+01
Fe III	2646.2029	$3s^2$ $3p^6$ $3d^5$ 4s $^3F_4$ - $3s^2$ $3p^6$ $3d^5$ 4p $^3G_5$	4.55	4.28e+01
Fe XI	2649.4980	$3s^2$ $3p^4$ $^3P_2$ - $3s^2$ $3p^4$ $^1D_2$	6.15	2.82e+02

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
Fe XX	2666.0271	$2s^2\ 2p^3\ ^2D_{3/2}$ - $2s^2\ 2p^3\ ^2D_{5/2}$	7.05	3.27e+03
Al II	2669.9490	$3s^2\ ^1S_0$ - 3s 3p $^3P_1$	4.50	7.75e+02
Cr II	2677.9551	$3d^4$ (^{5}D) 4s $^6D_{9/2}$ - $3d^4$ (^{5}D) 4p $^6D_{9/2}$	4.50	5.22e+01
Ne III	2678.6960	$2s^2\ 2p^3$ (^{4}S) 3s $^3S_1$ - $2s^2\ 2p^3$ (^{4}S) 3p $^3P_2$	5.05	4.26e+01
Fe II	2715.2170	$3d^6$ (^{5}D) 4s $^4D_{7/2}$ - $3d^6$ (^{5}D) 4p $^4D_{5/2}$	4.50	6.52e+01
Fe II	2717.5020	$3d^6$ (^{5}D) 4s $^4D_{7/2}$ - $3d^6$ (^{5}D) 4p $^4F_{7/2}$	4.50	6.77e+01
Fe II	2725.6909	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4F_{5/2}$	4.50	8.27e+01
Fe II	2728.3469	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4D_{3/2}$	4.50	7.67e+01
Fe II	2731.5430	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4F_{3/2}$	4.50	6.19e+01
Fe II	2737.7759	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4D_{1/2}$	4.50	5.34e+01
Ca XVI	2738.2261	$2s^2\ 2p\ ^2P_{1/2}$ - $2s^2\ 2p\ ^2P_{3/2}$	6.80	8.65e+02
Fe II	2740.3579	$3d^6$ (^{5}D) 4s $^4D_{7/2}$ - $3d^6$ (^{5}D) 4p $^4D_{7/2}$	4.50	4.11e+02
Fe II	2744.0090	$3d^6$ (^{5}D) 4s $^4D_{1/2}$ - $3d^6$ (^{5}D) 4p $^4F_{3/2}$	4.50	1.52e+02
Fe II	2747.2959	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4F_{5/2}$	4.50	2.47e+02
Fe II	2747.7939	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4D_{5/2}$	4.50	1.88e+02
Fe II	2749.9939	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4D_{3/2}$	4.50	8.49e+01
Fe II	2750.1340	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4F_{7/2}$	4.50	3.88e+02
Fe II	2750.2991	$3d^6$ (^{5}D) 4s $^4D_{1/2}$ - $3d^6$ (^{5}D) 4p $^4D_{1/2}$	4.50	5.24e+01
Fe II	2756.5510	$3d^6$ (^{5}D) 4s $^4D_{7/2}$ - $3d^6$ (^{5}D) 4p $^4F_{9/2}$	4.50	1.57e+02
Fe II	2762.6289	$3d^6$ (^{5}D) 4s $^4D_{1/2}$ - $3d^6$ (^{5}D) 4p $^4D_{3/2}$	4.50	5.21e+01
Cr II	2767.3540	$3d^4$ (^{5}D) 4s $^6D_{9/2}$ - $3d^4$ (^{5}D) 4p $^6P_{7/2}$	4.50	3.37e+01
Fe II	2769.7529	$3d^6$ (^{5}D) 4s $^4D_{3/2}$ - $3d^6$ (^{5}D) 4p $^4D_{5/2}$	4.50	7.40e+01
Fe II	2773.5449	$3d^6$ (^{5}D) 4s $^4D_{5/2}$ - $3d^6$ (^{5}D) 4p $^4D_{7/2}$	4.50	6.51e+01
O V	2781.8269	2s 3s $^3S_1$ - 2s 3p $^3P_2$	5.40	1.75e+02
O V	2787.8140	2s 3s $^3S_1$ - 2s 3p $^3P_1$	5.40	7.11e+01
O V	2790.6689	2s 3s $^3S_1$ - 2s 3p $^3P_0$	5.40	3.38e+01
Mg II	2791.5959	3p $^2P_{1/2}$ - 3d $^2D_{3/2}$	4.50	9.65e+01
Mg II	2796.3501	3s $^2S_{1/2}$ - 3p $^2P_{3/2}$	4.50	4.61e+03
Mg II	2798.8230	3p $^2P_{3/2}$ - 3d $^2D_{5/2}$	4.50	1.73e+02
Mg II	2803.5310	3s $^2S_{1/2}$ - 3p $^2P_{1/2}$	4.50	2.31e+03
Fe III	2814.0710	$3s^2\ 3p^6\ 3d^5$ 4s $^3G_5$ - $3s^2\ 3p^6\ 3d^5$ 4p $^3F_4$	4.55	3.35e+01
Al II	2817.0129	3s 3p $^1P_1$ - 3s 4s $^1S_0$	4.50	2.67e+02
Cr II	2823.1980	$3d^4$ (^{3}H) 4s $^4H_{13/2}$ - $3d^4$ (^{3}H) 4p $^4I_{15/2}$	4.50	3.35e+01
Cr II	2831.2991	$3d^4$ (^{3}H) 4s $^4H_{11/2}$ - $3d^4$ (^{3}H) 4p $^4I_{13/2}$	4.50	4.58e+01
Cr II	2836.4661	$3d^4$ (^{5}D) 4s $^6D_{9/2}$ - $3d^4$ (^{5}D) 4p $^6F_{11/2}$	4.50	9.54e+01
C II	2837.5410	$2s\ 2p^2\ ^2S_{1/2}$ - $2s^2$ 3p $^2P_{3/2}$	4.60	1.13e+03
C II	2838.4390	$2s\ 2p^2\ ^2S_{1/2}$ - $2s^2$ 3p $^2P_{1/2}$	4.60	1.57e+03
Cr II	2840.8501	$3d^4$ (^{3}H) 4s $^4H_{9/2}$ - $3d^4$ (^{3}H) 4p $^4I_{11/2}$	4.50	7.11e+01
Cr II	2844.0811	$3d^4$ (^{5}D) 4s $^6D_{7/2}$ - $3d^4$ (^{5}D) 4p $^6F_{9/2}$	4.50	7.04e+01
Cr II	2850.6721	$3d^4$ (^{5}D) 4s $^6D_{5/2}$ - $3d^4$ (^{5}D) 4p $^6F_{7/2}$	4.50	4.20e+01
Cr II	2852.1899	$3d^4$ (^{3}H) 4s $^4H_{7/2}$ - $3d^4$ (^{3}H) 4p $^4I_{9/2}$	4.50	3.74e+01
S III	2856.8330	$3s^2$ 3p 4p $^3D_2$ - $3s^2$ 3p 4d $^3F_3$	4.85	3.81e+01
S III	2864.3540	$3s^2$ 3p 4p $^3D_3$ - $3s^2$ 3p 4d $^3F_4$	4.85	6.94e+01
Cr II	2876.8340	$3d^4$ (^{5}D) 4s $^4D_{7/2}$ - $3d^4$ (^{5}D) 4p $^4D_{7/2}$	4.50	3.71e+01
Cr XIX	2886.2529	$2s^2\ 2p^2\ ^3P_1$ - $2s^2\ 2p^2\ ^3P_2$	7.00	3.30e+02
S III	2910.3530	$3s^2$ 3p 4s $^1P_1$ - $3s^2$ 3p 4p $^1S_0$	4.80	4.11e+01
Mg II	2929.4929	3p $^2P_{1/2}$ - 4s $^2S_{1/2}$	4.50	4.03e+01
Mg II	2937.3750	3p $^2P_{3/2}$ - 4s $^2S_{1/2}$	4.50	8.07e+01
He I	2945.9600	1s 2s $^3S_1$ - 1s 5p $^3P_0$	4.50	7.32e+01

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
He I	2945.9651	1s 2s $^3S_1$ - 1s 5p $^3P_1$	4.50	2.20e+02
He I	2945.9651	1s 2s $^3S_1$ - 1s 5p $^3P_2$	4.50	3.67e+02
Cr II	2972.7690	3d^4 (^{3}H) 4s $^4H_{13/2}$ - 3d^4 (^{3}H) 4p $^4H_{13/2}$	4.50	3.36e+01
O III	2984.6470	2s^2 2p 3s $^1P_1$ - 2s^2 2p 3p $^1D_2$	5.00	1.35e+02
Fe II	2985.6951	3d^7 $^4P_{5/2}$ - 3d^6 (^{5}D) 4p $^4P_{5/2}$	4.50	5.56e+01
O III	3024.3000	2s^2 2p 3s $^3P_1$ - 2s^2 2p 3p $^3P_2$	5.00	8.55e+01
O III	3025.4170	2s^2 2p 3s $^3P_0$ - 2s^2 2p 3p $^3P_1$	5.00	6.81e+01
O III	3036.2930	2s^2 2p 3s $^3P_1$ - 2s^2 2p 3p $^3P_1$	5.00	5.09e+01
Cr II	3041.8091	3d^4 (^{3}H) 4s $^2H_{9/2}$ - 3d^4 (^{3}H) 4p $^2I_{11/2}$	4.50	3.37e+01
O III	3043.8811	2s^2 2p 3s $^3P_1$ - 2s^2 2p 3p $^3P_0$	5.00	6.86e+01
O III	3047.9810	2s^2 2p 3s $^3P_2$ - 2s^2 2p 3p $^3P_2$	5.00	2.58e+02
O III	3060.1631	2s^2 2p 3s $^3P_2$ - 2s^2 2p 3p $^3P_1$	5.00	8.75e+01
O IV	3064.3169	2s^2 3s $^2S_{1/2}$ - 2s^2 3p $^2P_{3/2}$	5.20	1.95e+02
O IV	3072.4890	2s^2 3s $^2S_{1/2}$ - 2s^2 3p $^2P_{1/2}$	5.20	9.61e+01
Si III	3087.1250	3s 3d $^3D_3$ - 3s 4p $^3P_2$	4.80	9.79e+02
Si III	3087.3250	3s 3d $^3D_2$ - 3s 4p $^3P_2$	4.80	1.75e+02
Si III	3094.3181	3s 3d $^3D_2$ - 3s 4p $^3P_1$	4.75	4.67e+02
Si III	3094.5481	3s 3d $^3D_1$ - 3s 4p $^3P_1$	4.75	1.59e+02
Si III	3097.7209	3s 3d $^3D_1$ - 3s 4p $^3P_0$	4.80	2.25e+02
S IV	3118.5190	3s^2 4s $^2S_{1/2}$ - 3s^2 4p $^2P_{1/2}$	5.00	3.38e+01
Cr II	3125.8831	3d^4 (^{5}D) 4s $^4D_{5/2}$ - 3d^4 (^{5}D) 4p $^4F_{7/2}$	4.50	4.31e+01
Cr II	3132.9641	3d^4 (^{5}D) 4s $^4D_{7/2}$ - 3d^4 (^{5}D) 4p $^4F_{9/2}$	4.50	6.37e+01
O II	3135.6221	2s^2 2p^2 3p $^4D_{7/2}$ - 2s^2 2p^2 4s $^4P_{5/2}$	4.75	3.54e+01
Si III	3186.0430	3s 4p $^1P_1$ - 3s 5s $^1S_0$	4.80	6.75e+01
He I	3188.6550	1s 2s $^3S_1$ - 1s 4p $^3P_0$	4.50	2.19e+02
He I	3188.6660	1s 2s $^3S_1$ - 1s 4p $^3P_1$	4.50	6.60e+02
He I	3188.6670	1s 2s $^3S_1$ - 1s 4p $^3P_2$	4.50	1.10e+03
He II	3203.8721	3p $^2P_{1/2}$ - 5d $^2D_{3/2}$	4.90	5.16e+01
He II	3203.9080	3p $^2P_{1/2}$ - 5s $^2S_{1/2}$	4.90	4.16e+01
He II	3204.0381	3p $^2P_{3/2}$ - 5d $^2D_{5/2}$	4.90	9.28e+01
He II	3204.0859	3p $^2P_{3/2}$ - 5s $^2S_{1/2}$	4.90	8.32e+01
Si III	3242.5630	3s 4p $^3P_2$ - 3s 5s $^3S_1$	4.80	3.59e+01
O III	3261.8020	2s^2 2p 3p $^3D_2$ - 2s^2 2p 3d $^3F_3$	5.00	1.84e+02
O III	3266.2771	2s^2 2p 3p $^3D_3$ - 2s^2 2p 3d $^3F_4$	5.00	2.74e+02
O III	3268.1450	2s^2 2p 3p $^3D_1$ - 2s^2 2p 3d $^3F_2$	5.00	5.34e+01
S III	3325.8169	3s^2 3p 3d $^3P_2$ - 3s^2 3p 4p $^3P_2$	4.80	7.14e+01
Ca XII	3328.4519	2s^2 2p^5 $^2P_{3/2}$ - 2s^2 2p^5 $^2P_{1/2}$	6.50	5.75e+01
N III	3368.3320	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4P_{5/2}$	5.00	5.82e+01
Ti XVII	3371.7720	2s^2 2p^2 $^3P_0$ - 2s^2 2p^2 $^3P_1$	6.85	7.44e+01
O IV	3382.1831	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4D_{5/2}$	5.20	7.13e+01
O IV	3386.4900	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4D_{7/2}$	5.25	1.42e+02
Fe XIII	3388.9109	3s^2 3p^2 $^3P_2$ - 3s^2 3p^2 $^1D_2$	6.25	2.68e+02
N IV	3479.7129	2s 3s $^3S_1$ - 2s 3p $^3P_2$	5.20	1.01e+02
N IV	3483.9561	2s 3s $^3S_1$ - 2s 3p $^3P_1$	5.20	5.71e+01
S III	3498.2900	3s^2 3p 4s $^1P_1$ - 3s^2 3p 4p $^1D_2$	4.80	1.16e+02
C II s *	3517.8811	2s 2p 3p $^4P_{5/2}$ - 2s 2p 4s $^4P_{5/2}$	4.70	3.64e+01
Al II	3587.5730	3s 3d $^3D_3$ - 3s 4f $^3F_4$	4.50	5.46e+01
Al II	3588.0879	3s 3d $^3D_2$ - 3s 4f $^3F_3$	4.50	3.75e+01
Si III	3591.4900	3s 4p $^1P_1$ - 3s 4d $^1D_2$	4.80	6.13e+01

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
Ni XVI	3602.2539	$3s^2\ 3p\ ^2P_{1/2}$ - $3s^2\ 3p\ ^2P_{3/2}$	6.45	1.84e+02
S III	3633.0339	$3s^2\ 3p\ 3d\ ^3P_2$ - $3s^2\ 3p\ 4p\ ^3D_3$	4.80	4.12e+01
Ca XVII	3646.8401	$2s\ 2p\ ^3P_1$ - $2s\ 2p\ ^3P_2$	6.85	1.18e+02
O II	3713.8000	$2s^2\ 2p^2\ 3s\ ^4P_{1/2}$ - $2s^2\ 2p^2\ 3p\ ^4S_{3/2}$	4.75	5.03e+01
O II	3728.3799	$2s^2\ 2p^2\ 3s\ ^4P_{3/2}$ - $2s^2\ 2p^2\ 3p\ ^4S_{3/2}$	4.75	1.01e+02
O IV	3737.9131	$2s\ 2p\ 3p\ ^4D_{7/2}$ - $2s\ 2p\ 3d\ ^4F_{9/2}$	5.25	5.08e+01
O II	3750.5581	$2s^2\ 2p^2\ 3s\ ^4P_{5/2}$ - $2s^2\ 2p^2\ 3p\ ^4S_{3/2}$	4.75	1.54e+02
O III	3755.7561	$2s^2\ 2p\ 3s\ ^3P_1$ - $2s^2\ 2p\ 3p\ ^3D_2$	5.00	1.79e+02
O III	3758.2959	$2s^2\ 2p\ 3s\ ^3P_0$ - $2s^2\ 2p\ 3p\ ^3D_1$	5.00	6.68e+01
O III	3760.9399	$2s^2\ 2p\ 3s\ ^3P_2$ - $2s^2\ 2p\ 3p\ ^3D_3$	5.00	3.40e+02
O III	3775.0950	$2s^2\ 2p\ 3s\ ^3P_1$ - $2s^2\ 2p\ 3p\ ^3D_1$	5.00	4.81e+01
O III	3792.3459	$2s^2\ 2p\ 3s\ ^3P_2$ - $2s^2\ 2p\ 3p\ ^3D_2$	5.00	5.56e+01
Si III	3792.5190	$3s\ 4p\ ^3P_0$ - $3s\ 4d\ ^3D_1$	4.80	7.74e+01
Si III	3797.1990	$3s\ 4p\ ^3P_1$ - $3s\ 4d\ ^3D_2$	4.80	1.80e+02
Si III	3797.2859	$3s\ 4p\ ^3P_1$ - $3s\ 4d\ ^3D_1$	4.80	5.79e+01
Si III	3807.6089	$3s\ 4p\ ^3P_2$ - $3s\ 4d\ ^3D_3$	4.80	3.73e+02
Si III	3807.7830	$3s\ 4p\ ^3P_2$ - $3s\ 4d\ ^3D_2$	4.80	5.94e+01
O III *	3854.3811	$2s\ 2p^2\ 3s\ ^5P_3$ - $2s\ 2p^2\ 3p\ ^5D_4$	5.05	6.04e+01
Si II	3854.7571	$3s\ 3p^2\ ^2D_{3/2}$ - $3s^2\ 4p\ ^2P_{3/2}$	4.50	3.71e+01
Si II	3857.1111	$3s\ 3p^2\ ^2D_{5/2}$ - $3s^2\ 4p\ ^2P_{3/2}$	4.50	3.34e+02
Si II	3863.6909	$3s\ 3p^2\ ^2D_{3/2}$ - $3s^2\ 4p\ ^2P_{1/2}$	4.50	1.86e+02
He I	3889.7070	$1s\ 2s\ ^3S_1$ - $1s\ 3p\ ^3P_0$	4.50	1.01e+03
He I	3889.7480	$1s\ 2s\ ^3S_1$ - $1s\ 3p\ ^3P_1$	4.50	3.03e+03
He I	3889.7510	$1s\ 2s\ ^3S_1$ - $1s\ 3p\ ^3P_2$	4.50	5.02e+03
Al II	3901.7690	$3s\ 3p\ ^1P_1$ - $3p^2\ ^1D_2$	4.50	8.88e+02
O II	3913.0669	$2s^2\ 2p^2\ 3s\ ^2D_{5/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{3/2}$	4.75	5.57e+01
C II	3920.0769	$2s^2\ 3p\ ^2P_{1/2}$ - $2s^2\ 4s\ ^2S_{1/2}$	4.65	1.63e+02
C II	3921.7920	$2s^2\ 3p\ ^2P_{3/2}$ - $2s^2\ 4s\ ^2S_{1/2}$	4.65	3.26e+02
Ca II	3934.7771	$3p^6\ 4s\ ^2S_{1/2}$ - $3p^6\ 4p\ ^2P_{3/2}$	4.50	2.40e+02
O II	3946.1589	$2s^2\ 2p^2\ 3s\ ^2P_{1/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{3/2}$	4.70	5.47e+01
O II	3955.4771	$2s^2\ 2p^2\ 3s\ ^2P_{1/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{1/2}$	4.70	1.08e+02
Ca II	3969.5911	$3p^6\ 4s\ ^2S_{1/2}$ - $3p^6\ 4p\ ^2P_{1/2}$	4.50	1.20e+02
O II	3974.3889	$2s^2\ 2p^2\ 3s\ ^2P_{3/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{3/2}$	4.70	2.66e+02
O II	3983.8420	$2s^2\ 2p^2\ 3s\ ^2P_{3/2}$ - $2s^2\ 2p^2\ 3p\ ^2P_{1/2}$	4.70	5.46e+01
N II	3996.1270	$2s^2\ 2p\ 3s\ ^1P_1$ - $2s^2\ 2p\ 3p\ ^1D_2$	4.65	1.38e+02
He I	4027.3240	$1s\ 2p\ ^3P_2$ - $1s\ 5d\ ^3D_3$	4.50	3.70e+02
He I	4027.3240	$1s\ 2p\ ^3P_2$ - $1s\ 5d\ ^3D_2$	4.50	6.48e+01
He I	4027.3340	$1s\ 2p\ ^3P_1$ - $1s\ 5d\ ^3D_1$	4.50	6.93e+01
He I	4027.3359	$1s\ 2p\ ^3P_1$ - $1s\ 5d\ ^3D_2$	4.50	1.94e+02
He I	4027.4951	$1s\ 2p\ ^3P_0$ - $1s\ 5d\ ^3D_1$	4.50	9.23e+01
O II	4070.7661	$2s^2\ 2p^2\ 3p\ ^4D_{1/2}$ - $2s^2\ 2p^2\ 3d\ ^4F_{3/2}$	4.75	3.50e+01
O II	4071.0149	$2s^2\ 2p^2\ 3p\ ^4D_{3/2}$ - $2s^2\ 2p^2\ 3d\ ^4F_{5/2}$	4.75	5.68e+01
O II	4073.2871	$2s^2\ 2p^2\ 3p\ ^4D_{5/2}$ - $2s^2\ 2p^2\ 3d\ ^4F_{7/2}$	4.75	8.41e+01
O II	4077.0061	$2s^2\ 2p^2\ 3p\ ^4D_{7/2}$ - $2s^2\ 2p^2\ 3d\ ^4F_{9/2}$	4.75	1.18e+02
Ca XIII	4087.4719	$2s^2\ 2p^4\ ^3P_2$ - $2s^2\ 2p^4\ ^3P_1$	6.60	9.23e+01
N III	4098.5132	$2s^2\ 3s\ ^2S_{1/2}$ - $2s^2\ 3p\ ^2P_{3/2}$	4.95	1.08e+02
N III	4104.5508	$2s^2\ 3s\ ^2S_{1/2}$ - $2s^2\ 3p\ ^2P_{1/2}$	4.95	5.37e+01
O II	4120.3809	$2s^2\ 2p^2\ 3p\ ^4P_{5/2}$ - $2s^2\ 2p^2\ 3d\ ^4D_{7/2}$	4.75	5.25e+01
He I	4121.9731	$1s\ 2p\ ^3P_2$ - $1s\ 5s\ ^3S_1$	4.50	1.77e+02

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
He I	4121.9858	1s 2p $^3P_1$ - 1s 5s $^3S_1$	4.50	1.06e+02
He I	4122.1538	1s 2p $^3P_0$ - 1s 5s $^3S_1$	4.50	3.55e+01
Si II	4129.2178	$3s^2$ 3d $^2D_{3/2}$ - $3s^2$ 4f $^2F_{5/2}$	4.50	4.41e+01
Si II	4132.0591	$3s^2$ 3d $^2D_{5/2}$ - $3s^2$ 4f $^2F_{7/2}$	4.50	6.38e+01
O II	4190.9741	$2s^2$ $2p^2$ 3p $^2F_{7/2}$ - $2s^2$ $2p^2$ 3d $^2G_{9/2}$	4.75	4.14e+01
S III	4254.7021	$3s^2$ 3p 4s $^3P_2$ - $3s^2$ 3p 4p $^3D_3$	4.80	3.58e+01
C II	4268.2021	$2s^2$ 3d $^2D_{3/2}$ - $2s^2$ 4f $^2F_{5/2}$	4.65	5.08e+02
C II	4268.4619	$2s^2$ 3d $^2D_{5/2}$ - $2s^2$ 4f $^2F_{5/2}$	4.65	3.64e+01
C II	4268.4619	$2s^2$ 3d $^2D_{5/2}$ - $2s^2$ 4f $^2F_{7/2}$	4.65	1.08e+03
O II	4318.3491	$2s^2$ $2p^2$ 3s $^4P_{1/2}$ - $2s^2$ $2p^2$ 3p $^4P_{3/2}$	4.70	4.00e+01
O II	4320.8301	$2s^2$ $2p^2$ 3s $^4P_{3/2}$ - $2s^2$ $2p^2$ 3p $^4P_{5/2}$	4.70	4.41e+01
H I	4341.6470	2p $^2P_{1/2}$ - 5d $^2D_{3/2}$	4.50	1.13e+03
H I	4341.6509	2p $^2P_{1/2}$ - 5s $^2S_{1/2}$	4.50	4.85e+02
H I	4341.6538	2s $^2S_{1/2}$ - 5p $^2P_{3/2}$	4.50	6.21e+02
H I	4341.6582	2s $^2S_{1/2}$ - 5p $^2P_{1/2}$	4.50	3.10e+02
H I	4341.7148	2p $^2P_{3/2}$ - 5d $^2D_{5/2}$	4.50	2.03e+03
H I	4341.7158	2p $^2P_{3/2}$ - 5d $^2D_{3/2}$	4.50	2.25e+02
H I	4341.7202	2p $^2P_{3/2}$ - 5s $^2S_{1/2}$	4.50	9.69e+02
O II	4346.7871	$2s^2$ $2p^2$ 3s $^4P_{3/2}$ - $2s^2$ $2p^2$ 3p $^4P_{1/2}$	4.70	4.53e+01
O II	4348.6392	$2s^2$ $2p^2$ 3s $^2D_{3/2}$ - $2s^2$ $2p^2$ 3p $^2D_{3/2}$	4.75	9.60e+01
O II	4350.6450	$2s^2$ $2p^2$ 3s $^4P_{5/2}$ - $2s^2$ $2p^2$ 3p $^4P_{5/2}$	4.70	1.19e+02
O II	4352.4810	$2s^2$ $2p^2$ 3s $^2D_{5/2}$ - $2s^2$ $2p^2$ 3p $^2D_{5/2}$	4.75	1.53e+02
O II	4368.1279	$2s^2$ $2p^2$ 3s $^4P_{5/2}$ - $2s^2$ $2p^2$ 3p $^4P_{3/2}$	4.70	4.33e+01
He I	4389.1621	1s 2p $^1P_1$ - 1s 5d $^1D_2$	4.50	1.03e+02
C II s *	4402.6099	2s 2p 3d $^4D_{7/2}$ - 2s 2p 4p $^4P_{5/2}$	4.70	3.60e+01
Ar XIV	4413.8032	$2s^2$ 2p $^2P_{1/2}$ - $2s^2$ 2p $^2P_{3/2}$	6.60	2.49e+02
O II	4416.1421	$2s^2$ $2p^2$ 3s $^2P_{3/2}$ - $2s^2$ $2p^2$ 3p $^2D_{5/2}$	4.70	5.02e+02
O II	4418.2100	$2s^2$ $2p^2$ 3s $^2P_{1/2}$ - $2s^2$ $2p^2$ 3p $^2D_{3/2}$	4.70	2.80e+02
He I	4438.7988	1s 2p $^1P_1$ - 1s 5s $^1S_0$	4.50	6.89e+01
O II	4453.6289	$2s^2$ $2p^2$ 3s $^2P_{3/2}$ - $2s^2$ $2p^2$ 3p $^2D_{3/2}$	4.70	5.43e+01
He I	4472.7290	1s 2p $^3P_2$ - 1s 4d $^3D_2$	4.50	2.10e+02
He I	4472.7290	1s 2p $^3P_2$ - 1s 4d $^3D_3$	4.50	1.20e+03
He I	4472.7402	1s 2p $^3P_1$ - 1s 4d $^3D_1$	4.50	2.25e+02
He I	4472.7441	1s 2p $^3P_1$ - 1s 4d $^3D_2$	4.50	6.29e+02
He I	4472.9380	1s 2p $^3P_0$ - 1s 4d $^3D_1$	4.50	2.97e+02
N III	4516.1191	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4D_{7/2}$	5.00	5.09e+01
O II *	4542.9971	2s $2p^3$ 3s $^6S_{5/2}$ - 2s $2p^3$ 3p $^6P_{7/2}$	4.80	6.81e+01
O II *	4546.4668	2s $2p^3$ 3s $^6S_{5/2}$ - 2s $2p^3$ 3p $^6P_{5/2}$	4.80	5.21e+01
O II *	4548.9282	2s $2p^3$ 3s $^6S_{5/2}$ - 2s $2p^3$ 3p $^6P_{3/2}$	4.80	3.52e+01
Si III	4553.8789	3s 4s $^3S_1$ - 3s 4p $^3P_2$	4.80	6.23e+02
Si III	4569.1099	3s 4s $^3S_1$ - 3s 4p $^3P_1$	4.75	3.31e+02
Si III	4576.0308	3s 4s $^3S_1$ - 3s 4p $^3P_0$	4.80	1.17e+02
O II	4592.2539	$2s^2$ $2p^2$ 3s $^2D_{5/2}$ - $2s^2$ $2p^2$ 3p $^2F_{7/2}$	4.75	1.29e+02
O II	4597.4692	$2s^2$ $2p^2$ 3s $^2D_{3/2}$ - $2s^2$ $2p^2$ 3p $^2F_{5/2}$	4.75	9.08e+01
N II	4631.8359	$2s^2$ 2p 3s $^3P_2$ - $2s^2$ 2p 3p $^3P_2$	4.65	6.46e+01
O II	4640.1558	$2s^2$ $2p^2$ 3s $^4P_{1/2}$ - $2s^2$ $2p^2$ 3p $^4D_{3/2}$	4.70	1.05e+02
O II	4643.1079	$2s^2$ $2p^2$ 3s $^4P_{3/2}$ - $2s^2$ $2p^2$ 3p $^4D_{5/2}$	4.70	2.56e+02
C III	4648.7202	2s 3s $^3S_1$ - 2s 3p $^3P_2$	4.95	1.72e+03
O II	4650.4492	$2s^2$ $2p^2$ 3s $^4P_{5/2}$ - $2s^2$ $2p^2$ 3p $^4D_{7/2}$	4.70	4.69e+02

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
C III	4651.5518	2s 3s $^3S_1$ - 2s 3p $^3P_1$	4.95	1.01e+03
O II	4652.1362	$2s^2$ $2p^2$ 3s $^4P_{1/2}$ - $2s^2$ $2p^2$ 3p $^4D_{1/2}$	4.70	1.01e+02
C III	4652.7861	2s 3s $^3S_1$ - 2s 3p $^3P_0$	4.95	3.45e+02
O II	4662.9390	$2s^2$ $2p^2$ 3s $^4P_{3/2}$ - $2s^2$ $2p^2$ 3p $^4D_{3/2}$	4.70	1.20e+02
Al II	4664.3530	$3p^2$ $^1D_2$ - 3s 4p $^1P_1$	4.50	7.22e+01
O II	4677.5532	$2s^2$ $2p^2$ 3s $^4P_{5/2}$ - $2s^2$ $2p^2$ 3p $^4D_{5/2}$	4.70	9.09e+01
He II	4686.6880	3p $^2P_{1/2}$ - 4d $^2D_{3/2}$	4.90	1.15e+02
He II	4686.7192	3s $^2S_{1/2}$ - 4p $^2P_{3/2}$	4.90	4.35e+01
He II	4686.8359	3p $^2P_{1/2}$ - 4s $^2S_{1/2}$	4.90	8.66e+01
He II	4687.0151	3d $^2D_{3/2}$ - 4f $^2F_{5/2}$	4.90	2.99e+02
He II	4687.0161	3p $^2P_{3/2}$ - 4d $^2D_{5/2}$	4.90	2.07e+02
He II	4687.1152	3d $^2D_{5/2}$ - 4f $^2F_{7/2}$	4.90	4.23e+02
He II	4687.2168	3p $^2P_{3/2}$ - 4s $^2S_{1/2}$	4.90	1.73e+02
He I	4714.4580	1s 2p $^3P_2$ - 1s 4s $^3S_1$	4.50	1.42e+02
He I	4714.4751	1s 2p $^3P_1$ - 1s 4s $^3S_1$	4.50	8.50e+01
Ni XVII	4750.1431	3s 3p $^3P_1$ - 3s 3p $^3P_2$	6.70	5.95e+01
S II	4816.8979	$3p^2$ (^{3}P) 4s $^4P_{5/2}$ - $3p^2$ (^{3}P) 4p $^4S_{3/2}$	4.50	3.80e+01
H I	4862.6372	2p $^2P_{1/2}$ - 4d $^2D_{3/2}$	4.50	2.59e+03
H I	4862.6450	2s $^2S_{1/2}$ - 4p $^2P_{3/2}$	4.50	1.28e+03
H I	4862.6460	2p $^2P_{1/2}$ - 4s $^2S_{1/2}$	4.50	1.14e+03
H I	4862.6558	2s $^2S_{1/2}$ - 4p $^2P_{1/2}$	4.50	6.37e+02
H I	4862.7202	2p $^2P_{3/2}$ - 4d $^2D_{5/2}$	4.50	4.66e+03
H I	4862.7231	2p $^2P_{3/2}$ - 4d $^2D_{3/2}$	4.50	5.19e+02
H I	4862.7329	2p $^2P_{3/2}$ - 4s $^2S_{1/2}$	4.50	2.28e+03
He I	4923.3052	1s 2p $^1P_1$ - 1s 4d $^1D_2$	4.50	4.33e+02
N II	5006.5459	$2s^2$ 2p 3p $^3D_3$ - $2s^2$ 2p 3d $^3F_4$	4.70	3.30e+01
S II	5015.4399	$3p^2$ (^{3}P) 4s $^2P_{3/2}$ - $3p^2$ (^{3}P) 4p $^2P_{3/2}$	4.50	3.57e+01
He I	5017.0771	1s 2s $^1S_0$ - 1s 3p $^1P_1$	4.50	4.19e+01
S II	5033.8389	$3p^2$ (^{3}P) 4s $^4P_{5/2}$ - $3p^2$ (^{3}P) 4p $^4P_{5/2}$	4.50	3.29e+01
He I	5049.1460	1s 2p $^1P_1$ - 1s 4s $^1S_0$	4.50	2.00e+02
Si II	5057.3940	$3s^2$ 4p $^2P_{3/2}$ - $3s^2$ 4d $^2D_{5/2}$	4.50	5.87e+01
C II	5134.3770	2s 2p 3s $^4P_{1/2}$ - 2s 2p 3p $^4P_{3/2}$	4.65	1.55e+02
C II	5134.7119	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4P_{5/2}$	4.65	1.69e+02
C II	5140.6060	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4P_{3/2}$	4.65	4.83e+01
C II	5144.9268	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4P_{1/2}$	4.65	1.58e+02
C II	5146.5981	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4P_{5/2}$	4.65	3.97e+02
C II	5152.5200	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4P_{3/2}$	4.65	1.77e+02
Fe XIV	5304.4771	$3s^2$ 3p $^2P_{1/2}$ - $3s^2$ 3p $^2P_{3/2}$	6.35	8.94e+02
S II	5322.2031	$3p^2$ (^{1}D) 4s $^2D_{5/2}$ - $3p^2$ (^{1}D) 4p $^2F_{7/2}$	4.50	5.43e+01
C II *	5333.4492	2s 2p 3s $^4P_{1/2}$ - 2s 2p 3s $^2P_{3/2}$	4.65	4.03e+01
Ca XV	5445.4370	$2s^2$ $2p^2$ $^3P_1$ - $2s^2$ $2p^2$ $^3P_2$	6.75	2.22e+02
S II	5455.3721	$3p^2$ (^{3}P) 4s $^4P_{5/2}$ - $3p^2$ (^{3}P) 4p $^4D_{7/2}$	4.50	1.18e+02
S II	5607.7090	$3p^2$ (^{3}P) 3d $^4F_{9/2}$ - $3p^2$ (^{3}P) 4p $^4D_{7/2}$	4.50	4.82e+01
S II	5641.5420	$3p^2$ (^{3}P) 4s $^2P_{3/2}$ - $3p^2$ (^{3}P) 4p $^2D_{5/2}$	4.50	3.74e+01
N II	5681.1338	$2s^2$ 2p 3s $^3P_2$ - $2s^2$ 2p 3p $^3D_3$	4.65	6.63e+01
Ca XV	5695.0850	$2s^2$ $2p^2$ $^3P_0$ - $2s^2$ $2p^2$ $^3P_1$	6.70	4.42e+02
Si III	5741.3188	3s 4s $^1S_0$ - 3s 4p $^1P_1$	4.80	4.17e+01
He I	5877.2271	1s 2p $^3P_2$ - 1s 3d $^3D_1$	4.50	8.72e+01
He I	5877.2432	1s 2p $^3P_2$ - 1s 3d $^3D_3$	4.50	7.10e+03

Table 1: (continued)

Ion	λ (Å)	Transition	T_{max}	Int
He I	5877.2432	1s 2p $^3P_2$ - 1s 3d $^3D_2$	4.50	1.14e+03
He I	5877.2539	1s 2p $^3P_1$ - 1s 3d $^3D_1$	4.50	1.31e+03
He I	5877.2690	1s 2p $^3P_1$ - 1s 3d $^3D_2$	4.50	3.44e+03
He I	5877.5952	1s 2p $^3P_0$ - 1s 3d $^3D_1$	4.50	1.74e+03
Ar XV	5945.5508	2s 2p $^3P_1$ - 2s 2p $^3P_2$	6.70	3.49e+01
C II *	6067.8921	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3s $^2P_{3/2}$	4.65	6.80e+01
C II *	6068.2598	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3s $^2P_{3/2}$	4.65	9.49e+01
Si II	6348.8638	$3s^2$ 4s $^2S_{1/2}$ - $3s^2$ 4p $^2P_{3/2}$	4.50	3.26e+02
Si II	6373.1328	$3s^2$ 4s $^2S_{1/2}$ - $3s^2$ 4p $^2P_{1/2}$	4.50	1.62e+02
Fe X	6376.2900	$3s^2$ $3p^5$ $^2P_{3/2}$ - $3s^2$ $3p^5$ $^2P_{1/2}$	6.05	8.87e+01
N II	6483.8398	$2s^2$ 2p 3s $^1P_1$ - $2s^2$ 2p 3p $^1P_1$	4.65	3.93e+01
H I	6564.5229	2p $^2P_{1/2}$ - 3d $^2D_{3/2}$	4.50	1.30e+04
H I	6564.5381	2s $^2S_{1/2}$ - 3p $^2P_{3/2}$	4.50	3.60e+03
H I	6564.5640	2p $^2P_{1/2}$ - 3s $^2S_{1/2}$	4.50	5.67e+03
H I	6564.5840	2s $^2S_{1/2}$ - 3p $^2P_{1/2}$	4.50	1.80e+03
H I	6564.6650	2p $^2P_{3/2}$ - 3d $^2D_{5/2}$	4.50	2.34e+04
H I	6564.6802	2p $^2P_{3/2}$ - 3d $^2D_{3/2}$	4.50	2.60e+03
H I	6564.7222	2p $^2P_{3/2}$ - 3s $^2S_{1/2}$	4.50	1.14e+04
C II	6579.8691	$2s^2$ 3s $^2S_{1/2}$ - $2s^2$ 3p $^2P_{3/2}$	4.60	3.77e+02
C II	6584.7002	$2s^2$ 3s $^2S_{1/2}$ - $2s^2$ 3p $^2P_{1/2}$	4.60	6.80e+02
O II	6642.8848	$2s^2$ $2p^2$ 3s $^2P_{1/2}$ - $2s^2$ $2p^2$ 3p $^2S_{1/2}$	4.70	7.92e+01
He I	6679.9951	1s 2p $^1P_1$ - 1s 3d $^1D_2$	4.50	1.34e+03
Ni XV	6703.5361	$3s^2$ $3p^2$ $^3P_0$ - $3s^2$ $3p^2$ $^3P_1$	6.45	4.00e+01
O II	6723.2769	$2s^2$ $2p^2$ 3s $^2P_{3/2}$ - $2s^2$ $2p^2$ 3p $^2S_{1/2}$	4.70	1.44e+02
C II	6781.8130	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4D_{5/2}$	4.65	1.14e+02
C II	6782.4658	2s 2p 3s $^4P_{1/2}$ - 2s 2p 3p $^4D_{3/2}$	4.65	1.08e+02
C II	6785.7798	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4D_{7/2}$	4.65	2.59e+02
C II	6789.0830	2s 2p 3s $^4P_{1/2}$ - 2s 2p 3p $^4D_{1/2}$	4.65	1.45e+02
C II	6793.3398	2s 2p 3s $^4P_{3/2}$ - 2s 2p 3p $^4D_{3/2}$	4.65	1.36e+02
C II	6802.5640	2s 2p 3s $^4P_{5/2}$ - 2s 2p 3p $^4D_{5/2}$	4.65	4.74e+01
Al II	7044.0391	3s 4s $^3S_1$ - 3s 4p $^3P_2$	4.50	1.16e+02
Al II	7058.6572	3s 4s $^3S_1$ - 3s 4p $^3P_1$	4.50	6.88e+01
Fe XV	7062.1470	3s 3p $^3P_1$ - 3s 3p $^3P_2$	6.40	1.48e+02
He I	7067.1270	1s 2p $^3P_2$ - 1s 3s $^3S_1$	4.50	4.25e+03
He I	7067.1650	1s 2p $^3P_1$ - 1s 3s $^3S_1$	4.50	2.55e+03
He I	7067.6582	1s 2p $^3P_0$ - 1s 3s $^3S_1$	4.50	8.49e+02
C II	7114.9971	2s 2p 3p $^4D_{3/2}$ - 2s 2p 3d $^4F_{5/2}$	4.65	3.66e+01
C II	7117.5952	2s 2p 3p $^4D_{5/2}$ - 2s 2p 3d $^4F_{7/2}$	4.65	5.62e+01
C II	7121.8730	2s 2p 3p $^4D_{7/2}$ - 2s 2p 3d $^4F_{9/2}$	4.65	8.20e+01
He I	7283.3569	1s 2p $^1P_1$ - 1s 3s $^1S_0$	4.50	9.67e+02
S XII	7613.0732	$2s^2$ 2p $^2P_{1/2}$ - $2s^2$ 2p $^2P_{3/2}$	6.40	1.83e+02
Fe XI	7894.0308	$3s^2$ $3p^4$ $^3P_2$ - $3s^2$ $3p^4$ $^3P_1$	6.15	7.07e+01
Ar XIII	8341.9531	$2s^2$ $2p^2$ $^3P_1$ - $2s^2$ $2p^2$ $^3P_2$	6.55	5.39e+01