Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
HI	$1s-2p$	^{2}S $-^2$P°	1215.6701	2	6	0.416e+00	0.416e+00	14.70	1
HI	$1s-3p$	^{2}S $-^2$P°	1025.7223	2	6	0.790e−01	0.791e−01	13.91	1
HI	$1s-4p$	^{2}S $-^2$P°	972.5368	2	6	0.290e−01	0.290e−01	13.45	1
HI	$1s-5p$	^{2}S $-^2$P°	949.7431	2	6	0.139e−01	0.139e−01	13.12	1
HI	$1s-6p$	^{2}S $-^2$P°	937.8035	2	6	0.780e−02	0.780e−02	12.86	1
HI	$1s-7p$	^{2}S $-^2$P°	930.7483	2	6	0.482e−02	0.482e−02	12.65	1
HI	$1s-8p$	^{2}S $-^2$P°	926.2257	2	6	0.319e−02	0.318e−02	12.47	1
HI	$1s-9p$	^{2}S $-^2$P°	923.1504	2	6	0.222e−02	0.222e−02	12.31	1
HI	$1s-10p$	^{2}S $-^2$P°	920.9631	2	6	0.160e−02	0.161e−02	12.17	1
HI	$1s-11p$	^{2}S $-^2$P°	919.3514	2	6	-	0.120e−02	12.04	1
HI	$1s-12p$	^{2}S $-^2$P°	918.1294	2	6	-	0.921e−03	11.93	1
HI	$1s-13p$	^{2}S $-^2$P°	917.1806	2	6	-	0.723e−03	11.82	1
HI	$1s-14p$	^{2}S $-^2$P°	916.429	2	6	-	0.578e−03	11.72	5
HI	$1s-15p$	^{2}S $-^2$P°	915.824	2	6	-	0.469e−03	11.63	5
HI	$1s-16p$	^{2}S $-^2$P°	915.329	2	6	-	0.386e−03	11.55	5
HI	$1s-17p$	^{2}S $-^2$P°	914.919	2	6	-	0.321e−03	11.47	5
HI	$1s-18p$	^{2}S $-^2$P°	914.576	2	6	-	0.270e−03	11.39	5
HI	$1s-19p$	^{2}S $-^2$P°	914.286	2	6	-	0.230e−03	11.32	5
HI	$1s-20p$	^{2}S $-^2$P°	914.039	2	6	-	0.197e−03	11.26	5
HI	$1s-21p$	^{2}S $-^2$P°	913.826	2	6	-	0.170e−03	11.19	5
HI	$1s-22p$	^{2}S $-^2$P°	913.641	2	6	-	0.148e−03	11.13	5
HI	$1s-23p$	^{2}S $-^2$P°	913.480	2	6	-	0.129e−03	11.07	5
HI	$1s-24p$	^{2}S $-^2$P°	913.339	2	6	-	0.114e−03	11.02	5
HI	$1s-25p$	^{2}S $-^2$P°	913.215	2	6	-	0.100e−03	10.96	5
HI	$1s-26p$	^{2}S $-^2$P°	913.104	2	6	-	0.893e−04	10.91	5
HI	$1s-27p$	^{2}S $-^2$P°	913.006	2	6	-	0.797e−04	10.86	5
HI	$1s-28p$	^{2}S $-^2$P°	912.918	2	6	-	0.715e−04	10.81	5
HI	$1s-29p$	^{2}S $-^2$P°	912.839	2	6	-	0.643e−04	10.77	5
HI	$1s-30p$	^{2}S $-^2$P°	912.768	2	6	-	0.581e−04	10.72	5
HeI	$1s^2-1s2p$	^{1}S $-^1$P°	584.3340	1	3	0.285e+00	0.276e+00	13.21	2
HeI	$1s^2-1s3p$	^{1}S $-^1$P°	537.0296	1	3	0.752e−01	0.734e−01	12.60	2
HeI	$1s^2-1s4p$	^{1}S $-^1$P°	522.2128	1	3	0.307e−01	0.302e−01	12.19	2
HeI	$1s^2-1s5p$	^{1}S $-^1$P°	515.6165	1	3	0.154e−01	0.155e−01	11.89	2
HeI	$1s^2-1s6p$	^{1}S $-^1$P°	512.0982	1	3	0.883e−02	0.846e−02	11.65	2
HeI	$1s^2-1s7p$	^{1}S $-^1$P°	509.9979	1	3	0.553e−02	0.540e−02	11.44	2
HeI	$1s^2-1s8p$	^{1}S $-^1$P°	508.6431	1	3	0.369e−02	0.399e−02	11.26	2
HeI	$1s^2-1s9p$	^{1}S $-^1$P°	507.7178	1	3	0.259e−02	0.275e−02	11.11	2
HeI	$1s^2-1s10p$	^{1}S $-^1$P°	507.0576	1	3	0.188e−02	0.209e−02	10.97	2
HeI	$1s^2-1s11p$	^{1}S $-^1$P°	506.5702	1	3	-	0.150e−02	10.87	2
HeI	$1s^2-1s12p$	^{1}S $-^1$P°	506.2000	1	3	-	0.119e−02	10.77	2
HeII	$1s-2p$	^{2}S $-^2$P°	303.7822	2	6	0.416e+00	0.416e+00	13.09	2
HeII	$1s-3p$	^{2}S $-^2$P°	256.317	2	6	0.790e−01	0.791e−01	12.30	2
HeII	$1s-4p$	^{2}S $-^2$P°	243.027	2	6	0.290e−01	0.290e−01	11.84	2
HeII	$1s-5p$	^{2}S $-^2$P°	237.331	2	6	0.139e−01	0.139e−01	11.51	2
HeII	$1s-6p$	^{2}S $-^2$P°	234.347	2	6	0.780e−02	0.780e−02	11.25	2
HeII	$1s-7p$	^{2}S $-^2$P°	232.584	2	6	0.482e−02	0.482e−02	11.04	2
HeII	$1s-8p$	^{2}S $-^2$P°	231.454	2	6	0.319e−02	0.318e−02	10.86	2
HeII	$1s-9p$	^{2}S $-^2$P°	230.686	2	6	0.222e−02	0.222e−02	10.70	2
HeII	$1s-10p$	^{2}S $-^2$P°	230.139	2	6	0.160e−02	0.161e−02	10.56	2
HeII	$1s-11p$	^{2}S $-^2$P°	229.736	2	6	-	0.120e−02	10.43	2
HeII	$1s-12p$	^{2}S $-^2$P°	229.431	2	6	-	0.921e−03	10.31	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
Li I	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	6709.764	2	2	0.249e+00	0.247e+00	6.53	1
			6709.613	2	4	0.499e+00	0.495e+00	6.83	1
Li I	$1s^2 2s - 1s^2 3p$	^{2}S $-^2$P°	3233.564	2	6	0.481e−02	0.550e−02	4.50	1
Li I	$1s^2 2s - 1s^2 4p$	^{2}S $-^2$P°	2741.995	2	6	0.431e−02	0.450e−02	4.38	1
Li I	$1s^2 2s - 1s^2 5p$	^{2}S $-^2$P°	2563.080	2	6	0.258e−02	-	4.13	3
Li I	$1s^2 2s - 1s^2 6p$	^{2}S $-^2$P°	2475.809	2	6	0.158e−02	-	3.90	3
Li I	$1s^2 2s - 1s^2 7p$	^{2}S $-^2$P°	2426.163	2	6	0.102e−03	-	2.70	3
Li I	$1s^2 2s - 1s^2 8p$	^{2}S $-^2$P°	2395.116	2	6	0.697e−03	-	3.53	3
Li I	$1s^2 2s - 1s^2 9p$	^{2}S $-^2$P°	2374.267	2	6	0.495e−03	-	3.38	3
Li I	$1s^2 2s - 1s^2 10p$	^{2}S $-^2$P°	2359.650	2	6	0.363e−03	-	3.24	3
Be I	$2s^2 - 2s2p$	^{1}S $-^1$P°	2349.329	1	3	0.139e+01	0.136e+01	4.93	1
Be I	$2s^2 - 2s3p$	^{1}S $-^1$P°	1661.478	1	3	0.156e−01	0.248e−01	2.83	2
Be I	$2s^2 - 2s4p$	^{1}S $-^1$P°	1491.765	1	3	0.844e−06:	0.130e−02	1.71	2
Be I	$2s^2 - 2s5p$	^{1}S $-^1$P°	1426.117	1	3	0.357e−03	-	1.13	2
Be I	$2s^2 - 2s6p$	^{1}S $-^1$P°	1393.804	1	3	0.442e−03	-	1.21	3
Be II	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	3131.973	2	2	0.167e+00	0.169e+00	4.14	1
			3131.327	2	4	0.333e+00	0.338e+00	4.44	1
Be II	$1s^2 2s - 1s^2 3p$	^{2}S $-^2$P°	1036.319	2	2	0.275e−01	0.267e−01	2.87	1
			1036.299	2	4	0.551e−01	0.535e−01	3.18	1
Be II	$1s^2 2s - 1s^2 4p$	^{2}S $-^2$P°	842.031	2	2	0.104e−01	-	2.36	2
			842.025	2	4	0.208e−01	-	2.66	2
Be II	$1s^2 2s - 1s^2 5p$	^{2}S $-^2$P°	775.365	2	2	0.496e−02	-	2.00	3
			775.362	2	4	0.992e−02	-	2.31	2
Be II	$1s^2 2s - 1s^2 6p$	^{2}S $-^2$P°	743.58	2	6	0.821e−02	-	2.21	2
Be II	$1s^2 2s - 1s^2 7p$	^{2}S $-^2$P°	725.71	2	6	0.506e−02	-	1.98	2
B I	$2s^2 2p - 2s^2 3s$	^{2}P° $-^2$S	2497.5243	2	2	0.808e−01	0.792e−01	5.18	1
B I	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	2089.559	2	4	0.351e−01	0.367e−01	4.75	3
B I	$2s^2 2p - 2s^2 3d$	^{2}P° $-^2$D	1825.896	2	4	0.175e+00	0.200e+00	5.38	1
B I	$2s^2 2p - 2s^2 4s$	^{2}P° $-^2$S	1817.843	2	2	0.156e−01	-	4.33	2
B I	$2s^2 2p - 2s^2 4d$	^{2}P° $-^2$D	1666.850	2	4	0.732e−01	-	4.97	2
B I	$2s^2 2p - 2s^2 5s$	^{2}P° $-^2$S	1662.608	2	2	0.829e−02	-	4.02	2
B I	$2s^2 2p - 2s^2 6s$	^{2}P° $-^2$S	1600.455	2	2	0.675e−02	-	3.91	2
B I	$2s^2 2p - 2s^2 5d$	^{2}P° $-^2$D	1600.373	2	4	0.363e−01	-	4.64	2
B I	$2s^2 2p - 2s2p^2$:	^{2}P° $-^2$S	1573.301	2	2	0.164e−01	-	4.29	3
B I	$2s^2 2p - 2s^2 6d$	^{2}P° $-^2$D	1566.286	2	4	0.206e−01	-	4.39	2
B I	$2s^2 2p - 2s^2 7s$:	^{2}P° $-^2$S	1558.701	2	2	0.736e−02	-	3.94	2
B I	$2s^2 2p - 2s^2 7d$	^{2}P° $-^2$D	1546.423	2	4	0.128e−01	-	4.18	2
B I	$2s^2 2p - 2s^2 8s$:	^{2}P° $-^2$S	1543.398	2	2	0.100e−01	-	4.07	2
B I	$2s^2 2p - 2s^2 8d$	^{2}P° $-^2$D	1533.806	2	4	0.846e−02	-	3.99	2
B I	$2s^2 2p - 2s^2 9s$:	^{2}P° $-^2$S	1532.094	2	2	0.151e−01	-	4.24	2
B I	$2s^2 2p - 2s^2 9d$	^{2}P° $-^2$D	1525.281	2	4	0.590e−02	-	3.83	2
B I	$2s^2 2p - 2s^2 10s$:	^{2}P° $-^2$S	1524.170	2	2	0.102e−01	-	4.07	2
B I	$2s^2 2p - 2s^2 10d$	^{2}P° $-^2$D	1519.246	2	4	0.427e−02	-	3.69	2
B I	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	1378.875	2	2	0.390e+00	0.399e+00	5.61	1
			1378.654	2	4	0.195e+00	0.200e+00	5.31	1
B I	$2s^2 2p - 2s2p(^3\mathrm{P}^\circ)3p$	^{2}P° $-^2$P	1151.281	2	2	0.388e−01	-	4.53	2
			1151.207	2	4	0.194e−01	-	4.23	2
B I	$2s^2 2p - 2s2p(^3\mathrm{P}^\circ)4p$	^{2}P° $-^2$P	1047.695	2	2	0.231e−02	-	3.26	2
			1047.647	2	4	0.115e−02	-	2.96	2

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Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
BI	$2s^2 2p - 2s2p(^3\mathrm{P}^\circ)5p$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	1010.902	2	2	0.332e−03	-	2.41	2
			[1010.9]	2	4	0.166e−03	-	2.10	
BII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	1362.461	1	3	0.101e+01	0.987e+00	6.02	1
BII	$2s^2 - 2s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	693.947	1	3	0.993e−01	-	4.72	2
BII	$2s^2 - 2s4p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	586.195	1	3	0.514e−01	-	4.36	3
BII	$2s^2 - 2s5p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	547.541	1	3	0.242e−01	-	4.00	3
BIII	$1s^2 2s - 1s^2 2p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	2067.893	2	2	0.121e+00	0.122e+00	5.28	1
			2066.436	2	4	0.243e+00	0.245e+00	5.58	1
BIII	$1s^2 2s - 1s^2 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	518.271	2	2	0.511e−01	0.503e−01	4.30	2
			518.244	2	4	0.102e+00	0.101e+00	4.60	2
BIII	$1s^2 2s - 1s^2 4p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	[411.82]	2	2	0.166e−01	-	3.71	
			411.810	2	4	0.331e−01	-	4.01	2
BIII	$1s^2 2s - 1s^2 5p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	[376.38]	2	2	0.751e−02	-	3.33	
			376.372	2	4	0.150e−01	-	3.63	2
CI	$2s^2 2p^2 - 2s^2 2p3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1656.9283	1	3	0.148e+00	0.141e+00	10.95	1
CI	$2s^2 2p^2 - 2s^2 2p3s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1613.3763	1	3	-	0.555e−04	7.51	1
CI	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1560.3092	1	3	0.714e−01	0.804e−01	10.61	1
CI	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1328.8333	1	3	0.609e−01	0.580e−01	10.47	1
CI	$2s^2 2p^2 - 2s^2 2p4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1280.1353	1	3	0.212e−01	0.243e−01	9.99	1
CI	$2s^2 2p^2 - 2s^2 2p3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1277.2454	1	3	0.107e+00	0.966e−01	10.70	1
CI	$2s^2 2p^2 - 2s^2 2p4s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1276.4825	1	3	-	0.450e−02	9.32	1
CI	$2s^2 2p^2 - 2s^2 2p3d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1270.1434	1	3	-	0.388e−03	8.25	1
CI	$2s^2 2p^2 - 2s^2 2p3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1260.7355	1	3	0.387e−01	0.394e−01	10.25	1
CI	$2s^2 2p^2 - 2s^2 2p5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1193.9955	1	3	0.105e−01	0.941e−02	9.66	1
CI	$2s^2 2p^2 - 2s^2 2p4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1193.0308	1	3	0.476e−01	0.445e−01	10.31	1
CI	$2s^2 2p^2 - 2s^2 2p5s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1192.2175	1	3	-	0.263e−02	9.06	1
CI	$2s^2 2p^2 - 2s^2 2p4d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1190.0207	1	3	-	0.380e−02	9.22	1
CI	$2s^2 2p^2 - 2s^2 2p4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1188.8332	1	3	0.129e−01	0.168e−01	9.75	1
CI	$2s^2 2p^2 - 2s^2 2p6s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1158.3240	1	3	0.557e−02	0.342e−02	9.37	1
CI	$2s^2 2p^2 - 2s^2 2p5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1157.9097	1	3	0.244e−01	0.218e−01	10.01	1
CI	$2s^2 2p^2 - 2s^2 2p6s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1157.1857	1	3	-	0.550e−03	8.36	1
CI	$2s^2 2p^2 - 2s^2 2p5d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1156.1842	1	3	-	0.282e−04	7.07	1
CI	$2s^2 2p^2 - 2s^2 2p5d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1155.8092	1	3	0.605e−02	0.173e−01	9.40	1
CI	$2s^2 2p^2 - 2s^2 2p7s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1140.0096	1	3	0.328e−02	0.175e−02	9.13	1
CI	$2s^2 2p^2 - 2s^2 2p6d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1139.793	1	3	0.141e−01	0.140e−01	9.77	1
CI	$2s^2 2p^2 - 2s^2 2p7s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1139.0867	1	3	-	0.692e−03	8.46	1
CI	$2s^2 2p^2 - 2s^2 2p6d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1138.5609	1	3	-	0.120e−02	8.70	1
CI	$2s^2 2p^2 - 2s^2 2p6d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1138.384	1	3	0.334e−02	0.195e−02	9.14	1
CI	$2s^2 2p^2 - 2s^2 2p8s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1129.3175	1	3	0.208e−02	0.721e−03	8.93	1
CI	$2s^2 2p^2 - 2s^2 2p7d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1129.193	1	3	0.882e−02	0.490e−02	9.56	1
CI	$2s^2 2p^2 - 2s^2 2p8s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1128.4770	1	3	-	0.891e−03	8.56	1
CI	$2s^2 2p^2 - 2s^2 2p7d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1128.1713	1	3	-	0.112e−02	8.66	1
CI	$2s^2 2p^2 - 2s^2 2p7d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1128.079	1	3	0.204e−02	0.281e−02	8.92	1
CI	$2s^2 2p^2 - 2s^2 2p9s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1122.5183	1	3	0.140e−02	0.223e−02	8.76	1
CI	$2s^2 2p^2 - 2s^2 2p8d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1122.438	1	3	0.588e−02	0.283e−02	9.38	1
CI	$2s^2 2p^2 - 2s^2 2p8d$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1121.5196	1	3	-	0.355e−03	8.16	1
CI	$2s^2 2p^2 - 2s^2 2p8d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1121.452	1	3	0.135e−02	0.177e−02	8.74	1
CI	$2s^2 2p^2 - 2s^2 2p10s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1117.9202	1	3	0.987e−03	0.356e−03	8.60	1
CI	$2s^2 2p^2 - 2s^2 2p9d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1117.866	1	3	0.413e−02	0.562e−02	9.22	1
CI	$2s^2 2p^2 - 2s^2 2p10s$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	1117.132	1	3	-	0.231e−03	7.97	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
C I	$2s^22p^2 - 2s^22p9d$	^{3}P $-^1$P°	1117.000	1	3	-	0.389e−03	8.20	1
C I	$2s^22p^2 - 2s^22p10d$	^{3}P $-^3$D°	1114.628	1	3	0.300e−02	0.113e−01	9.08	1
C I	$2s^22p^2 - 2s^22p10d$	^{3}P $-^1$P°	1113.793	1	3	-	0.398e−02	9.21	1
C I	$2s^22p^2 - 2s^22p11d$	^{3}P $-^3$D°	1112.269	1	3	-	0.161e−01	9.81	1
C I	$2s^22p^2 - 2s^22p11d$	^{3}P $-^1$P°	1111.421	1	3	-	0.891e−02	9.56	1
C I	$2s^22p^2 - 2s^22p12d$	^{3}P $-^3$D°	1110.441	1	3	-	0.355e−02	9.16	1
C I	$2s^22p^2 - 2s^22p12d$	^{3}P $-^1$P°	1109.634	1	3	-	0.708e−02	9.46	1
C I	$2s^22p^2 - 2s^22p13d$	^{3}P $-^3$D°	1109.031	1	3	-	0.891e−02	9.55	1
C I	$2s^22p^2 - 2s^22p14d$	^{3}P $-^1$P°	1107.146	1	3	-	0.115e−02	8.66	1
C I	$2s^22p^2 - 2s^22p15d$	^{3}P $-^3$D°	1107.043	1	3	-	0.363e−03	8.16	1
C I	$2s^22p^2 - 2s^22p16d$	^{3}P $-^3$D°	1106.315	1	3	-	0.513e−02	9.31	1
C I	$2s^22p^2 - 2s^22p15d$	^{3}P $-^1$P°	1106.250	1	3	-	0.457e−03	8.26	1
C I	$2s^22p^2 - 2s^22p16d$	^{3}P $-^1$P°	1105.532	1	3	-	0.229e−02	8.96	1
C I	$2s^22p^2 - 2s^22p17d$	^{3}P $-^1$P°	1104.942	1	3	-	0.363e−02	9.16	1
C I	$2s^22p^2 - 2s^22p18d$	^{3}P $-^1$P°	1104.427	1	3	-	0.724e−03	8.46	1
C I	$2s^22p^2 - 2s^22p20d$	^{3}P $-^1$P°	1103.629	1	3	-	0.145e−01	9.76	1
C I	$2s^22p^2 - 2s2p^3$	^{3}P $-^3$S°	945.191	1	3	0.152e+00	0.273e+00	10.72	1
C II	$2s^22p - 2s2p^2$	^{2}P° $-^4$P	2325.403	2	2	-	0.448e−07	4.58	1
			2324.214	2	4	-	0.277e−08	3.37	1
C II	$2s^22p - 2s2p^2$	^{2}P° $-^2$D	1334.5323	2	4	0.127e+00	0.128e+00	10.79	1
C II	$2s^22p - 2s2p^2$	^{2}P° $-^2$S	1036.3367	2	2	0.122e+00	0.123e+00	10.66	1
C II	$2s^22p - 2s2p^2$	^{2}P° $-^2$P	903.9616	2	2	0.336e+00	0.322e+00	11.04	2
			903.6235	2	4	0.168e+00	0.162e+00	10.74	2
C II	$2s^22p - 2s^23s$	^{2}P° $-^2$S	858.0918	2	2	0.130e−01	0.407e−02	9.61	2
C II	$2s^22p - 2s^23d$	^{2}P° $-^2$D	687.0526	2	4	0.336e+00	0.270e+00	10.92	2
C II	$2s^22p - 2s^24s$	^{2}P° $-^2$S	635.9945	2	2	0.614e−02	-	9.15	2
C II	$2s^22p - 2s^24d$	^{2}P° $-^2$D	594.8000	2	4	0.117e+00	-	10.40	2
C II	$2s^22p - 2s^25s$	^{2}P° $-^2$S	576.8748	2	2	0.234e−02	-	8.69	2
C II	$2s^22p - 2s^25d$	^{2}P° $-^2$D	560.2394	2	4	0.571e−01	-	10.07	2
C II	$2s^22p - 2s^26s$	^{2}P° $-^2$S	551.680	2	2	0.112e−02	-	8.35	3
C II	$2s^22p - 2s2p(^3\mathrm{P}^\circ)3p$	^{2}P° $-^2$P	549.3785	2	2	0.121e−01	-	9.38	2
			549.3195	2	4	0.607e−02	-	9.08	2
C II	$2s^22p - 2s^26d$	^{2}P° $-^2$D	543.257	2	4	0.349e−01	-	9.84	2
C II	$2s^22p - 2s^27s$	^{2}P° $-^2$S	538.406	2	2	0.605e−03	-	8.07	3
C II	$2s^22p - 2s2p(^3\mathrm{P}^\circ)3p$	^{2}P° $-^2$D	530.274	2	4	0.362e−01	-	9.84	2
C II	$2s^22p - 2s2p(^3\mathrm{P}^\circ)4p$	^{2}P° $-^2$P	466.407	2	2	0.592e−02	-	9.00	2
			466.352	2	4	0.297e−02	-	8.70	2
C II	$2s^22p - 2s2p(^3\mathrm{P}^\circ)5p$	^{2}P° $-^2$P	438.824	2	2	0.257e−02	-	8.61	2
			438.773	2	4	0.128e−02	-	8.31	3
C III	$2s^2 - 2s2p$	^{1}S $-^3$P°	1908.734	1	3	-	0.123e−06	4.93	1
C III	$2s^2 - 2s2p$	^{1}S $-^1$P°	977.020	1	3	0.767e+00	0.762e+00	11.43	1
C III	$2s^2 - 2s3p$	^{1}S $-^1$P°	386.2028	1	3	0.232e+00	0.216e+00	10.51	2
C III	$2s^2 - 2s4p$:	^{1}S $-^1$P°	322.5741	1	3	0.452e−01	-	9.72	2
C III	$2s^2 - 2p3s$:	^{1}S $-^1$P°	310.1697	1	3	0.284e−01	0.779e−01	9.50	2
C III	$2s^2 - 2s5p$	^{1}S $-^1$P°	291.3261	1	3	0.451e−01	-	9.68	2
C III	$2s^2 - 2p3d$	^{1}S $-^1$P°	288.423	1	3	0.325e−02	-	8.53	2
C III	$2s^2 - 2s6p$	^{1}S $-^1$P°	280.043	1	3	0.164e−01	-	9.22	2
C III	$2s^2 - 2s7p$	^{1}S $-^1$P°	274.051	1	3	0.113e−01	-	9.05	2
C III	$2s^2 - 2s8p$	^{1}S $-^1$P°	270.324	1	3	0.772e−02	-	8.88	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
C IV	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	1550.770	2	2	0.952e−01	0.952e−01	10.73	1
			1548.195	2	4	0.190e+00	0.191e+00	11.03	1
C IV	$1s^2 2s - 1s^2 3p$	^{2}S $-^2$P°	312.453	2	2	0.678e−01	0.657e−01	9.89	2
			312.422	2	4	0.135e+00	0.131e+00	10.19	2
C IV	$1s^2 2s - 1s^2 4p$	^{2}S $-^2$P°	244.911	2	2	0.203e−01	0.199e−01	9.26	3
			244.907	2	4	0.407e−01	0.398e−01	9.56	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})3s$	^{4}S° $-^4$P	1200.7098	4	2	0.541e−01	0.442e−01	9.86	1
			1200.2233	4	4	0.108e+00	0.885e−01	10.16	1
			1199.5496	4	6	0.163e+00	0.133e+00	10.34	1
N I	$2s^2 2p^3 - 2p^2 3s$	^{4}S° $-^2$P	1160.937	4	2	-	0.241e−05	5.50	1
			1159.817	4	4	-	0.851e−05	6.04	1
N I	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^4$P	1134.9803	4	6	0.116e−01	0.402e−01	9.17	1
			1134.4149	4	4	0.770e−02	0.268e−01	8.99	1
			1134.1653	4	2	0.385e−02	0.134e−01	8.69	1
N I	$2s^2 2p^3 - 2p^2 3s$	^{4}S° $-^2$D	1003.377	4	6	-	0.339e−06	4.58	1
			1003.372	4	4	-	0.489e−07	3.74	1
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})4s$	^{4}S° $-^4$P	965.0413	4	2	0.522e−02	0.580e−02	8.75	1
			964.6256	4	4	0.105e−01	0.118e−01	9.06	1
			963.9903	4	6	0.157e−01	0.184e−01	9.23	1
N I	$2s^2 2p^3 - 2p^2 4s$	^{4}S° $-^2$P	960.201	4	2	-	0.361e−05	5.59	1
			959.4936	4	4	-	0.161e−04	6.24	1
N I	$2s^2 2p^3 - 2p^2 3d$	^{4}S° $-^2$P	955.8814	4	4	-	0.587e−04	6.80	1
			955.5292	4	2	-	0.173e−04	6.27	1
N I	$2s^2 2p^3 - 2p^2 3d$	^{4}S° $-^4$F	955.437	4	4	-	0.116e−05	5.09	1
			955.2643	4	6	-	0.502e−04	6.73	1
N I	$2s^2 2p^3 - 2p^2 3d$	^{4}S° $-^2$F	954.1042	4	6	-	0.442e−02	8.68	1
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})3d$	^{4}S° $-^4$P	953.9699	4	6	0.347e−01	0.260e−01	9.57	1
			953.6549	4	4	0.231e−01	0.203e−01	9.39	1
			953.4152	4	2	0.116e−01	0.106e−01	9.09	1
N I	$2s^2 2p^3 - 2p^2 3d$	^{4}S° $-^4$D	952.5227	4	2	-	0.417e−03	7.65	1
			952.4148	4	4	-	0.156e−02	8.22	1
			952.3034	4	6	-	0.176e−02	8.27	1
N I	$2s^2 2p^3 - 2p^2 3d$	^{4}S° $-^2$D	951.2947	4	4	-	0.181e−04	6.29	1
			951.0791	4	6	-	0.129e−03	7.14	1
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})5s$	^{4}S° $-^4$P	910.6456	4	2	0.222e−02	-	8.36	2
			910.2785	4	4	0.445e−02	-	8.66	2
			909.6976	4	6	0.667e−02	-	8.83	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})4d$	^{4}S° $-^4$P	906.617	4	6	0.167e−01	-	9.23	2
			906.433	4	4	0.112e−01	-	9.06	2
			906.206	4	2	0.557e−02	-	8.75	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})6s$	^{4}S° $-^4$P	888.372	4	2	0.110e−02	-	8.04	2
			888.022	4	4	0.219e−02	-	8.34	2
			887.457	4	6	0.328e−02	-	8.51	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})5d$	^{4}S° $-^4$P	886.332	4	6	0.899e−02	-	8.95	2
			886.226	4	4	0.599e−02	-	8.77	2
			885.973	4	2	0.300e−02	-	8.47	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})7s$	^{4}S° $-^4$P	876.987	4	2	0.622e−03	-	7.79	2
			876.645	4	4	0.125e−02	-	8.09	2
			876.331	4	6	0.187e−02	-	8.26	2
N I	$2s^2 2p^3 - 2p^2(^3\mathrm{P})6d$	^{4}S° $-^4$P	875.721	4	6	0.533e−02	-	8.72	2
			875.656	4	4	0.355e−02	-	8.54	2
			875.277	4	2	0.178e−02	-	8.24	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})8s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	870.367	4	2	0.386e−03	-	7.58	2
			870.029	4	4	0.771e−03	-	7.88	2
			869.404	4	6	0.116e−02	-	8.05	3
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})7d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	869.482	4	6	0.340e−02	-	8.52	2
			869.424	4	4	0.226e−02	-	8.34	2
			[869.4]	4	2	0.114e−02	-	8.05	
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})9s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	866.180	4	2	0.256e−03	-	7.40	3
			865.835	4	4	0.511e−03	-	7.70	3
			865.225	4	6	0.768e−03	-	7.87	6
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})8d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	865.406	4	6	0.230e−02	-	8.35	6
			[865.4]	4	4	0.153e−02	-	8.17	
			[865.4]	4	2	0.766e−03	-	7.87	
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})10s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	863.336	4	2	0.178e−03	-	7.24	6
			862.985	4	4	0.357e−03	-	7.54	6
			862.402	4	6	0.535e−03	-	7.71	3
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})9d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	862.14	4	6	0.162e−02	-	8.20	2
			[862.1]	4	4	0.108e−02	-	8.02	
			[862.1]	4	2	0.540e−03	-	7.72	
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})11s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	861.15	4	12	0.776e−03	-	7.87	3
NI	$2s^22p^3 - 2p^2(^3\mathrm{P})10d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	860.15	4	6	0.119e−02	-	8.06	2
			[860.1]	4	4	0.790e−03	-	7.88	
			[860.1]	4	2	0.395e−03	-	7.58	
NII	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1083.9937	1	3	0.109e+00	0.103e+00	10.12	7
NII	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	915.6131	1	3	0.160e+00	0.145e+00	10.22	7
NII	$2s^22p^2 - 2s^22p3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	671.4102	1	3	0.766e−01	0.730e−01	9.76	7
NII	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	644.6337	1	3	0.224e+00	0.224e+00	10.21	7
NII	$2s^22p^2 - 2s^22p3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	533.5099	1	3	0.299e+00	0.256e+00	10.25	7
NII	$2s^22p^2 - 2s^22p3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	529.3572	1	3	0.103e+00	0.819e−01	9.79	7
NII	$2s^22p^2 - 2s^22p4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	508.669	1	3	0.105e−01	-	8.78	7
NII	$2s^22p^2 - 2s^22p4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	475.6481	1	3	0.119e+00	0.142e+00	9.80	7
NII	$2s^22p^2 - 2s^22p4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	474.4909	1	3	0.436e−01	-	9.37	7
NII	$2s^22p^2 - 2s^22p5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	466.7373	1	3	0.364e−02	-	8.28	7
NII	$2s^22p^2 - 2s^22p5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	453.237	1	3	0.625e−01	-	9.50	7
NII	$2s^22p^2 - 2s^22p5d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	452.639	1	3	0.222e−01	-	9.05	7
NII	$2s^22p^2 - 2s^22p6s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	448.9396	1	3	0.158e−02	-	7.90	7
NII	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	448.2921	1	3	0.257e−02	-	8.11	7
NII	$2s^22p^2 - 2s^22p6d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	442.052	1	3	0.461e−01	-	9.36	7
NII	$2s^22p^2 - 2s^22p6d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	441.599	1	3	0.136e−01	-	8.83	7
NII	$2s^22p^2 - 2s^22p7s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	439.603	1	3	0.670e−03	-	7.52	7
NII	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	436.1072	1	3	0.382e−01	-	9.27	7
NII	$2s^22p^2 - 2s^22p7d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	435.309	1	3	0.107e−01	-	8.72	7
NII	$2s^22p^2 - 2s^22p7d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	434.671	1	3	0.562e−02	-	8.44	7
NII	$2s^22p^2 - 2s^22p8d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	431.455	1	3	0.853e−02	-	8.62	7
NII	$2s^22p^2 - 2s^22p8d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	431.259	1	3	0.509e−03	-	7.39	7
NII	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$:	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	429.5	1	3	0.125e−01	-	8.78	8
NII	$2s^22p^2 - 2s^22p9d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	428.692	1	3	0.672e−02	-	8.51	7
NII	$2s^22p^2 - 2s^22p10s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	427.979	1	3	0.651e−03	-	7.50	7
NII	$2s^22p^2 - 2s^22p10d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	426.822	1	3	0.511e−02	-	8.39	7
NII	$2s^22p^2 - 2s^22p10d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	426.402	1	3	0.172e−02	-	7.92	7
NII	$2s^22p^2 - 2s2p^2(^4\mathrm{P})4p$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	385.460	1	3	0.200e−02	-	7.94	7

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NIII	$2s^22p - 2s2p^2$	^{2}P° $-^4$P	1748.646	2	2	-	0.155e−06	4.48	1
			1746.823	2	4	-	0.819e−08	3.21	1
NIII	$2s^22p - 2s2p^2$	^{2}P° $-^2$D	989.799	2	4	0.122e+00	0.107e+00	10.13	1
NIII	$2s^22p - 2s2p^2$	^{2}P° $-^2$S	763.340	2	2	0.820e−01	0.839e−01	9.85	2
NIII	$2s^22p - 2s2p^2$	^{2}P° $-^2$P	685.513	2	2	0.268e+00	0.261e+00	10.31	2
			684.996	2	4	0.135e+00	0.131e+00	10.02	2
NIII	$2s^22p - 2s^23s$	^{2}P° $-^2$S	451.869	2	2	0.316e−01	0.272e−01	9.20	2
NIII	$2s^22p - 2s^23d$	^{2}P° $-^2$D	374.204	2	4	0.441e+00	0.424e+00	10.27	2
NIII	$2s^22p - 2s^24s$	^{2}P° $-^2$S	332.140	2	2	0.614e−02	-	8.36	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)3p$	^{2}P° $-^2$P	323.493	2	2	0.348e−01	-	9.10	2
			323.436	2	4	0.173e−01	-	8.80	2
NIII	$2s^22p - 2s^24d$	^{2}P° $-^2$D	314.715	2	4	0.194e+00	-	9.84	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)3p$	^{2}P° $-^2$D	311.550	2	4	0.159e−01	-	8.74	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)3p$	^{2}P° $-^2$S	305.761	2	2	0.679e−02	-	8.37	2
NIII	$2s^22p - 2s^25s$	^{2}P° $-^2$S	299.661	2	2	0.545e−02	-	8.26	2
NIII	$2s^22p - 2s^25d$	^{2}P° $-^2$D	292.447	2	4	0.484e−01	-	9.20	2
NIII	$2s^22p - 2s^26s$	^{2}P° $-^2$S	285.855	2	2	0.191e−02	-	7.79	2
NIII	$2s^22p - 2s^26d$	^{2}P° $-^2$D	282.070	2	4	0.271e−01	-	8.93	2
NIII	$2s^22p - 2s^27s$	^{2}P° $-^2$S	278.436	2	2	0.115e−02	-	7.56	2
NIII	$2s^22p - 2s^27d$	^{2}P° $-^2$D	276.193	2	4	0.165e−01	-	8.71	2
NIII	$2s^22p - 2s^28s$	^{2}P° $-^2$S	273.977	2	2	0.810e−03	-	7.40	2
NIII	$2s^22p - 2s^28d$	^{2}P° $-^2$D	272.523	2	4	0.110e−01	-	8.53	2
NIII	$2s^22p - 2s^29s$	^{2}P° $-^2$S	271.077	2	2	0.634e−03	-	7.29	2
NIII	$2s^22p - 2s^29d$	^{2}P° $-^2$D	270.073	2	4	0.782e−02	-	8.37	2
NIII	$2s^22p - 2s^210s$	^{2}P° $-^2$S	269.072	2	2	0.544e−03	-	7.22	2
NIII	$2s^22p - 2s^210d$	^{2}P° $-^2$D	268.347	2	4	0.597e−02	-	8.25	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)4p$	^{2}P° $-^2$P	266.847	2	2	0.568e−02	-	8.23	2
			266.805	2	4	0.284e−02	-	7.93	2
NIII	$2s^22p - 2s2p(^1\mathrm{P}°)3p$	^{2}P° $-^2$P	264.846	2	2	0.131e−01	-	8.59	2
			264.822	2	4	0.655e−02	-	8.29	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)5p$	^{2}P° $-^2$P	248.371	2	2	0.548e−02	-	8.18	2
			248.320	2	4	0.274e−02	-	7.88	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)6p$	^{2}P° $-^2$P	238.034	2	2	0.172e−02	-	7.66	2
			237.994	2	4	0.863e−03	-	7.36	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)7p$	^{2}P° $-^2$P	233.620	2	2	0.138e−02	-	7.56	2
			233.599	2	4	0.691e−03	-	7.26	2
NIII	$2s^22p - 2s2p(^3\mathrm{P}°)8p$	^{2}P° $-^2$P	230.789	2	2	0.906e−03	-	7.37	2
			230.765	2	4	0.453e−03	-	7.07	2
NIV	$2s^2 - 2s2p$	^{1}S $-^3$P°	1486.496	1	3	-	0.574e−06	4.98	1
NIV	$2s^2 - 2s2p$	^{1}S $-^1$P°	765.148	1	3	0.616e+00	0.632e+00	10.72	2
NIV	$2s^2 - 2s3p$	^{1}S $-^1$P°	247.205	1	3	0.327e+00	0.313e+00	9.96	2
NV	$1s^22s - 1s^22p$	^{2}S $-^2$P°	1242.804	2	2	0.780e−01	0.782e−01	10.04	1
			1238.821	2	4	0.157e+00	0.157e+00	10.34	1
OI	$2s^22p^4 - 2p^33s$	^{3}P $-^5$S°	1355.5977	5	5	-	0.125e−05	6.16	1
OI	$2s^22p^4 - 2p^3(^4\mathrm{S}°)3s$	^{3}P $-^3$S°	1302.1685	5	3	0.504e−01	0.489e−01	10.75	1
OI	$2s^22p^4 - 2p^3(^4\mathrm{S}°)4s$	^{3}P $-^3$S°	1039.2304	5	3	0.904e−02	0.920e−02	9.90	1
OI	$2s^22p^4 - 2p^33d$	^{3}P $-^5$D°	1026.4757	5	7	-	0.246e−02	9.33	1
			1026.4744	5	5	-	0.187e−03	8.21	1
			1026.4733	5	3	-	0.235e−05	6.31	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1025.7633	5	3	0.188e−03	0.203e−03	8.22	1
			1025.7626	5	5	0.282e−02	0.304e−02	9.39	1
			1025.7616	5	7	0.158e−01	0.171e−01	10.14	1
O I	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	988.7734	5	7	0.449e−01	0.432e−01	10.58	1
			988.6549	5	5	0.803e−02	0.771e−02	9.83	1
			988.5778	5	3	0.535e−03	0.515e−03	8.65	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	976.4481	5	3	0.327e−02	0.330e−02	9.43	1
O I	$2s^2 2p^4 - 2p^3 3s$	$^3\mathrm{P} - ^1\mathrm{D}^\circ$	974.070	5	5	-	0.200e−04	7.22	1
O I	$2s^2 2p^4 - 2p^3 4d$	$^3\mathrm{P} - ^5\mathrm{D}^\circ$	972.1428	5	7	-	0.317e−03	8.42	1
			972.1422	5	5	-	0.310e−04	7.41	1
			972.1418	5	3	-	0.448e−06	5.57	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	971.7382	5	7	0.130e−01	0.124e−01	10.03	1
			971.7376	5	5	0.231e−02	0.222e−02	9.28	1
			971.7371	5	3	0.154e−03	0.148e−03	8.11	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)6s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	950.8846	5	3	0.157e−02	0.157e−02	9.10	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	948.6855	5	7	0.524e−02	0.542e−02	9.63	1
			948.6855	5	5	0.937e−03	0.967e−03	8.88	1
			948.6855	5	3	0.625e−04	0.645e−04	7.70	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)7s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	937.8405	5	3	0.867e−03	0.872e−03	8.84	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)6d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	936.6295	5	7	0.302e−02	0.314e−02	9.38	1
			936.6295	5	5	0.540e−03	0.560e−03	8.63	1
			936.6295	5	3	0.360e−04	0.374e−04	7.46	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)8s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	930.2566	5	3	0.532e−03	0.537e−03	8.62	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)7d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	929.5168	5	7	0.190e−02	0.198e−02	9.18	1
			929.5168	5	5	0.341e−03	0.354e−03	8.43	1
			929.5168	5	3	0.227e−04	0.236e−04	7.25	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)9s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	925.442	5	3	0.350e−03	0.354e−03	8.44	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)8d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	924.952	5	7	0.129e−02	0.134e−02	9.01	1
			924.952	5	5	0.229e−03	0.239e−03	8.26	1
			924.952	5	3	0.153e−04	0.159e−04	7.08	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)10s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	922.200	5	3	0.242e−03	0.245e−03	8.28	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)9d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	921.860	5	7	0.903e−03	0.940e−03	8.85	1
			921.860	5	5	0.162e−03	0.168e−03	8.10	1
			921.860	5	3	0.108e−04	0.112e−04	6.93	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)11s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	919.908	5	3	0.176e−03	0.178e−03	8.14	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)10d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	919.658	5	7	0.659e−03	0.683e−03	8.71	1
			919.658	5	5	0.118e−03	0.122e−03	7.97	1
			919.658	5	3	0.785e−05	0.814e−05	6.79	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)11d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	918.044	5	7	-	0.516e−03	8.61	1
			918.044	5	5	-	0.921e−04	7.86	1
			918.044	5	3	-	0.615e−05	6.68	1
O I	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)12d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	916.815	5	7	-	0.398e−03	8.49	1
			916.815	5	5	-	0.710e−04	7.74	1
			916.815	5	3	-	0.474e−05	6.57	1
O I	$2s^2 2p^4 - 2p^3(^2\mathrm{P}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	877.8787	5	5	0.589e−01	0.270e−01	10.64	2
			877.7983	5	3	0.197e−01	0.920e−02	10.17	2
O I	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	811.0512	5	5	0.221e−02	0.576e−02	9.18	2
			810.6650	5	3	0.738e−03	0.192e−02	8.71	2
O I	$2s^2 2p^4 - 2s2p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	791.9732	5	5	0.464e−01	-	10.50	2
			791.5136	5	3	0.155e−01	-	10.02	2
O I	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	769.4083	5	5	0.143e−01	-	9.97	2
			769.3528	5	3	0.477e−02	-	9.49	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)5d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	755.790	5	5	0.597e−02	-	9.58	2
			755.765	5	3	0.199e−02	-	9.11	3
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)6d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	748.380	5	5	0.333e−02	-	9.33	2
			748.355	5	3	0.111e−02	-	8.85	3
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)7d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	743.929	5	5	0.213e−02	-	9.13	2
			743.901	5	3	0.709e−03	-	8.65	3
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)8d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	741.055	5	5	0.148e−02	-	8.97	2
			741.031	5	3	0.493e−03	-	8.49	3
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)9d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	739.085	5	5	0.109e−02	-	8.84	2
			739.071	5	3	0.363e−03	-	8.36	3
O I	$2s^22p^4 - 2p^3(^2\mathrm{D}^\circ)10d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	737.683	5	5	0.848e−03	-	8.73	2
			737.669	5	3	0.282e−03	-	8.25	3
O II	$2s^22p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	834.4655	4	6	0.132e+00	0.210e+00	10.97	9
			833.3294	4	4	0.886e−01	0.150e+00	10.80	9
			832.7572	4	2	0.444e−01	0.700e−01	10.50	9
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})3s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	539.8544	4	2	0.217e−01	0.190e−01	10.00	9
			539.5489	4	4	0.435e−01	0.370e−01	10.30	9
			539.0855	4	6	0.652e−01	0.560e−01	10.48	9
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})3d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	430.177	4	6	0.186e+00	0.162e+00	10.83	2
			430.041	4	4	0.124e+00	0.108e+00	10.66	2
			429.918	4	2	0.618e−01	0.540e−01	10.35	2
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})4s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	419.065	4	2	0.244e−02	-	8.94	3
			418.881	4	4	0.489e−02	-	9.24	3
			418.598	4	6	0.734e−02	-	9.42	2
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})4d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	392.002	4	6	0.821e−01	-	10.44	2
			391.943	4	4	0.548e−01	-	10.26	2
			391.912	4	2	0.273e−01	-	9.96	2
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})5s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	388.058	4	2	0.632e−03	-	8.32	3
			387.901	4	4	0.127e−02	-	8.62	3
			387.651	4	6	0.189e−02	-	8.79	3
O II	$2s^22p^3 - 2p^2(^3\mathrm{P})5d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	376.745	4	6	0.436e−01	-	10.15	2
			376.693	4	4	0.290e−01	-	9.97	2
			[376.6]	4	2	0.146e−01	-	9.67	
O III	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	832.927	1	3	0.107e+00	0.998e−01	10.88	2
O III	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	702.332	1	3	0.137e+00	0.126e+00	10.91	2
O III	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	507.391	1	3	0.185e+00	0.185e+00	10.90	2
O III	$2s^22p^2 - 2s2p^3$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	475.153	1	3	-	0.150e−05	5.78	3
O III	$2s^22p^2 - 2s^22p3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	374.005	1	3	0.831e−01	0.810e−01	10.42	2
O III	$2s^22p^2 - 2s^22p3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	305.596	1	3	0.470e+00	0.420e+00	11.09	2
O III	$2s^22p^2 - 2s^22p3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	303.411	1	3	0.160e+00	0.141e+00	10.62	2
O III	$2s^22p^2 - 2s^22p4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	280.234	1	3	0.111e−01	-	9.42	2
O III	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	275.281	1	3	0.139e−01	-	9.51	2
O III	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	266.967	1	3	0.118e+00	-	10.43	2
O III	$2s^22p^2 - 2s2p^2(^4\mathrm{P})3p$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	264.257	1	3	0.736e−01	-	10.22	2
O III	$2s^22p^2 - 2s^22p4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	263.692	1	3	0.104e+00	0.163e+00	10.37	2
O III	$2s^22p^2 - 2s^22p4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	262.662	1	3	0.109e−01	-	9.39	24
O III	$2s^22p^2 - 2s^22p5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	255.155	1	3	0.689e−02	-	9.18	24
O III	$2s^22p^2 - 2s^22p5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	248.538	1	3	0.664e−01	-	10.15	2
O III	$2s^22p^2 - 2s2p^2(^4\mathrm{P})4p$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	228.825	1	3	0.479e−02	-	8.97	3

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
O IV	$2s^2 2p - 2s2p^2$	^{2}P° $-^4$P	1399.780	2	2	-	0.610e−06	5.86	1
			1397.232	2	4	-	0.340e−07	4.61	1
O IV	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	787.711	2	4	0.111e+00	0.110e+00	10.87	2
O IV	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$S	608.398	2	2	0.670e−01	0.694e−01	10.54	2
O IV	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	554.075	2	2	0.224e+00	0.218e+00	11.02	2
			553.330	2	4	0.112e+00	0.110e+00	10.72	2
O IV	$2s^2 2p - 2s^2 3s$	^{2}P° $-^2$S	279.631	2	2	0.314e−01	0.278e−01	9.87	2
O IV	$2s^2 2p - 2s^2 3d$	^{2}P° $-^2$D	238.360	2	4	0.504e+00	0.491e+00	11.01	2
O V	$2s^2 - 2s2p$	^{1}S $-^3$P°	1218.344	1	3	-	0.148e−05	6.19	1
O V	$2s^2 - 2s2p$	^{1}S $-^1$P°	629.730	1	3	0.515e+00	0.499e+00	11.44	2
O VI	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	1037.6167	2	2	0.661e−01	0.661e−01	10.77	1
			1031.9261	2	4	0.133e+00	0.133e+00	11.07	1
F I	$2s^2 2p^5 - 2p^4 3s$	^{2}P° $-^4$P	976.508	4	6	-	0.643e−05	2.28	1
			973.895	4	4	-	0.294e−03	3.94	1
			972.380	4	2	-	0.109e−04	2.51	1
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})3s$	^{2}P° $-^2$P	954.826	4	4	0.789e−01	0.866e−01	6.36	1
			951.870	4	2	0.158e−01	0.174e−01	5.66	1
F I	$2s^2 2p^5 - 2p^4(^1\mathrm{D})3s$	^{2}P° $-^2$D	806.970	4	6	0.434e−01	0.483e−01	6.02	2
			806.97	4	4	0.483e−02	-	5.07	3
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})4s$	^{2}P° $-^2$P	791.875	4	4	0.157e−01	-	5.57	2
			790.006	4	2	0.316e−02	-	4.88	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})3d$	^{2}P° $-^2$D	780.390	4	6	0.176e−01	-	5.62	2
			779.910	4	4	0.195e−02	-	4.66	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})3d$	^{2}P° $-^2$P	778.088	4	2	0.707e−03	-	4.22	3
			776.926	4	4	0.354e−02	-	4.92	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})5s$	^{2}P° $-^2$P	751.861	4	4	0.576e−02	-	5.12	2
			750.610	4	2	0.115e−02	-	4.42	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})4d$	^{2}P° $-^2$D	748.580	4	6	0.869e−02	-	5.29	2
			748.338	4	4	0.965e−03	-	4.34	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})4d$	^{2}P° $-^2$P	746.768	4	2	0.382e−03	-	3.94	3
			745.767	4	4	0.191e−02	-	4.63	2
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})6s$	^{2}P° $-^2$P	735.469	4	4	0.275e−02	-	4.79	2
			734.478	4	2	0.549e−03	-	4.09	3
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})5d$	^{2}P° $-^2$D	734.795	4	6	0.474e−02	-	5.02	2
			734.679	4	4	0.527e−03	-	4.07	3
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})5d$	^{2}P° $-^2$P	733.030	4	2	0.214e−03	-	3.68	3
			732.129	4	4	0.107e−02	-	4.37	3
F I	$2s^2 2p^5 - 2p^4(^3\mathrm{P})6d$	^{2}P° $-^2$D	727.530	4	6	0.283e−02	-	4.79	3
			727.470	4	4	0.315e−03	-	3.84	3
F I	$2s^2 2p^5 - 2p^4(^1\mathrm{S})3s$	^{2}P° $-^2$S	680.698	4	2	0.195e−01	-	5.60	2
F I	$2s^2 2p^5 - 2p^4(^1\mathrm{D})3d$	^{2}P° $-^2$S	671.1	4	2	0.315e−02	-	4.81	3
F I	$2s^2 2p^5 - 2s2p^6$	^{2}P° $-^2$S	588.84	4	2	-	0.197e+00	6.54	2
F II	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^3$P°	606.804	5	5	0.132e+00	0.430e+00	6.38	2
			605.670	5	3	0.441e−01	0.140e+00	5.91	2
F II	$2s^2 2p^4 - 2p^3(^4\mathrm{S}°)3s$	^{3}P $-^3$S°	546.852	5	3	0.555e−01	-	5.96	2
F II	$2s^2 2p^4 - 2p^3(^2\mathrm{D}°)3s$	^{3}P $-^3$D°	471.999	5	7	0.586e−01	-	5.92	2
			471.952	5	5	0.104e−01	-	5.17	2
			471.921	5	3	0.697e−03	-	4.00	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{P}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	435.636	5	5	0.264e−01	-	5.54	2
			432.632	5	3	0.886e−02	-	5.06	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	430.917	5	3	0.974e−03	-	4.10	3
			430.915	5	5	0.146e−01	-	5.28	3
			430.914	5	7	0.817e−01	-	6.03	2
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	422.013	5	3	0.106e−01	-	5.13	2
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	393.678	5	3	0.383e−03	-	3.66	3
			393.677	5	5	0.575e−02	-	4.83	3
			393.675	5	7	0.322e−01	-	5.58	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	390.225	5	3	0.379e−02	-	4.65	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	378.684	5	7	0.729e−02	-	4.92	3
			378.680	5	5	0.130e−02	-	4.17	3
			378.676	5	3	0.868e−04	-	3.00	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)6s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	376.850	5	3	0.118e−02	-	4.13	3
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	376.687	5	7	0.430e−01	-	5.69	3
			376.650	5	5	0.769e−02	-	4.94	3
			376.624	5	3	0.512e−03	-	3.77	3
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	375.4	5	3	0.231e−01	-	5.42	3
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	375.303	5	5	0.516e−01	-	5.77	2
			375.237	5	3	0.172e−01	-	5.29	2
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	370.990	5	7	0.219e−01	-	5.39	3
			370.970	5	5	0.392e−02	-	4.64	3
			370.956	5	3	0.261e−03	-	3.47	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)6d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	370.736	5	7	0.543e−02	-	4.78	3
			370.733	5	5	0.970e−03	-	4.04	3
			370.732	5	3	0.647e−04	-	2.86	3
FII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)7s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	369.858	5	3	0.131e−02	-	4.17	3
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{P}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	353.466	5	3	0.716e−02	-	4.88	3
			353.423	5	5	0.215e−01	-	5.36	3
FII	$2s^2 2p^4 - 2p^3(^2\mathrm{P}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	348.795	5	5	0.168e−01	-	5.25	3
			348.789	5	3	0.557e−02	-	4.77	3
FIII	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	656.869	4	4	0.835e−01	-	6.22	2
			656.329	4	6	0.126e+00	-	6.40	2
			656.121	4	2	0.418e−01	-	5.92	2
FIII	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^2\mathrm{S}$	402.801	4	2	-	0.291e−05	1.55	3
FIII	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^2\mathrm{P}$	375.147	4	4	-	0.699e−05	1.90	3
			374.609	4	2	-	0.239e−05	1.43	3
FIII	$2s^2 2p^3 - 2p^2(^3\mathrm{P})3s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	315.747	4	2	0.224e−01	-	5.33	2
			315.536	4	4	0.450e−01	-	5.63	2
			315.219	4	6	0.676e−01	-	5.81	2
FIII	$2s^2 2p^3 - 2p^2(^3\mathrm{P})3d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	255.863	4	6	0.338e+00	-	6.42	2
			255.770	4	4	0.226e+00	-	6.24	2
			255.723	4	2	0.113e+00	-	5.94	2
FIII	$2s^2 2p^3 - 2p^2(^3\mathrm{P})4s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	240.857	4	2	0.238e−02	-	4.24	2
			240.735	4	4	0.477e−02	-	4.54	2
			240.546	4	6	0.715e−02	-	4.72	2
FIII	$2s^2 2p^3 - 2p^3(^5\mathrm{S}^\circ)3p$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	230.117	4	6	0.785e−01	-	5.74	2
			230.113	4	4	0.524e−01	-	5.56	3
			230.105	4	2	0.262e−01	-	5.26	3
FIV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	676.119	1	3	0.100e+00	0.130e+00	6.31	2
FIV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	570.640	1	3	0.122e+00	0.160e+00	6.32	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FIV	$2s^22p^2 - 2s2p^3$	^{3}P $-^3$S°	419.645	1	3	0.158e+00	0.160e+00	6.30	2
FIV	$2s^22p^2 - 2s^22p3s$	^{3}P $-^3$P°	240.017	1	3	0.801e−01	-	5.76	2
FV	$2s^22p - 2s2p^2$	^{2}P° $-^4$P	1165.634	2	2	-	0.970e−06	1.53	1
			1162.203	2	4	-	0.527e−07	0.27	1
FV	$2s^22p - 2s2p^2$	^{2}P° $-^2$D	654.029	2	4	0.999e−01	0.130e+00	6.30	2
FV	$2s^22p - 2s2p^2$	^{2}P° $-^2$S	506.159	2	2	0.574e−01	0.870e−01	5.94	2
FV	$2s^22p - 2s2p^2$	^{2}P° $-^2$P	465.374	2	2	0.192e+00	0.220e+00	6.43	2
			464.367	2	4	0.963e−01	0.110e+00	6.13	2
FVI	$2s^2 - 2s2p$	^{1}S $-^3$P°	1032.52	1	3	-	0.351e−05	2.04	1
FVI	$2s^2 - 2s2p$	^{1}S $-^1$P°	535.207	1	3	0.443e+00	0.620e+00	6.85	2
FVII	$1s^22s - 1s^22p$	^{2}S $-^2$P°	890.786	2	2	0.573e−01	0.558e−01	6.19	2
			883.110	2	4	0.115e+00	0.112e+00	6.49	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{3/2})3s$	^{1}S $-$ $\frac{3}{2}[\frac{3}{2}]^\circ$	743.7195	1	3	-	0.121e−01	9.04	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{1/2})3s$	^{1}S $-$ $\frac{1}{2}[\frac{1}{2}]^\circ$	735.8962	1	3	-	0.149e+00	10.13	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{3/2})4s$	^{1}S $-$ $\frac{3}{2}[\frac{3}{2}]^\circ$	629.7388	1	3	-	0.856e−02	8.82	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{1/2})4s$	^{1}S $-$ $\frac{1}{2}[\frac{1}{2}]^\circ$	626.8232	1	3	-	0.131e−01	9.00	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{3/2})3d$	^{1}S $-$ $\frac{3}{2}[\frac{1}{2}]^\circ$	619.1023	1	3	-	0.569e−02	8.64	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{3/2})3d$	^{1}S $-$ $\frac{3}{2}[\frac{3}{2}]^\circ$	618.6716	1	3	-	0.160e−01	9.09	2
NeI	$2s^22p^6 - 2p^5(^2\mathrm{P}^\circ_{1/2})3s$	^{1}S $-$ $\frac{1}{2}[\frac{3}{2}]^\circ$	615.6283	1	3	-	0.648e−02	8.69	2
NeII	$2s^22p^5 - 2s2p^6$	^{2}P° $-^2$S	460.7284	4	2	0.857e−01	0.748e−01	9.69	2
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})3s$	^{2}P° $-^2$P	446.2556	4	4	0.974e−01	0.102e+00	9.73	2
			445.0397	4	2	0.195e−01	0.203e−01	9.03	2
NeII	$2s^22p^5 - 2p^4(^1\mathrm{D})3s$	^{2}P° $-^2$D	405.8538	4	6	0.586e−01	0.668e−01	9.47	2
			405.8480	4	4	0.652e−02	0.742e−02	8.51	3
NeII	$2s^22p^5 - 2p^4(^1\mathrm{S})3s$	^{2}P° $-^2$S	361.4326	4	2	0.980e−02	0.105e−01	8.64	2
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})3d$	^{2}P° $-^2$D	356.7995	4	6	0.994e−01	0.109e+00	9.64	2
			356.5405	4	4	0.110e−01	0.121e−01	8.68	2
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})3d$	^{2}P° $-^2$P	355.4541	4	2	0.654e−02	-	8.46	2
			354.9622	4	4	0.327e−01	-	9.15	2
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})4s$	^{2}P° $-^2$P	352.9561	4	4	0.125e−01	-	8.73	2
			352.2466	4	2	0.252e−02	-	8.04	2
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})4d$	^{2}P° $-^2$D	330.790	4	6	0.379e−01	-	9.19	2
			330.660	4	4	0.422e−02	-	8.23	3
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})4d$	^{2}P° $-^2$P	330.216	4	4	0.928e−02	-	8.58	3
			329.774	4	2	0.186e−02	-	7.88	3
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})5s$	^{2}P° $-^2$P	328.975	4	4	0.397e−02	-	8.21	3
			328.472	4	2	0.795e−03	-	7.51	3
NeII	$2s^22p^5 - 2p^4(^1\mathrm{D})3d$	^{2}P° $-^2$P	327.262	4	4	0.351e−01	-	9.15	2
			327.244	4	2	0.704e−02	-	8.45	3
NeII	$2s^22p^5 - 2p^4(^1\mathrm{D})3d$	^{2}P° $-^2$S	326.787	4	2	0.238e−01	-	8.98	2
NeII	$2s^22p^5 - 2p^4(^1\mathrm{D})3d$	^{2}P° $-^2$D	326.542	4	6	0.354e−01	-	9.15	2
			326.517	4	4	0.394e−02	-	8.20	3
NeII	$2s^22p^5 - 2p^4(^1\mathrm{D})4s$	^{2}P° $-^2$D	324.570	4	6	0.450e−02	-	8.25	2
			324.568	4	4	0.500e−03	-	7.30	3
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})6s$	^{2}P° $-^2$P	318.825	4	4	0.251e−02	-	7.99	3
			318.452	4	2	0.502e−03	-	7.29	3
NeII	$2s^22p^5 - 2p^4(^3\mathrm{P})7s$	^{2}P° $-^2$P	313.539	4	4	0.137e−02	-	7.72	3
			[313]	4	2	0.276e−03	-	7.03	

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NeII	$2s^2 2p^5 - 2p^4(^1\mathrm{S})4s$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	295.169	4	2	0.771e−02	-	8.45	3
NeIII	$2s^2 2p^4 - 2s2p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	489.505	5	5	0.131e+00	0.190e+00	9.90	10
			488.108	5	3	0.438e−01	0.630e−01	9.42	10
NeIII	$2s^2 2p^4 - 2s2p^5$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	345.448	5	3	-	0.996e−04	6.63	3
NeIII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	313.059	5	3	0.546e−01	0.410e−01	9.32	10
NeIII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	283.167	5	7	0.618e−01	0.470e−01	9.33	3
			283.146	5	5	0.110e−01	0.860e−02	8.58	3
			283.130	5	3	0.735e−03	0.580e−03	7.41	3
NeIII	$2s^2 2p^4 - 2p^3(^2\mathrm{P}^\circ)3s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	267.07	5	5	0.306e−01	0.250e−01	9.00	2
			267.05	5	3	0.102e−01	0.860e−02	8.53	3
NeIII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	251.14	5	3	0.176e−02	0.220e−02	7.74	3
			251.13	5	5	0.263e−01	0.310e−01	8.91	3
			251.12	5	7	0.147e+00	0.180e+00	9.66	2
NeIII	$2s^2 2p^4 - 2p^3(^4\mathrm{S}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	238.1	5	3	0.113e−01	-	8.52	3
NeIII	$2s^2 2p^4 - 2p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	228.916	5	7	0.674e−01	0.800e−01	9.28	3
			228.876	5	5	0.120e−01	0.140e−01	8.53	3
			228.852	5	3	0.802e−03	0.960e−03	7.35	3
NeIV	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	543.891	4	6	0.116e+00	0.170e+00	9.89	2
			542.073	4	4	0.779e−01	0.110e+00	9.72	2
			541.127	4	2	0.390e−01	0.560e−01	9.41	2
NeIV	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^2\mathrm{S}$	334.056	4	2	-	0.551e−05	5.35	3
NeV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	568.42	1	3	0.928e−01	0.815e−01	9.81	2
NeV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	480.41	1	3	0.110e+00	0.105e+00	9.81	2
NeV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	357.95	1	3	0.139e+00	0.135e+00	9.79	2
NeV	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	329.151	1	3	-	0.654e−07	3.42	3
NeVI	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	997.4	2	2	-	0.245e−05	5.48	2
			993.0	2	4	-	0.105e−06	4.11	2
NeVI	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	558.59	2	4	0.907e−01	0.140e+00	9.79	2
NeVI	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	433.176	2	2	0.505e−01	0.310e−01	9.43	2
NeVI	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	401.14	2	2	0.168e+00	0.170e+00	9.92	2
			399.82	2	4	0.844e−01	0.840e−01	9.62	2
NeVII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	895.18	1	3	-	0.589e−05	5.81	2
NeVII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	465.221	1	3	0.389e+00	0.398e+00	10.35	2
NeVIII	$1s^2 2s - 1s^2 2p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	780.324	2	2	0.505e−01	0.519e−01	9.69	2
			770.409	2	4	0.103e+00	0.105e+00	9.99	2
NaI	$2p^6 3s - 2p^6 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	5897.5581	2	2	0.335e+00	0.318e+00	9.61	1
			5891.5833	2	4	0.670e+00	0.631e+00	9.91	1
NaI	$2p^6 3s - 2p^6 4p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	3303.929	2	2	0.450e−02	0.448e−02	7.48	1
			3303.319	2	4	0.901e−02	0.897e−02	7.78	1
NaI	$2p^6 3s - 2p^6 5p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	2853.850	2	2	0.664e−03	0.635e−03	6.59	1
			2853.649	2	4	0.133e−02	0.127e−02	6.89	1
NaI	$2p^6 3s - 2p^6 6p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	2681.230	2	2	0.201e−03	0.244e−03	6.04	1
			2681.137	2	4	0.401e−03	0.487e−03	6.34	1
NaI	$2p^6 3s - 2p^6 7p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	2594.695	2	2	0.852e−04	0.121e−03	5.65	1
			2594.644	2	4	0.170e−03	0.242e−03	5.95	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NaI	$2p^6 3s - 2p^6 8p$	^{2}S $-^2$P°	2544.636	2	2	0.442e−04	0.641e−04	5.36	1
			2544.604	2	4	0.885e−04	0.128e−03	5.66	1
NaI	$2p^6 3s - 2p^6 9p$	^{2}S $-^2$P°	2512.911	2	4	0.520e−04	0.767e−04	5.43	1
			2512.890	2	2	0.260e−04	0.383e−04	5.13	1
NaI	$2p^6 3s - 2p^6 10p$	^{2}S $-^2$P°	2491.452	2	6	0.500e−04	-	5.41	3
NaII	$2s^2 2p^6 - 2p^5(^2\mathrm{P}^\circ_{1/2})3s$	^{1}S $-$ $\frac{1}{2}[\frac{1}{2}]^\circ$	372.075	1	3	-	0.212e+00	8.21	2
NaII	$2s^2 2p^6 - 2p^5(^2\mathrm{P}^\circ_{3/2})3d$	^{1}S $-$ $\frac{3}{2}[\frac{3}{2}]^\circ$	301.436	1	3	-	0.200e+00	8.09	2
NaII	$2s^2 2p^6 - 2p^5(^2\mathrm{P}^\circ_{1/2})3d$	^{1}S $-$ $\frac{1}{2}[\frac{3}{2}]^\circ$	300.153	1	3	-	0.122e+00	7.87	2
NaIII	$2s^2 2p^5 - 2s2p^6$	^{2}P° $-^2$S	378.136	4	2	0.889e−01	0.825e−01	7.84	2
NaIII	$2s^2 2p^5 - 2p^4(^3\mathrm{P})3s$	^{2}P° $-^2$P	267.645	4	4	0.101e+00	-	7.74	2
			266.896	4	2	0.203e−01	-	7.04	2
NaIII	$2s^2 2p^5 - 2p^4(^1\mathrm{D})3s$	^{2}P° $-^2$D	250.516	4	6	0.631e−01	-	7.51	2
			250.512	4	4	0.701e−02	-	6.55	3
NaIII	$2s^2 2p^5 - 2p^4(^1\mathrm{S})3s$	^{2}P° $-^2$S	229.869	4	2	0.125e−01	-	6.77	2
NaIV	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^3$P°	410.3715	5	5	0.126e+00	0.190e+00	8.02	2
			408.6836	5	3	0.419e−01	0.620e−01	7.54	2
NaIV	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^1$P°	290.965	5	3	-	0.166e−03	4.99	3
NaV	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^4$P	463.263	4	6	0.109e+00	0.106e+00	8.01	2
			461.051	4	4	0.727e−01	0.733e−01	7.84	2
			459.897	4	2	0.364e−01	0.365e−01	7.53	2
NaV	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$D	335.702	4	6	-	0.836e−09	−0.24	3
			335.664	4	4	-	0.793e−07	1.74	3
NaV	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$S	285.100	4	2	-	0.955e−05	3.75	3
NaV	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$P	268.288	4	4	-	0.267e−04	4.17	3
			267.427	4	2	-	0.687e−05	3.57	3
NaVI	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$D°	489.580	1	3	0.860e−01	0.789e−01	7.93	2
NaVI	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$P°	414.370	1	3	0.100e+00	0.962e−01	7.93	2
NaVI	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$S°	311.921	1	3	0.124e+00	0.140e+00	7.90	2
NaVI	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^1$P°	285.470	1	3	-	0.304e−06	2.25	3
NaVII	$2s^2 2p - 2s2p^2$	^{2}P° $-^4$P	874.791	2	2	-	0.462e−05	3.92	3
			869.218	2	4	-	0.194e−06	2.54	3
NaVII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	486.740	2	4	0.829e−01	0.781e−01	7.92	2
NaVII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$S	378.22	2	2	0.453e−01	0.480e−01	7.54	2
NaVII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	352.275	2	2	0.150e+00	0.160e+00	8.03	2
			350.645	2	4	0.754e−01	0.780e−01	7.73	2
NaVIII	$2s^2 - 2s2p$	^{1}S $-^3$P°	789.6	1	3	-	0.110e−04	4.25	2
NaVIII	$2s^2 - 2s2p$	^{1}S $-^1$P°	411.145	1	3	0.348e+00	0.336e+00	8.47	2
NaIX	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	694.27	2	2	0.454e−01	0.455e−01	7.81	2
			681.72	2	4	0.924e−01	0.924e−01	8.11	2
MgI	$3s^2 - 3s3p$	^{1}S $-^3$P°	4572.3767	1	3	-	0.205e−05	5.55	1
MgI	$3s^2 - 3s3p$	^{1}S $-^1$P°	2852.9642	1	3	0.173e+01	0.183e+01	11.27	1
MgI	$3s^2 - 3s4p$	^{1}S $-^3$P°	2090.1082	1	3	-	0.147e−06	4.07	1
MgI	$3s^2 - 3s4p$	^{1}S $-^1$P°	2026.4768	1	3	0.122e+00	0.115e+00	9.97	1
MgI	$3s^2 - 3s5p$	^{1}S $-^1$P°	1827.9351	1	3	0.283e−01	0.245e−01	9.29	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
MgI	$3s^2 - 3s6p$	^{1}S $-^1$P°	1747.7937	1	3	0.102e−01	0.934e−02	8.83	1
MgI	$3s^2 - 3s7p$	^{1}S $-^1$P°	1707.0606	1	3	0.485e−02	0.414e−02	8.50	1
MgI	$3s^2 - 3s8p$	^{1}S $-^1$P°	1683.4116	1	3	0.271e−02	0.249e−02	8.24	1
MgI	$3s^2 - 3s9p$	^{1}S $-^1$P°	1668.4288	1	3	0.167e−02	0.120e−02	8.03	1
MgI	$3s^2 - 3s10p$	^{1}S $-^1$P°	1658.3115	1	3	0.111e−02	0.877e−03	7.84	1
MgI	$3s^2 - 3s11p$	^{1}S $-^1$P°	1651.1636	1	3	0.777e−03	0.658e−03	7.69	1
MgII	$2p^6 3s - 2p^6 3p$	^{2}S $-^2$P°	2803.531	2	2	0.314e+00	0.305e+00	10.52	1
			2796.352	2	4	0.629e+00	0.612e+00	10.83	1
MgII	$2p^6 3s - 2p^6 4p$	^{2}S $-^2$P°	1240.3947	2	2	0.185e−03	0.134e−03	6.94	1
			1239.9253	2	4	0.372e−03	0.268e−03	7.24	1
MgII	$2p^6 3s - 2p^6 5p$	^{2}S $-^2$P°	1026.1134	2	2	0.468e−03	0.426e−03	7.26	1
			1025.9681	2	4	0.936e−03	0.852e−03	7.56	1
MgII	$2p^6 3s - 2p^6 6p$	^{2}S $-^2$P°	946.7694	2	2	0.332e−03	0.349e−03	7.08	1
			946.7033	2	4	0.665e−03	0.699e−03	7.38	1
MgII	$2p^6 3s - 2p^6 7p$	^{2}S $-^2$P°	907.4115	2	2	0.221e−03	-	6.88	2
			907.3752	2	4	0.442e−03	-	7.18	2
MgII	$2p^6 3s - 2p^6 8p$	^{2}S $-^2$P°	884.7189	2	2	0.150e−03	-	6.70	2
			884.6967	2	4	0.300e−03	-	7.00	2
MgII	$2p^6 3s - 2p^6 9p$	^{2}S $-^2$P°	870.346	2	2	0.105e−03	-	6.54	3
			870.332	2	4	0.211e−03	-	6.84	3
MgIII	$2p^6 - 2p^5 3s$	^{1}S $-^3$P°	234.2631	1	3	-	0.110e−01	7.99	2
MgIII	$2p^6 - 2p^5 3s$	^{1}S $-^1$P°	231.7333	1	3	0.239e+00	0.210e+00	9.32	2
MgIV	$2s^2 2p^5 - 2s2p^6$	^{2}P° $-^2$S	320.9943	4	2	0.871e−01	0.130e+00	9.03	2
MgV	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^3$P°	353.091	5	5	0.118e+00	0.170e+00	9.20	2
			351.088	5	3	0.396e−01	0.550e−01	8.72	2
MgV	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^1$P°	251.584	5	3	-	0.269e−03	6.41	2
MgVI	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^4$P	403.315	4	6	0.101e+00	0.988e−01	9.19	2
			400.676	4	4	0.678e−01	0.674e−01	9.01	2
			399.289	4	2	0.341e−01	0.335e−01	8.71	2
MgVI	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$D	292.701	4	6	-	0.107e−07	2.08	3
			292.672	4	4	-	0.188e−06	3.32	3
MgVI	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$S	248.933	4	2	-	0.155e−04	5.17	3
MgVI	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$P	235.252	4	4	-	0.466e−04	5.62	3
			234.174	4	2	-	0.106e−04	4.97	3
MgVII	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$D°	429.134	1	3	0.801e−01	0.750e−01	9.12	2
MgVII	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$P°	363.770	1	3	0.920e−01	0.886e−01	9.10	2
MgVII	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$S°	276.145	1	3	0.112e+00	0.120e+00	9.07	2
MgVII	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^1$P°	251.815	1	3	-	0.603e−06	3.76	3
MgVIII	$2s^2 2p - 2s2p^2$	^{2}P° $-^4$P	765.708	2	2	-	0.796e−05	5.36	3
			758.938	2	4	-	0.334e−06	3.98	3
MgVIII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	430.467	2	4	0.763e−01	0.755e−01	9.10	2
MgVIII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$S	335.230	2	2	0.410e−01	0.450e−01	8.72	2
MgVIII	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	313.743	2	2	0.137e+00	0.140e+00	9.21	2
			311.806	2	4	0.686e−01	0.680e−01	8.91	2
MgIX	$2s^2 - 2s2p$	^{1}S $-^3$P°	705.72	1	3	-	0.193e−04	5.71	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
MgIX	$2s^2 - 2s2p$	^{1}S $-^1$P°	368.071	1	3	0.314e+00	0.321e+00	9.64	2
MgX	$1s^22s - 1s^22p$	^{2}S $-^2$P°	624.95	2	2	0.410e−01	0.410e−01	8.99	2
			609.79	2	4	0.842e−01	0.839e−01	9.29	2
AlI	$3s^23p - 3s^24s$	^{2}P° $-^2$S	3945.1224	2	2	0.123e+00	0.113e+00	9.17	1
AlI	$3s^23p - 3s^23d$	^{2}P° $-^2$D	3083.0479	2	4	0.162e+00	0.171e+00	9.18	1
AlI	$3s^23p - 3s^25s$	^{2}P° $-^2$S	2653.2650	2	2	0.147e−01	0.150e−01	8.07	1
AlI	$3s^23p - 3s^24d$	^{2}P° $-^2$D	2568.7523	2	4	0.597e−01	0.381e−01	8.67	1
AlI	$3s^23p - 3s^26s$	^{2}P° $-^2$S	2372.7944	2	2	0.486e−02	0.405e−02	7.54	1
AlI	$3s^23p - 3s^25d$	^{2}P° $-^2$D	2367.7762	2	4	0.128e+00	0.106e+00	8.96	1
AlI	$3s^23p - 3s^26d$	^{2}P° $-^2$D	2264.1637	2	4	0.978e−01	0.892e−01	8.83	1
AlI	$3s^23p - 3s^27s$	^{2}P° $-^2$S	2258.705	2	2	0.233e−02	-	7.20	3
AlI	$3s^23p - 3s^27d$	^{2}P° $-^2$D	2205.3555	2	4	0.637e−01	0.545e−01	8.63	1
AlI	$3s^23p - 3s^28s$	^{2}P° $-^2$S	2199.868	2	2	0.130e−02	-	6.94	3
AlI	$3s^23p - 3s^28d$	^{2}P° $-^2$D	2169.5069	2	4	0.417e−01	0.368e−01	8.44	1
AlI	$3s^23p - 3s^29s$	^{2}P° $-^2$S	2165.229	2	2	0.802e−03	-	6.72	3
AlI	$3s^23p - 3s^29d$	^{2}P° $-^2$D	2146.230	2	4	0.285e−01	0.177e−01	8.27	1
AlI	$3s^23p - 3s^210s$	^{2}P° $-^2$S	2142.902	2	2	0.531e−03	-	6.54	3
AlI	$3s^23p - 3s^210d$	^{2}P° $-^2$D	2130.335	2	4	0.200e−01	0.207e−01	8.11	1
AlI	$3s^23p - 3s^211d$	^{2}P° $-^2$D	2118.990	2	4	-	0.139e−01	7.95	1
AlI	$3s^23p - 3s3p^2$	^{2}P° $-^2$S	1932.27	2	2	-	0.781e−01	8.66	1
AlI	$3s^23p - 3s3p^2$	^{2}P° $-^2$P	1765.632	2	2	0.531e+00	0.577e+00	9.45	1
			1762.892	2	4	0.266e+00	0.289e+00	9.15	1
AlII	$3s^2 - 3s3p$	^{1}S $-^3$P°	2669.948	1	3	-	0.107e−04	4.94	1
AlII	$3s^2 - 3s3p$	^{1}S $-^1$P°	1670.7874	1	3	0.181e+01	0.183e+01	9.96	1
AlII	$3s^2 - 3s4p$	^{1}S $-^1$P°	935.2738	1	3	0.300e−02	0.261e−01	6.93	1
AlII	$3s^2 - 3s5p$	^{1}S $-^1$P°	794.475	1	3	0.565e−03	-	6.13	2
AlII	$3s^2 - 3s6p$	^{1}S $-^1$P°	741.182	1	3	0.109e−02	-	6.39	2
AlII	$3s^2 - 3s7p$	^{1}S $-^1$P°	714.695	1	3	0.110e−02	-	6.38	2
AlII	$3s^2 - 3s8p$	^{1}S $-^1$P°	699.489	1	3	0.105e−02	-	6.35	2
AlII	$3s^2 - 3s9p$	^{1}S $-^1$P°	689.936	1	3	0.995e−03	-	6.32	2
AlII	$3s^2 - 3s10p$	^{1}S $-^1$P°	683.529	1	3	0.945e−03	-	6.29	2
AlII	$3s^2 - 3s11p$	^{1}S $-^1$P°	679.024	1	3	0.856e−03	-	6.24	3
AlIII	$2p^63s - 2p^63p$	^{2}S $-^2$P°	1862.7895	2	2	0.286e+00	0.279e+00	9.21	1
			1854.7164	2	4	0.575e+00	0.560e+00	9.51	1
AlIII	$2p^63s - 2p^64p$	^{2}S $-^2$P°	696.2170	2	2	0.462e−02	0.523e−02	6.99	2
			695.8289	2	4	0.926e−02	0.107e−01	7.29	2
AlIII	$2p^63s - 2p^65p$	^{2}S $-^2$P°	560.4331	2	2	0.267e−02	0.188e−02	6.66	2
			560.3173	2	4	0.535e−02	0.377e−02	6.96	2
AlIII	$2p^63s - 2p^66p$	^{2}S $-^2$P°	511.1907	2	2	0.148e−02	-	6.36	2
			511.1384	2	4	0.296e−02	-	6.66	2
AlIII	$2p^63s - 2p^67p$	^{2}S $-^2$P°	486.9124	2	2	0.890e−03	-	6.12	2
			486.8839	2	4	0.178e−02	-	6.42	2
AlV	$2s^22p^5 - 2s2p^6$	^{2}P° $-^2$S	278.694	4	2	0.839e−01	0.120e+00	7.85	2
AlVI	$2s^22p^4 - 2s2p^5$	^{3}P $-^3$P°	309.597	5	5	0.112e+00	0.160e+00	8.02	2
			307.249	5	3	0.376e−01	0.510e−01	7.54	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
AlVII	$2s^22p^3 - 2s2p^4$	$^4S^\circ - ^4P$	356.880	4	6	0.939e−01	0.120e+00	8.01	2
			353.769	4	4	0.631e−01	0.790e−01	7.83	2
			352.145	4	2	0.317e−01	0.390e−01	7.53	2
AlVII	$2s^22p^3 - 2s2p^4$	$^4S^\circ - ^2D$	259.309	4	6	-	0.465e−07	1.56	3
			259.276	4	4	-	0.478e−06	2.57	3
AlVIII	$2s^22p^2 - 2s2p^3$	$^3P - ^3D^\circ$	381.15	1	3	0.749e−01	0.880e−01	7.94	2
AlVIII	$2s^22p^2 - 2s2p^3$	$^3P - ^3P^\circ$	323.52	1	3	0.852e−01	0.100e+00	7.92	2
AlVIII	$2s^22p^2 - 2s2p^3$	$^3P - ^3S^\circ$	247.401	1	3	0.103e+00	0.110e+00	7.89	2
AlIX	$2s^22p - 2s2p^2$	$^2P^\circ - ^4P$	683.480	2	2	-	0.130e−04	4.43	3
			675.607	2	4	-	0.546e−06	3.05	3
AlIX	$2s^22p - 2s2p^2$	$^2P^\circ - ^2D$	384.95	2	4	0.708e−01	0.790e−01	7.92	2
AlIX	$2s^22p - 2s2p^2$	$^2P^\circ - ^2S$	300.560	2	2	0.377e−01	0.400e−01	7.53	2
AlIX	$2s^22p - 2s2p^2$	$^2P^\circ - ^2P$	282.407	2	2	0.124e+00	0.130e+00	8.02	2
			280.114	2	4	0.628e−01	0.650e−01	7.73	2
AlX	$2s^2 - 2s2p$	$^1S - ^3P^\circ$	637.99	1	3	-	0.317e−04	4.79	2
AlX	$2s^2 - 2s2p$	$^1S - ^1P^\circ$	332.783	1	3	0.287e+00	0.279e+00	8.46	2
AlXI	$1s^22s - 1s^22p$	$^2S - ^2P^\circ$	568.15	2	2	0.375e−01	0.374e−01	7.81	2
			550.03	2	4	0.773e−01	0.776e−01	8.11	2
SiI	$3s^23p^2 - 3s^23p4s$	$^3P - ^3P^\circ$	2515.0725	1	3	0.236e+00	0.162e+00	10.32	1
SiI	$3s^23p^2 - 3s3p^3$	$^3P - ^3D^\circ$	2208.6665	1	3	0.522e−01	0.457e−01	9.61	1
SiI	$3s^23p^2 - 3s^23p3d$	$^3P - ^3P^\circ$	1977.5979	1	3	0.539e−01	0.389e−01	9.58	1
SiI	$3s^23p^2 - 3s^23p3d$	$^3P - ^3D^\circ$	1845.5202	1	3	0.271e+00	0.229e+00	10.25	1
SiI	$3s^23p^2 - 3s^23p5s$	$^3P - ^3P^\circ$	1841.1521	1	3	0.291e−01	0.229e−01	9.28	1
SiI	$3s^23p^2 - 3s^23p5s$	$^3P - ^1P^\circ$	1822.4553	1	3	-	0.631e−02	8.61	1
SiI	$3s^23p^2 - 3s^23p4d$	$^3P - ^3P^\circ$	1763.6607	1	3	0.121e−01	0.813e−02	8.88	1
SiI	$3s^23p^2 - 3s^23p4d$	$^3P - ^1P^\circ$	1700.6360	1	3	-	0.398e−01	9.38	1
SiI	$3s^23p^2 - 3s^23p4d$	$^3P - ^3D^\circ$	1693.2935	1	3	0.156e+00	0.871e−01	9.97	1
SiI	$3s^23p^2 - 3s^23p5d:$	$^3P - ^3P^\circ$	1666.3762	1	3	0.346e−01	0.219e−01	9.31	1
SiI	$3s^23p^2 - 3s^23p5d$	$^3P - ^1P^\circ$	1631.1705	1	3	-	0.205e+00	10.07	1
SiI	$3s^23p^2 - 3s^23p5d$	$^3P - ^3D^\circ$	1625.7051	1	3	0.851e−01	0.682e−01	9.69	1
SiI	$3s^23p^2 - 3s^23p6d:$	$^3P - ^3P^\circ$	1614.566	1	3	0.293e−01	0.472e−01	9.22	1
SiI	$3s^23p^2 - 3s^23p6d$	$^3P - ^3D^\circ$	1589.173	1	3	0.503e−01	0.168e−01	9.45	1
SiI	$3s^23p^2 - 3s^23p7d:$	$^3P - ^3P^\circ$	1584.852	1	3	0.183e−01	0.261e−01	9.01	1
SiI	$3s^23p^2 - 3s^23p9s:$	$^3P - ^3P^\circ$	1572.718	1	3	0.112e−01	-	8.80	2
SiI	$3s^23p^2 - 3s^23p7d$	$^3P - ^3D^\circ$	1568.618	1	3	0.318e−01	0.719e−02	9.25	1
SiI	$3s^23p^2 - 3s^23p8d:$	$^3P - ^3P^\circ$	1566.303	1	3	0.630e−02	-	8.54	2
SiI	$3s^23p^2 - 3s^23p8d$	$^3P - ^1P^\circ$	1562.002	1	3	-	0.376e+00	10.32	1
SiI	$3s^23p^2 - 3s^23p10s:$	$^3P - ^3P^\circ$	1560.406	1	3	0.119e−01	-	8.82	2
SiI	$3s^23p^2 - 3s^23p8d$	$^3P - ^3D^\circ$	1555.514	1	3	0.212e−01	0.338e−01	9.07	1
SiI	$3s^23p^2-$	$^3P - (\frac{3}{2}, \frac{3}{2})^\circ$	1554.296	1	3	-	0.767e−01	9.63	1
SiI	$3s^23p^2-$	$^3P - (\frac{1}{2}, \frac{3}{2})^\circ$	1552.948	1	3	-	0.129e−01	8.85	1
SiI	$3s^23p^2 - 3s^23p9d:$	$^3P - ^3P^\circ$	1552.022	1	3	0.421e−03	-	7.37	2
SiI	$3s^23p^2-$	$^3P - (\frac{1}{2}, \frac{3}{2})^\circ$	1547.130	1	3	-	0.910e−02	8.70	1
SiI	$3s^23p^2 - 3s^23p9d$	$^3P - ^3D^\circ$	1546.674	1	3	0.149e−01	-	8.91	2
SiI	$3s^23p^2 - 3s^23p11s:$	$^3P - ^3P^\circ$	1545.612	1	3	0.885e−02	-	8.69	2
SiI	$3s^23p^2-$	$^3P - (\frac{1}{2}, \frac{3}{2})^\circ$	1542.432	1	3	-	0.634e−02	8.54	1
SiI	$3s^23p^2 - 3s^23p10d$	$^3P - ^3D^\circ$	1540.354	1	3	0.108e−01	-	8.77	2
SiI	$3s^23p^2 - 3s^23p10d:$	$^3P - ^3P^\circ$	1539.738	1	3	0.424e−03	-	7.36	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
Si I	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$S°	1255.272	1	3	0.289e+00	0.220e+00	10.11	1
Si II	$3s^2 3p - 3s3p^2$	^{2}P° $-^4$P	2335.123	2	2	-	0.372e−05	5.49	1
			2329.231	2	4	-	0.215e−07	3.25	1
Si II	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	1808.0126	2	4	0.256e−02	0.553e−02	8.22	1
Si II	$3s^2 3p - 3s^2 4s$	^{2}P° $-^2$S	1526.7066	2	2	0.132e+00	0.230e+00	9.85	1
Si II	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	1304.3702	2	2	0.871e−01	0.147e+00	9.61	1
Si II	$3s^2 3p - 3s^2 3d$	^{2}P° $-^2$D	1260.4221	2	4	0.118e+01	0.101e+01	10.72	1
Si II	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	1193.2897	2	2	0.584e+00	0.499e+00	10.39	1
			1190.4158	2	4	0.293e+00	0.250e+00	10.09	1
Si II	$3s^2 3p - 3s^2 5s$	^{2}P° $-^2$S	1020.6989	2	2	0.151e−01	0.283e−01	8.74	1
Si II	$3s^2 3p - 3s^2 4d$	^{2}P° $-^2$D	989.8731	2	4	0.171e+00	0.133e+00	9.78	1
Si II	$3s^2 3p - 3s^2 6s$	^{2}P° $-^2$S	899.4063	2	2	0.570e−02	-	8.26	2
Si II	$3s^2 3p - 3s^2 5d$	^{2}P° $-^2$D	889.7228	2	4	0.434e−01	-	9.14	2
Si II	$3s^2 3p - 3s^2 7s$	^{2}P° $-^2$S	848.0700	2	2	0.279e−02	-	7.92	2
Si II	$3s^2 3p - 3s^2 6d$	^{2}P° $-^2$D	843.7192	2	4	0.168e−01	-	8.70	2
Si II	$3s^2 3p - 3s^2 8s$	^{2}P° $-^2$S	820.9210	2	2	0.160e−02	-	7.67	2
Si II	$3s^2 3p - 3s^2 7d$	^{2}P° $-^2$D	818.590	2	4	0.818e−02	-	8.38	2
Si II	$3s^2 3p - 3s^2 9s$	^{2}P° $-^2$S	804.654	2	2	0.100e−02	-	7.46	3
Si II	$3s^2 3p - 3s^2 8d$	^{2}P° $-^2$D	803.234	2	4	0.462e−02	-	8.12	2
Si II	$3s^2 3p - 3s3p(^3\text{P}^\circ)4p$	^{2}P° $-^2$P	754.191	2	2	0.183e−02	-	7.69	3
			753.713	2	4	0.914e−03	-	7.39	3
Si III	$3s^2 - 3s3p$	^{1}S $-^3$P°	1892.030	1	3	-	0.269e−04	6.26	1
Si III	$3s^2 - 3s3p$	^{1}S $-^1$P°	1206.500	1	3	0.168e+01	0.167e+01	10.86	1
Si III	$3s^2 - 3s4p$	^{1}S $-^1$P°	566.613	1	3	0.155e−01	0.460e−01	8.49	2
Si III	$3s^2 - 3s5p$	^{1}S $-^1$P°	466.129	1	3	0.141e−01	-	8.37	2
Si III	$3s^2 - 3p4s$:	^{1}S $-^1$P°	437.255	1	3	0.483e−02	-	7.87	2
Si III	$3s^2 - 3s6p$	^{1}S $-^1$P°	426.644	1	3	0.415e−03	-	6.80	2
Si III	$3s^2 - 3p3d$:	^{1}S $-^1$P°	423.817	1	3	0.181e−02	-	7.43	2
Si III	$3s^2 - 3s7p$	^{1}S $-^1$P°	408.378	1	3	0.286e−02	-	7.62	3
Si IV	$2p^6 3s - 2p^6 3p$	^{2}S $-^2$P°	1402.770	2	2	0.260e+00	0.255e+00	10.11	1
			1393.755	2	4	0.524e+00	0.514e+00	10.41	1
Si IV	$2p^6 3s - 2p^6 4p$	^{2}S $-^2$P°	458.155	2	2	0.118e−01	0.107e−01	8.28	2
			457.818	2	4	0.236e−01	0.226e−01	8.58	2
Si IV	$2p^6 3s - 2p^6 5p$	^{2}S $-^2$P°	361.659	2	2	0.537e−02	-	7.84	2
			361.560	2	4	0.108e−01	-	8.14	2
Si IV	$2p^6 3s - 2p^6 6p$	^{2}S $-^2$P°	327.181	2	2	0.279e−02	-	7.51	2
			327.137	2	4	0.557e−02	-	7.81	2
Si IV	$2p^6 3s - 2p^6 7p$	^{2}S $-^2$P°	310.257	2	2	0.163e−02	-	7.25	3
			310.234	2	4	0.325e−02	-	7.55	3
Si IV	$2p^6 3s - 2p^6 8p$	^{2}S $-^2$P°	300.531	2	2	0.104e−02	-	7.04	3
			300.517	2	4	0.207e−02	-	7.34	3
Si VI	$2s^2 2p^5 - 2s2p^6$	^{2}P° $-^2$S	246.004	4	2	0.802e−01	0.771e−01	8.85	2
Si VII	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^3$P°	275.352	5	5	0.106e+00	0.101e+00	9.02	2
			272.641	5	3	0.356e−01	0.341e−01	8.54	2
Si VIII	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^4$P	319.829	4	6	0.882e−01	0.113e+00	9.00	2
			316.202	4	4	0.594e−01	0.749e−01	8.82	2
			314.31	4	2	0.299e−01	0.385e−01	8.52	2

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Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
SiIV III	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^2$D	233.481	4	6	-	0.137e−06	3.05	3
			233.449	4	4	-	0.120e−05	4.00	3
SiIX	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$D°	341.95	1	3	0.705e−01	0.663e−01	8.93	2
SiIX	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$P°	290.63	1	3	0.795e−01	0.766e−01	8.91	2
SiX	$2s^2 2p - 2s2p^2$	^{2}P° $-^4$P	617.055	2	2	-	0.202e−04	5.65	3
			607.903	2	4	-	0.853e−06	4.26	3
SiX	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	347.417	2	4	0.662e−01	0.654e−01	8.91	2
SiX	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$S	271.995	2	2	0.349e−01	0.333e−01	8.53	2
SiX	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	256.37	2	2	0.115e+00	0.109e+00	9.02	2
			253.772	2	4	0.582e−01	0.560e−01	8.72	2
SiXI	$2s^2 - 2s2p$	^{1}S $-^3$P°	580.85	1	3	-	0.499e−04	6.01	2
SiXI	$2s^2 - 2s2p$	^{1}S $-^1$P°	303.318	1	3	0.265e+00	0.266e+00	9.46	2
SiXII	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	520.67	2	2	0.345e−01	0.344e−01	8.80	2
			499.40	2	4	0.719e−01	0.715e−01	9.11	2
PI	$3s^2 3p^3 - 3p^2 4s$	^{4}S° $-^4$P	1787.6481	4	2	-	0.511e−01	7.53	1
			1782.8291	4	4	-	0.102e+00	7.83	1
			1774.9487	4	6	-	0.154e+00	8.01	1
PI	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	1679.6969	4	6	-	0.246e−01	7.19	1
			1674.5953	4	4	-	0.165e−01	7.01	1
			1671.6713	4	2	-	0.824e−02	6.71	1
PI	$3s^2 3p^3 - 3p^2 5s$	^{4}S° $-^4$P	1381.6353	4	2	-	0.535e−02	6.44	1
			1377.9343	4	4	-	0.995e−02	6.71	1
			1373.4905	4	6	-	0.134e−01	6.83	1
PI	$3s^2 3p^3 - 3p^2 3d$	^{4}S° $-^4$P	1381.4760	4	6	-	0.791e−01	7.61	1
			1379.4282	4	4	-	0.425e−01	7.34	1
			1377.0730	4	2	-	0.173e−01	6.95	1
PI	$3s^2 3p^3 - 3p^2 4d$	^{4}S° $-^2$P	1321.421	4	4	-	0.600e−03	5.47	1
			1319.022	4	2	-	0.658e−02	6.51	1
PI	$3s^2 3p^3 - 3p^2 4d$	^{4}S° $-^2$F	1318.684	4	6	-	0.705e−02	6.54	1
PI	$3s^2 3p^3 - 3p^2 4d$	^{4}S° $-^4$F	1314.994	4	6	-	0.144e−01	6.85	1
PI	$3s^2 3p^3 - 3p^2 4d$	^{4}S° $-^4$P	1286.444	4	6	-	0.791e−02	6.58	1
			1283.881	4	4	-	0.847e−02	6.61	1
PI	$3s^2 3p^3 - 3p^2 6d$	^{4}S° $-^2$P	1226.742	4	2	-	0.643e−02	6.47	1
PI	$3s^2 3p^3 - 3p^2 7d$	^{4}S° $-^4$F	1217.843	4	6	-	0.658e−02	6.47	1
PII	$3s^2 3p^2 - 3p^3$	^{3}P $-^3$D°	1532.533	1	3	-	0.761e−02	6.64	1
PII	$3s^2 3p^2 - 3p^3$	^{3}P $-^3$P°	1301.874	1	3	-	0.173e−01	6.92	1
PII	$3s^2 3p^2 - 3p4s$	^{3}P $-^3$P°	1152.818	1	3	-	0.236e+00	8.00	1
PII	$3s^2 3p^2 - 3p4s$	^{3}P $-^1$P°	1124.945	1	3	-	0.126e−02	5.72	1
PII	$3s^2 3p^2 - 3p3d$	^{3}P $-^1$P°	972.779	1	3	-	0.132e−02	5.68	1
PII	$3s^2 3p^2 - 3p3d$	^{3}P $-^3$P°	963.801	1	3	-	0.146e+01	8.72	1
PII	$3s^2 3p^2 - 3p3d$	^{3}P $-^3$D°	961.041	1	3	-	0.349e+00	8.10	1
PIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^4$P	1756.800	2	2	-	0.158e−04	4.01	1
			1750.517	2	4	-	0.132e−05	2.93	1
PIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	1334.813	2	4	-	0.253e−01	7.10	1
PIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	998.000	2	2	-	0.112e+00	7.62	1

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Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
PIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	917.118	2	2	-	0.405e+00	8.14	1
			913.968	2	4	-	0.203e+00	7.84	1
PIV	$3s^2 - 3s3p$	^{1}S $-^3$P°	1467.427	1	3	-	0.605e−04	4.52	1
PIV	$3s^2 - 3s3p$	^{1}S $-^1$P°	950.657	1	3	-	0.116e+01	8.61	1
PIV	$3s^2 - 3s4p$	^{1}S $-^1$P°	388.318	1	3	-	0.100e+00	7.16	2
PV	$2p^6 3s - 2p^6 3p$	^{2}S $-^2$P°	1128.008	2	2	-	0.235e+00	7.99	1
			1117.977	2	4	-	0.473e+00	8.29	1
PV	$2p^6 3s - 2p^6 4p$	^{2}S $-^2$P°	328.775	2	2	-	0.180e−01	6.34	2
			328.470	2	4	-	0.370e−01	6.65	2
PV	$2p^6 3s - 2p^6 5p$	^{2}S $-^2$P°	255.674	2	2	-	0.710e−02	5.83	2
			255.587	2	4	-	0.150e−01	6.15	2
PVIII	$2s^2 2p^4 - 2s2p^5$	^{3}P $-^3$P°	247.65	5	5	-	0.129e+00	7.07	2
			244.56	5	3	-	0.440e−01	6.60	2
PIX	$2s^2 2p^3 - 2s2p^4$	^{4}S° $-^4$P	289.49	4	6	-	0.101e+00	7.04	2
			285.37	4	4	-	0.686e−01	6.86	2
			283.26	4	2	-	0.348e−01	6.56	2
PX	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$D°	309.20	1	3	-	0.890e−01	7.01	2
PX	$2s^2 2p^2 - 2s2p^3$	^{3}P $-^3$P°	263.22	1	3	-	0.771e−01	6.88	2
PXI	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	315.65	2	4	-	0.731e−01	6.93	2
PXI	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$S	247.95	2	2	-	0.594e−01	6.74	2
PXI	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$P	234.25	2	2	-	0.834e−01	6.86	2
			231.40	2	4	-	0.512e−01	6.64	2
PXII	$2s^2 - 2s2p$	^{1}S $-^3$P°	532.09	1	3	-	0.756e−03	5.17	3
PXII	$2s^2 - 2s2p$	^{1}S $-^1$P°	278.26	1	3	-	0.251e+00	7.41	2
PXIII	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	480.42	2	2	-	0.321e−01	6.76	2
			455.67	2	4	-	0.680e−01	7.06	2
SI	$3s^2 3p^4 - 3p^3 4s$	^{3}P $-^5$S°	1900.2866	5	5	-	0.357e−04	6.10	1
SI	$3s^2 3p^4 - 3p^3(^4\text{S}^\circ)4s$	^{3}P $-^3$S°	1807.3113	5	3	0.845e−01	0.111e+00	9.45	1
SI	$3s^2 3p^4 - 3p^3(^2\text{D}^\circ)4s$	^{3}P $-^3$D°	1474.5706	5	3	0.409e−03	0.121e−02	7.05	1
			1474.3785	5	5	0.614e−02	0.163e−01	8.23	1
			1473.9943	5	7	0.344e−01	0.730e−01	8.98	1
SI	$3s^2 3p^4 - 3p^3 3d$	^{3}P $-^5$D°	1472.9706	5	7	-	0.191e−01	8.72	1
SI	$3s^2 3p^4 - 3p^3 4s$	^{3}P $-^1$D°	1444.2960	5	5	-	0.813e−03	7.34	1
SI	$3s^2 3p^4 - 3p^3(^4\text{S}^\circ)3d$	^{3}P $-^3$D°	1425.2189	5	3	0.144e−02	0.238e−02	7.58	1
			1425.1877	5	5	0.216e−01	0.365e−01	8.76	1
			1425.0299	5	7	0.121e+00	0.192e+00	9.51	1
SI	$3s^2 3p^4 - 3p^3(^4\text{S}^\circ)5s$	^{3}P $-^3$S°	1401.5142	5	3	0.142e−01	0.161e−01	8.57	1
SI	$3s^2 3p^4 - 3s3p^5$	^{3}P $-^3$P°	1388.4358	5	5	0.381e−03	0.159e−03	6.99	1
			1381.5527	5	3	0.127e−03	0.927e−04	6.51	1
SI	$3s^2 3p^4 - 3p^3(^4\text{S}^\circ)4d$	^{3}P $-^3$D°	1316.6219	5	3	0.269e−03	0.411e−03	6.82	1
			1316.6150	5	5	0.403e−02	0.615e−02	7.99	1
			1316.5425	5	7	0.226e−01	0.345e−01	8.74	1
SI	$3s^2 3p^4 - 3p^3(^4\text{S}^\circ)6s$	^{3}P $-^3$S°	1303.4300	5	3	0.460e−02	0.291e−01	8.05	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
SI	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1296.1739	5	3	0.278e−01	0.408e−01	8.83	1
			1295.6531	5	5	0.836e−01	0.123e+00	9.30	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)5d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1270.7874	5	5	0.621e−03	0.100e−01	7.17	1
			1270.7804	5	7	0.347e−02	0.551e−01	7.91	1
			1270.7686	5	3	0.414e−04	0.662e−03	5.99	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)7s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	1262.8599	5	3	0.200e−02	-	7.67	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)6d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1247.1602	5	7	0.744e−04	0.324e−01	6.24	1
			1247.1342	5	5	0.133e−04	0.577e−02	5.49	1
			1247.1067	5	3	0.886e−06	0.381e−03	4.31	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)8s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	1241.9050	5	3	0.102e−02	-	7.37	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)7d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1233.3454	5	7	0.351e−03	0.200e−01	6.91	1
			1233.3124	5	5	0.626e−04	0.356e−02	6.16	1
			1233.2787	5	3	0.417e−05	0.235e−03	4.98	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)9s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	1229.608	5	3	0.577e−03	-	7.12	2
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)8d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1224.5440	5	7	0.107e−02	0.123e−01	7.39	1
			1224.5056	5	5	0.191e−03	0.219e−02	6.64	1
			1224.4709	5	3	0.127e−04	0.148e−03	5.46	1
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)10s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	1221.753	5	3	0.355e−03	-	6.91	2
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)9d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1218.595	5	7	0.152e−02	-	7.54	3
			1218.571	5	5	0.272e−03	-	6.79	3
			1218.514	5	3	0.181e−04	-	5.61	3
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)11s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	1216.45	5	3	0.232e−03	-	6.72	2
SI	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)10d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1214.318	5	7	0.168e−02	-	7.58	3
			1214.295	5	5	0.299e−03	-	6.83	3
			1214.281	5	3	0.199e−04	-	5.65	3
SI	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1156.26	5	3	0.487e−02	-	8.02	2
			1155.99	5	5	0.146e−01	-	8.50	2
SI	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1092.99	5	3	0.368e−02	-	7.87	2
			1092.62	5	5	0.110e−01	-	8.35	2
SI	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1050.30	5	3	0.415e−02	-	7.91	2
			1049.82	5	5	0.124e−01	-	8.38	2
SII	$3s^2 3p^3 - 3s3p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	1259.518	4	6	0.155e−01	0.162e−01	8.56	11
			1253.805	4	4	0.103e−01	0.109e−01	8.38	11
			1250.578	4	2	0.520e−02	0.545e−02	8.08	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})4s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	912.735	4	2	0.620e−01	0.697e−01	9.02	11
			910.484	4	4	0.124e+00	0.140e+00	9.32	11
			906.885	4	6	0.187e+00	0.211e+00	9.50	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})3d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	765.693	4	6	0.119e+01	-	10.23	11
			764.420	4	4	0.795e+00	-	10.05	11
			763.657	4	2	0.398e+00	-	9.75	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})5s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	665.519	4	2	0.917e−02	-	8.06	11
			664.315	4	4	0.184e−01	-	8.36	11
			662.267	4	6	0.277e−01	-	8.53	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})4d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	641.767	4	6	0.260e+00	-	9.49	11
			640.902	4	4	0.174e+00	-	9.32	11
			640.412	4	2	0.868e−01	-	9.01	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})6s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	603.430	4	2	0.255e−02	-	7.46	11
			602.446	4	4	0.511e−02	-	7.76	11
			600.661	4	6	0.768e−02	-	7.93	11
SII	$3s^2 3p^3 - 3p^2(^3\mathrm{P})5d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	594.475	4	6	0.828e−01	-	8.96	11
			593.835	4	4	0.552e−01	-	8.79	11
			593.507	4	2	0.276e−01	-	8.48	11

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
S II	$3s^2 3p^3 - 3p^2(^3\mathrm{P})7s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	576.978	4	2	0.122e−02	-	7.12	11
			576.057	4	4	0.244e−02	-	7.42	11
			574.397	4	6	0.368e−02	-	7.60	11
S II	$3s^2 3p^3 - 3p^2(^3\mathrm{P})6d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	571.779	4	6	0.360e−01	-	8.58	11
			571.364	4	4	0.241e−01	-	8.41	11
			571.156	4	2	0.120e−01	-	8.11	11
S II	$3s^2 3p^3 - 3p^2(^3\mathrm{P})7d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	559.131	4	6	0.187e−01	-	8.29	11
			558.924	4	4	0.125e−01	-	8.11	11
			558.755	4	2	0.624e−02	-	7.81	11
S III	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	1190.191	1	3	0.253e−01	0.222e−01	8.75	12
S III	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	1012.501	1	3	0.425e−01	0.355e−01	8.90	12
S III	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	724.289	1	3	0.352e+00	-	9.68	12
S III	$3s^2 3p^2 - 3s^2 3p4s:$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	698.731	1	3	0.783e+00	-	10.01	12
S III	$3s^2 3p^2 - 3s^2 3p3d:$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	681.470	1	3	0.683e−01	-	8.94	12
S III	$3s^2 3p^2 - 3s^2 3p3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	677.746	1	3	0.164e+01	-	10.32	12
S III	$3s^2 3p^2 - 3s^2 3p4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	484.172	1	3	0.578e−01	-	8.72	12
S III	$3s^2 3p^2 - 3s^2 3p4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	480.533	1	3	0.179e−01	-	8.20	12
S III	$3s^2 3p^2 - 3s^2 3p5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	476.351	1	3	0.270e−01	-	8.38	12
S IV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	1404.80	2	2	-	0.797e−05	5.32	1
			1398.05	2	4	-	0.377e−06	3.99	1
S IV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	1062.662	2	4	0.487e−01	0.400e−01	8.98	1
S IV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	809.668	2	2	0.104e+00	-	9.20	2
S IV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	748.400	2	2	0.500e+00	-	9.84	2
			744.907	2	4	0.251e+00	-	9.54	2
S IV	$3s^2 3p - 3s^2 3d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	657.34	2	4	0.118e+01	-	10.16	2
S IV	$3s^2 3p - 3s^2 4s$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	551.17	2	2	0.869e−01	0.938e−01	8.95	2
S IV	$3s^2 3p - 3s^2 4d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	391.558	2	4	0.514e−04	-	5.57	3
S IV	$3s^2 3p - 3s^2 5s$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	368.990	2	2	0.159e−01	-	8.04	3
S V	$3s^2 - 3s3p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	1199.134	1	3	-	0.106e−03	6.37	1
S V	$3s^2 - 3s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	786.48	1	3	0.142e+01	0.146e+01	10.32	2
S V	$3s^2 - 3s4p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	286.094	1	3	0.984e−01	-	8.72	25
S VI	$2p^6 3s - 2p^6 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	944.523	2	2	0.220e+00	0.218e+00	9.59	1
			933.378	2	4	0.445e+00	0.441e+00	9.89	1
S VI	$2p^6 3s - 2p^6 4p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	249.27	2	2	0.274e−01	0.289e−01	8.10	2
			248.99	2	4	0.547e−01	0.576e−01	8.40	2
S X	$2s^2 2p^3 - 2s2p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	264.24	4	6	0.786e−01	-	8.59	2
			259.52	4	4	0.534e−01	-	8.41	2
			257.16	4	2	0.269e−01	-	8.11	2
S XI	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	281.40	1	3	0.633e−01	0.603e−01	8.52	2
S XI	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	239.81	1	3	0.705e−01	0.672e−01	8.50	2
S XII	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	515.278	2	2	-	0.448e−04	5.63	3
			502.841	2	4	-	0.188e−05	4.25	3
S XII	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	288.45	2	4	0.589e−01	-	8.50	2
S XIII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	491.44	1	3	-	0.111e−03	6.01	2
S XIII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	256.66	1	3	0.230e+00	0.258e+00	9.04	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
SXIV	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	445.77	2	2	0.299e−01	0.298e−01	8.39	2
			417.61	2	4	0.639e−01	0.628e−01	8.70	2
ClI	$3s^2 3p^5 - 3s^2 3p^4 4s$	^{2}P° $-^4$P	1389.6925	4	6	-	0.109e−03	4.45	1
			1379.5279	4	4	-	0.284e−02	5.86	1
			1373.1164	4	2	-	0.687e−04	4.24	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4s$	^{2}P° $-^2$P	1347.2396	4	4	-	0.119e+00	7.47	1
			1335.7258	4	2	-	0.248e−01	6.79	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4s$	^{2}P° $-^2$D	1188.7742	4	6	-	0.728e−01	7.21	1
			1188.7515	4	4	-	0.547e−02	6.08	1
ClI	$3s^2 3p^5 - 3s 3p^6$	^{2}P° $-^2$S	1167.1480	4	2	-	0.957e−02	6.32	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^4$D	1135.3310	4	6	-	0.211e−04	3.65	1
			1133.9341	4	4	-	0.521e−04	4.04	1
			1132.8528	4	2	-	0.141e−04	3.47	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^4$F	1101.9361	4	6	-	0.384e−01	6.90	1
			1099.5230	4	4	-	0.381e−02	5.89	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^4$P	1098.0683	4	2	-	0.256e−03	4.72	1
			1092.4365	4	4	-	0.931e−02	6.28	1
			1090.9815	4	6	-	0.244e−02	5.70	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^2$D	1097.3692	4	6	-	0.423e−01	6.94	1
			1096.8098	4	4	-	0.134e−01	6.44	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 5s$	^{2}P° $-$ 2[2]	1094.7686	4	6	-	0.112e−02	5.36	1
			1090.7387	4	4	-	0.252e−02	5.71	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^2$P	1092.1287	4	2	-	0.462e−02	5.97	1
			1084.6670	4	4	-	0.110e−01	6.35	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^2$F	1088.0589	4	6	-	0.159e−01	6.51	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 5s$	^{2}P° $-$ 1[1]	1085.3035	4	4	-	0.127e−04	3.41	1
			1085.1709	4	2	-	0.867e−04	4.24	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 5s$	^{2}P° $-$ 0[0]	1079.8821	4	2	-	0.653e−03	5.12	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4d$	^{2}P° $-$ 2[2]	1043.9857	4	6	-	0.181e−01	6.55	1
			1042.7793	4	4	-	0.250e−01	6.69	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4d$	^{2}P° $-$ 2[1]	1041.7148	4	2	-	0.522e−02	6.01	1
			1030.8845	4	4	-	0.287e−01	6.74	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4d$	^{2}P° $-$ 2[3]	1031.5070	4	6	-	0.151e+00	7.46	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4d$	^{2}P° $-$ 1[1]	1029.3433	4	2	-	0.117e−02	5.35	1
			1028.1739	4	4	-	0.223e−01	6.63	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4d$	^{2}P° $-$ 1[2]	1027.1786	4	4	-	0.345e−02	5.82	1
			1025.2821	4	6	-	0.445e−01	6.93	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 3d$	^{2}P° $-^2$S	1004.6676	4	2	-	0.158e+00	7.47	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 5d$	^{2}P° $-$ 2[3]	1002.3464	4	6	-	0.705e−01	7.12	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 5d$	^{2}P° $-$ 1[2]	997.5375	4	4	-	0.929e−03	5.24	1
			996.5402	4	6	-	0.208e−01	6.59	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 6d$	^{2}P° $-$ 2[3]	987.9145	4	6	-	0.378e−01	6.84	1
ClI	$3s^2 3p^5 - 3s^2 3p^4 4s$	^{2}P° $-^2$S	984.2865	4	2	-	0.244e−01	6.65	1
ClII	$3s^2 3p^4 - 3s 3p^5$	^{3}P $-^3$P°	1071.0358	5	5	-	0.150e−01	6.48	1
			1063.8311	5	3	-	0.503e−02	6.00	1
ClIII	$3s^2 3p^3 - 3s 3p^4$	^{4}S° $-^4$P	1015.0249	4	6	-	0.213e−01	6.60	13
			1008.767	4	4	-	0.143e−01	6.43	13
			1005.2779	4	2	-	0.717e−02	6.13	13

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
ClIV	$3s^23p^2 - 3s3p^3$	^{3}P $-^3$D°	973.1877	1	3	-	0.444e−01	6.91	13
ClV	$3s^23p - 3s3p^2$:	^{2}P° $-^4$P	1162.8	2	4	-	0.388e−05	2.92	1
			1162.8	2	2	-	0.500e−04	4.03	1
ClV	$3s^23p - 3s3p^2$	^{2}P° $-^2$D	883.125	2	4	-	0.530e+00	7.94	13
ClV	$3s^23p - 3s^24s$	^{2}P° $-^2$S	390.15	2	2	-	0.910e−01	6.82	2
ClVI	$3s^2 - 3s3p$	^{1}S $-^3$P°	1013.87	1	3	-	0.176e−03	4.52	1
ClVI	$3s^2 - 3s3p$	^{1}S $-^1$P°	671.3580	1	3	-	0.128e+01	8.20	13
ClVII	$3s - 3p$	^{2}S $-^2$P°	812.960	2	2	-	0.209e+00	7.50	2
			800.641	2	4	-	0.418e+00	7.79	2
ClXI	$2s^22p^3 - 2s2p^4$	^{4}S° $-^4$P	242.76	4	6	-	0.878e−01	6.60	2
			237.42	4	4	-	0.601e−01	6.42	2
			234.84	4	2	-	0.306e−01	6.13	2
ClXII	$2s^22p^2 - 2s2p^3$	^{3}P $-^3$D°	257.43	1	3	-	0.848e−01	6.61	2
ClXIII	$2s^22p - 2s2p^2$	^{2}P° $-^2$D	264.78	2	4	-	0.670e−01	6.52	2
ClXIV	$2s^2 - 2s2p$	^{1}S $-^3$P°	454.84	1	3	-	0.157e−03	4.12	2
ClXIV	$2s^2 - 2s2p$	^{1}S $-^1$P°	237.70	1	3	-	0.221e+00	6.99	2
ClXV	$1s^22s - 1s^22p$	^{2}S $-^2$P°	415.50	2	2	-	0.280e−01	6.34	2
			383.96	2	4	-	0.609e−01	6.64	2
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{3/2})4s$	^{1}S $-\frac{3}{2}[\frac{3}{2}]^\circ$	1066.6599	1	3	-	0.665e−01	8.41	1
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{1/2})4s$	^{1}S $-\frac{1}{2}[\frac{1}{2}]^\circ$	1048.2199	1	3	-	0.244e+00	8.97	1
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{3/2})5s$	^{1}S $-\frac{3}{2}[\frac{3}{2}]^\circ$	879.9466	1	3	-	0.268e−01	7.93	2
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{3/2})3d$	^{1}S $-\frac{3}{2}[\frac{3}{2}]^\circ$	876.0577	1	3	-	0.930e−01	8.47	2
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{1/2})5s$	^{1}S $-\frac{1}{2}[\frac{1}{2}]^\circ$	869.7542	1	3	-	0.119e−01	7.57	2
ArI	$3p^6 - 3p^5(^2\mathrm{P}^\circ_{1/2})3d$	^{1}S $-\frac{1}{2}[\frac{3}{2}]^\circ$	866.8000	1	3	-	0.106e+00	8.52	2
ArII	$3s^23p^5 - 3s3p^6$	^{2}P° $-^2$S	919.7810	4	2	0.181e−01	0.887e−02	7.78	1
ArII	$3s^23p^5 - 3p^4(^3\mathrm{P})4s$	^{2}P° $-^4$P	740.2691	4	4	-	0.250e−02	6.83	2
			737.4537	4	2	-	0.150e−03	5.60	2
ArII	$3s^23p^5 - 3p^4(^3\mathrm{P})4s$	^{2}P° $-^2$P	723.3605	4	4	0.181e+00	0.180e+00	8.68	2
			718.0898	4	2	0.364e−01	0.370e−01	7.98	2
ArII	$3s^23p^5 - 3p^4(^3\mathrm{P})3d$	^{2}P° $-^2$P	691.0373	4	2	0.742e−04	-	5.27	2
			686.4883	4	4	0.374e−03	-	5.97	2
ArII	$3s^23p^5 - 3p^4(^1\mathrm{D})4s$	^{2}P° $-^2$D	672.8562	4	4	0.866e−02	-	7.33	2
			671.8513	4	6	0.781e−01	-	8.28	2
ArII	$3s^23p^5 - 3p^4(^3\mathrm{P})3d$	^{2}P° $-^2$D	664.5622	4	4	0.877e−02	-	7.33	2
			661.8689	4	6	0.793e−01	-	8.28	2
ArII	$3s^23p^5 - 3p^4(^1\mathrm{S})4s$	^{2}P° $-^2$S	597.7000	4	2	0.686e−01	-	8.17	2
ArII	$3s^23p^5 - 3p^4(^1\mathrm{D})3d$	^{2}P° $-^2$D	580.2631	4	6	0.493e+00	-	9.02	2
			578.6043	4	4	0.550e−01	-	8.06	2
ArII	$3s^23p^5 - 3p^4(^1\mathrm{D})3d$	^{2}P° $-^2$P	573.3619	4	4	0.257e+00	-	8.73	2
			572.0136	4	2	0.515e−01	-	8.03	2
ArII	$3s^23p^5 - 3p^4(^1\mathrm{S})3d$	^{2}P° $-^2$D	556.8169	4	6	0.157e−04	-	4.50	2
			555.7659	4	4	0.174e−05	-	3.55	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})5s$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	546.1768	4	4	0.404e−01	-	7.90	2
			543.7305	4	2	0.811e−02	-	7.20	2
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	543.2032	4	2	0.130e+00	-	8.41	2
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})4d$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	526.4969	4	2	0.260e−01	-	7.70	2
			524.6803	4	4	0.131e+00	-	8.40	2
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})4d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	519.3269	4	6	0.345e+00	-	8.81	2
			518.9088	4	4	0.383e−01	-	7.86	2
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})5s$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	510.5564	4	6	0.860e−02	-	7.20	2
			510.5509	4	4	0.956e−03	-	6.25	2
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})4d$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	501.3872	4	2	0.495e−03	-	5.95	2
			501.1897	4	4	0.248e−02	-	6.65	2
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})4d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	500.8016	4	6	0.292e−02	-	6.73	2
			500.0450	4	4	0.325e−03	-	5.77	3
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})6s$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	499.9192	4	4	0.291e−01	-	7.72	2
			498.4460	4	2	0.583e−02	-	7.02	3
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})5d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	489.1953	4	4	0.200e−01	-	7.55	2
			488.7926	4	6	0.180e+00	-	8.50	2
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})5d$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	488.962	4	2	0.190e−01	-	7.53	3
			487.278	4	4	0.953e−01	-	8.23	3
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})4d$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	487.2272	4	2	0.932e−01	-	8.22	2
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})7s$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	480.193	4	4	0.733e−02	-	7.11	3
			479.006	4	2	0.147e−02	-	6.41	3
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})6d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	477.524	4	4	0.117e−01	-	7.31	3
			475.9054	4	6	0.106e+00	-	8.26	2
ArII	$3s^2 3p^5 - 3p^4(^3\mathrm{P})6d$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	477.105	4	4	0.531e−01	-	7.96	3
			[476]	4	2	0.106e−01	-	7.26	
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})6s$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	469.633	4	4	0.214e−02	-	6.56	3
			469.6301	4	6	0.193e−01	-	7.52	2
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{D})5d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	465.8365	4	6	0.101e−01	-	7.23	2
			[465]	4	4	0.112e−02	-	6.28	
ArII	$3s^2 3p^5 - 3p^4(^1\mathrm{S})5s$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	464.974	4	2	0.972e−02	-	7.22	3
ArIII	$3s^2 3p^4 - 3s3p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	878.729	5	5	0.288e−01	0.323e−01	7.96	13
			871.105	5	3	0.969e−02	0.109e−01	7.49	13
ArIII	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	637.288	5	7	0.225e−02	-	6.72	13
			637.256	5	5	0.400e−03	-	5.97	13
			636.824	5	3	0.267e−04	-	4.79	13
ArIII	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	553.465	5	3	0.122e+00	-	8.39	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	534.268	5	3	0.314e−03	-	5.78	13
			532.410	5	5	0.473e−02	-	6.96	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	530.455	5	3	0.902e−03	-	6.24	3
			[530]	5	5	0.271e−02	-	6.72	
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	529.896	5	7	0.266e−01	-	7.71	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	508.668	5	3	0.188e−02	-	6.54	13
			508.607	5	5	0.282e−01	-	7.72	13
			508.439	5	7	0.158e+00	-	8.46	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	488.451	5	3	0.258e+00	-	8.66	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	482.552	5	5	0.675e+00	-	9.07	13
			481.854	5	3	0.226e+00	-	8.60	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)3d:$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	476.436	5	7	0.150e+01	-	9.41	13
			473.922	5	5	0.269e+00	-	8.67	13
			473.028	5	3	0.180e−01	-	7.49	13

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	467.399	5	5	0.267e+00	-	8.66	13
			466.53	5	3	0.891e−01	-	8.18	13
ArIII	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	396.422	5	5	0.248e−01	-	7.55	13
			[396.4]	5	3	0.169e−02	-	6.39	
			396.369	5	7	0.139e+00	-	8.30	13
ArIII	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	395.919	5	3	0.238e−01	-	7.53	13
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	371.776	5	3	0.597e−03	-	5.91	3
			371.746	5	7	0.502e−01	-	7.83	3
			371.729	5	5	0.895e−02	-	7.08	3
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	368.313	5	5	0.555e−01	-	7.87	3
			368.091	5	3	0.185e−01	-	7.39	3
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	367.555	5	3	0.128e−01	-	7.23	3
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	367.474	5	3	0.214e−03	-	5.46	3
			367.393	5	5	0.320e−02	-	6.63	3
			367.308	5	7	0.179e−01	-	7.38	3
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)4d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	354.610	5	3	0.292e−02	-	6.58	3
			354.485	5	5	0.876e−02	-	7.05	3
ArIII	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)5s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	349.795	5	3	0.166e−02	-	6.32	3
			349.639	5	5	0.497e−02	-	6.80	3
ArIV	$3s^2 3p^3 - 3s3p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	850.60	4	6	0.385e−01	0.428e−01	8.08	2
			843.77	4	4	0.259e−01	0.288e−01	7.90	2
			840.03	4	2	0.130e−01	0.144e−01	7.60	2
ArIV	$3s^2 3p^3 - 3p^2(^3\mathrm{P})3d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	452.91	4	6	0.156e+01	-	9.41	2
			451.87	4	4	0.104e+01	-	9.23	2
			451.20	4	2	0.521e+00	-	8.93	2
ArIV	$3s^2 3p^3 - 3p^2(^3\mathrm{P})4s$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	399.63	4	2	0.203e−01	-	7.47	2
			398.55	4	4	0.407e−01	-	7.77	2
			396.87	4	6	0.613e−01	-	7.95	2
ArV	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	822.160	1	3	0.433e−01	0.510e+00	8.11	13
ArV	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	705.364	1	3	0.613e−01	-	8.20	13
ArV	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	522.094	1	3	0.305e+00	-	8.76	13
ArV	$3s^2 3p^2 - 3s^2 3p3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	458.12	1	3	0.579e+00	-	8.98	2
ArV	$3s^2 3p^2 - 3s^2 3p3d$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	445.997	1	3	0.140e+01	-	9.36	2
ArV	$3s^2 3p^2 - 3s^2 3p4s$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	337.56	1	3	0.142e+00	-	8.24	2
ArVI	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	754.93	2	4	0.668e−01	0.480e+00	8.26	2
ArVI	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	588.92	2	2	0.873e−01	-	8.27	2
ArVI	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	548.91	2	2	0.433e+00	-	8.94	2
			544.73	2	4	0.218e+00	-	8.63	2
ArVI	$3s^2 3p - 3s^2 3d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	457.48	2	4	0.942e+00	-	9.19	2
ArVI	$3s^2 3p - 3s^2 4s$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	292.15	2	2	0.827e−01	0.883e−01	7.94	2
ArVII	$3s^2 - 3s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	585.75	1	3	0.124e+01	0.121e+01	9.42	2
ArVIII	$2p^6 3s - 2p^6 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	713.812	2	2	0.188e+00	0.183e+00	8.69	2
			700.245	2	4	0.385e+00	0.375e+00	8.99	2
ArXIII	$2s^2 2p^2 - 2s2p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	236.27	1	3	0.579e−01	0.555e−01	7.70	2
ArXIV	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	508.388	2	2	-	0.902e−04	5.22	3
			487.068	2	4	-	0.372e−05	3.82	3

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
ArXIV	$2s^2 2p - 2s2p^2$	^{2}P° $-^2$D	243.74	2	4	0.536e−01	-	7.68	2
ArXV	$2s^2 - 2s2p$	^{1}S $-^3$P°	424.01	1	3	-	0.218e−03	5.53	2
ArXVI	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	389.14	2	2	0.263e−01	0.250e−01	7.57	2
			353.92	2	4	0.579e−01	0.563e−01	7.87	2
KI	$3p^6 4s - 3p^6 4p$	^{2}S $-^2$P°	7701.093	2	2	-	0.339e+00	8.55	1
			7667.021	2	4	-	0.682e+00	8.85	1
KI	$3p^6 4s - 3p^6 5p$	^{2}S $-^2$P°	4048.356	2	2	-	0.304e−02	6.22	1
			4045.285	2	4	-	0.609e−02	6.52	1
KI	$3p^6 4s - 3p^6 6p$	^{2}S $-^2$P°	3448.363	2	2	-	0.299e−03	5.14	1
			3447.359	2	4	-	0.599e−03	5.44	1
KII	$3s^2 3p^6 - 3p^5(^2\mathrm{P}^\circ_{3/2})3d$	^{1}S $-$ $\frac{3}{2}[\frac{1}{2}]^\circ$	607.931	1	3	-	0.216e−03	4.25	2
KIII	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	765.644	4	2	-	0.220e+00	7.36	2
KIV	$3s^2 3p^4 - 3s3p^5$	^{3}P $-^3$P°	745.258	5	5	-	0.530e+00	7.73	2
			737.146	5	3	-	0.180e+00	7.25	2
KV	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	731.869	4	6	-	0.480e+00	7.68	2
			724.441	4	4	-	0.320e+00	7.50	2
			720.440	4	2	-	0.160e+00	7.19	2
KVI	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	710.526	1	3	-	0.470e+00	7.65	2
KVII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	658.398	2	4	-	0.440e+00	7.59	2
KVIII	$3s^2 - 3s3p$	^{1}S $-^1$P°	519.382	1	3	-	0.114e+01	7.90	2
KIX	$3p^6 3s - 3p^6 3p$	^{2}S $-^2$P°	636.325	2	2	-	0.177e+00	7.18	2
			621.452	2	4	-	0.362e+00	7.48	2
KXVI	$2s^2 - 2s2p$	^{1}S $-^3$P°	396.004	1	3	-	0.296e−03	4.20	2
KXVII	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	365.656	2	2	-	0.248e−01	6.09	2
			326.777	2	4	-	0.558e−01	6.39	2
CaI	$3p^6 4s^2 - 3p^6 4s4p$	^{1}S $-^3$P°	6574.595	1	3	-	0.506e−04	5.86	1
CaI	$3p^6 4s^2 - 3p^6 4s4p$	^{1}S $-^1$P°	4227.918	1	3	0.194e+01	0.175e+01	10.25	1
CaI	$3p^6 4s^2 - 3p^6 4s5p$	^{1}S $-^3$P°	2735.623	1	3	-	0.406e−02	7.39	1
CaI	$3p^6 4s^2 - 3p^6 3d4p$:	^{1}S $-^1$P°	2722.450	1	3	0.201e−01	0.900e−03	8.08	1
CaI	$3p^6 4s^2 - 3p^6 4s5p$:	^{1}S $-^1$P°	2399.289	1	3	0.154e−02	0.432e−01	6.91	1
CaI	$3p^6 4s^2 - 3p^6 4s6p$:	^{1}S $-^1$P°	2276.169	1	3	0.108e−01	0.701e−01	7.73	1
CaI	$3p^6 4s^2 - 3p^6 4s7p$:	^{1}S $-^1$P°	2201.414	1	3	0.188e−01	0.334e−01	7.96	1
CaI	$3p^6 4s^2 - 3p^6 4s8p$:	^{1}S $-^1$P°	2151.472	1	3	0.203e−01	0.127e−01	7.98	1
CaI	$3p^6 4s^2 - 3p^6 4s9p$	^{1}S $-^1$P°	2119.346	1	3	0.154e−01	-	7.85	3
CaI	$3p^6 4s^2 - 3p^6 4s10p$	^{1}S $-^1$P°	2098.160	1	3	0.997e−02	-	7.66	3
CaI	$3p^6 4s^2 - 3p^6 4s11p$	^{1}S $-^1$P°	2083.446	1	3	0.624e−02	-	7.45	3

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CaII	$3p^6 4s - 3p^6 4p$	^{2}S $-^2$P°	3969.591	2	2	0.322e+00	0.315e+00	9.45	1
			3934.777	2	4	0.650e+00	0.635e+00	9.75	1
CaII	$3p^6 4s - 3p^6 5p$	^{2}S $-^2$P°	1651.9909	2	2	0.290e−03	0.160e−03	6.02	1
			1649.8579	2	4	0.579e−03	0.170e−03	6.32	1
CaII	$3p^6 4s - 3p^6 6p$	^{2}S $-^2$P°	1342.5536	2	2	0.732e−03	0.416e−03	6.33	1
			1341.8901	2	4	0.147e−02	0.832e−03	6.64	1
CaII	$3p^6 4s - 3p^6 7p$	^{2}S $-^2$P°	1227.0	2	2	0.549e−03	-	6.17	3
			1226.7	2	4	0.109e−02	-	6.47	3
CaIII	$3s^2 3p^6 - 3s^2 3p^5 3d$	^{1}S $-^3$P°	490.549	1	3	-	0.173e−03	5.27	3
CaIII	$3s^2 3p^6 - 3s^2 3p^5 3d$	^{1}S $-^3$D°	439.691	1	3	-	0.165e−02	6.20	2
CaIII	$3s^2 3p^6 - 3s^2 3p^5 4s$	^{1}S $-^1$P°	403.724	1	3	0.700e+00	-	8.79	2
CaIII	$3s^2 3p^6 - 3s^2 3p^5 3d$	^{1}S $-^1$P°	357.969	1	3	0.383e+01	0.507e+01	9.48	3
CaIII	$3s^2 3p^6 - 3s^2 3p^5 5s$	^{1}S $-^1$P°	301.741	1	3	0.137e+00	-	7.96	2
CaIII	$3s^2 3p^6 - 3s^2 3p^5 4d$	^{1}S $-^1$P°	296.958	1	3	0.117e+01	-	8.88	3
CaIII	$3s^2 3p^6 - 3s^2 3p^5 6s$	^{1}S $-^1$P°	274.461	1	3	0.506e−01	-	7.48	2
CaIII	$3s^2 3p^6 - 3s^2 3p^5 5d$	^{1}S $-^1$P°	273.695	1	3	0.419e+00	-	8.40	2
CaIV	$3s^2 3p^5 - 3s 3p^6$	^{2}P° $-^2$S	656.001	4	2	0.295e−01	0.370e+00	7.63	14
CaIV	$3s^2 3p^5 - 3p^4(^3\mathrm{P})4s$:	^{2}P° $-^2$P	454.558	4	4	0.726e−03	-	5.86	14
			450.564	4	2	0.146e−03	-	5.16	14
CaIV	$3s^2 3p^5 - 3p^4(^3\mathrm{P})3d$:	^{2}P° $-^2$D	437.752	4	4	0.672e−03	-	5.81	14
			434.559	4	6	0.609e−02	-	6.76	14
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$:	^{2}P° $-^2$D	370.402	4	6	0.192e−01	-	7.19	14
			369.646	4	4	0.215e−02	-	6.24	14
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$:	^{2}P° $-^2$S	341.291	4	2	0.450e+00	-	8.53	14
CaIV	$3s^2 3p^5 - 3p^4(^3\mathrm{P})3d$:	^{2}P° $-^2$P	340.282	4	4	0.522e+00	-	8.59	14
			338.822	4	2	0.105e+00	-	7.89	14
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{S})3d$:	^{2}P° $-^2$D	331.986	4	6	0.732e+00	-	8.73	14
			329.110	4	4	0.820e−01	-	7.77	14
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$:	^{2}P° $-^2$P	331.434	4	4	0.611e+00	-	8.65	14
			329.371	4	2	0.123e+00	-	7.95	14
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{D})4s$	^{2}P° $-^2$D	318.385	4	4	0.158e+00	-	8.04	2
			318.094	4	6	0.142e+01	-	8.99	2
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{S})4s$	^{2}P° $-^2$S	296.554	4	2	0.159e−02	-	6.01	2
CaIV	$3s^2 3p^5 - 3p^4(^1\mathrm{D})5s$	^{2}P° $-^2$D	250.153	4	6	0.126e−01	-	6.84	2
			249.408	4	4	0.141e−02	-	5.89	2
CaV	$3s^2 3p^4 - 3s 3p^5$	^{3}P $-^3$P°	646.534	5	5	0.410e−01	0.432e−01	7.76	2
			637.917	5	3	0.139e−01	0.143e−01	7.29	2
CaV	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$:	^{3}P $-^3$S°	340.389	5	3	0.283e+00	-	8.32	2
CaV	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)3d$:	^{3}P $-^3$P°	335.344	5	5	0.121e−01	-	6.95	2
			333.857	5	3	0.405e−02	-	6.47	2
CaV	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)3d$:	^{3}P $-^3$D°	324.477	5	7	0.973e−02	-	6.84	2
			322.757	5	5	0.175e−02	-	6.09	2
			321.609	5	3	0.117e−03	-	4.92	2
CaV	$3s^2 3p^4 - 3p^3(^4\mathrm{S}^\circ)4s$	^{3}P $-^3$S°	284.978	5	3	0.658e−01	-	7.61	2
CaV	$3s^2 3p^4 - 3p^3(^2\mathrm{D}^\circ)4s$	^{3}P $-^3$D°	270.570	5	3	0.879e−03	-	5.72	2
			270.494	5	5	0.132e−01	-	6.89	2
			270.305	5	7	0.740e−01	-	7.64	2
CaV	$3s^2 3p^4 - 3p^3(^2\mathrm{P}^\circ)4s$	^{3}P $-^3$P°	258.251	5	3	0.129e−01	-	6.86	2
			257.976	5	5	0.386e−01	-	7.34	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CaVI	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	641.904	4	6	0.471e−01	0.440e+00	7.82	2
			633.844	4	4	0.318e−01	0.300e+00	7.64	2
			629.602	4	2	0.160e−01	0.140e+00	7.34	2
CaVI	$3s^2 3p^3 - 3p^2(^3\mathrm{P})3d$	^{4}S° $-^4$P	335.33	4	6	0.124e+01	-	8.96	2
			334.14	4	4	0.832e+00	-	8.78	2
			333.44	4	2	0.417e+00	-	8.48	2
CaVI	$3s^2 3p^3 - 3p^2(^3\mathrm{P})4s$	^{4}S° $-^4$P	230.495	4	2	0.331e−01	-	7.22	2
			229.734	4	4	0.665e−01	-	7.52	2
			228.628	4	6	0.100e+00	-	7.70	2
CaVII	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	624.385	1	3	0.503e−01	0.579e−01	7.84	2
CaVII	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$P°	539.396	1	3	0.665e−01	-	7.89	2
CaVII	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$S°	407.764	1	3	0.270e+00	-	8.38	2
CaVII	$3s^2 3p^2 - 3s^2 3p3d$	^{3}P $-^3$P°	347.021	1	3	0.464e+00	-	8.55	2
CaVII	$3s^2 3p^2 - 3s^2 3p3d$	^{3}P $-^3$D°	338.824	1	3	0.114e+01	-	8.93	2
CaVIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	582.845	2	4	0.725e−01	0.420e+00	7.97	2
CaVIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	461.711	2	2	0.766e−01	-	7.89	2
CaVIII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	432.869	2	2	0.382e+00	-	8.56	2
			428.094	2	4	0.194e+00	-	8.26	2
CaVIII	$3s^2 3p - 3s^2 3d$	^{2}P° $-^2$D	354.165	2	4	0.768e+00	-	8.77	2
CaIX	$3s^2 - 3s3p$	^{1}S $-^1$P°	466.240	1	3	0.109e+01	0.109e+01	9.05	2
CaX	$2p^6 3s - 2p^6 3p$	^{2}S $-^2$P°	574.010	2	2	0.166e+00	0.158e+00	8.32	2
			557.763	2	4	0.343e+00	0.326e+00	8.62	2
CaXVII	$2s^2 - 2s2p$	^{1}S $-^3$P°	371.037	1	3	-	0.394e−03	5.50	2
CaXVIII	$1s^2 2s - 1s^2 2p$	^{2}S $-^2$P°	344.772	2	2	0.236e−01	0.232e−01	7.25	2
			302.215	2	4	0.538e−01	0.548e−01	7.55	2
ScI	$3d4s^2 - 4p$	^{2}D $-^2$D°	4021.528	4	4	-	0.395e+00	6.29	1
			3997.728	4	6	-	0.593e−01	5.46	1
ScI	$3d4s^2 - 4p$	^{2}D $-^2$F°	3908.595	4	6	-	0.570e+00	6.44	1
ScI	$3d4s^2 - 4p$	^{2}D $-^2$P°	3270.842	4	2	-	0.251e+00	6.00	1
			3256.623	4	4	-	0.505e−01	5.31	1
ScI	$3d4s^2 - 4p'$	^{2}D $-^2$F°	3016.246	4	6	-	0.160e+00	5.77	1
ScII	$3d4s - 3d4p$	^{3}D $-^3$F°	3643.822	3	5	-	0.375e+00	6.23	1
ScII	$3d4s - 3d4p$	^{3}D $-^3$D°	3581.947	3	3	-	0.237e+00	6.02	1
			3568.715	3	5	-	0.111e+00	5.69	1
ScII	$3d4s - 3d4p$	^{3}D $-^3$P°	3362.897	3	1	-	0.661e−01	5.44	1
			3362.231	3	3	-	0.576e−01	5.38	1
			3353.012	3	5	-	0.450e−02	4.27	1
ScII	$3d4s - 4s4p$	^{3}D $-^3$P°	2563.958	3	1	-	0.887e−01	5.45	1
			2556.561	3	3	-	0.676e−01	5.33	1
			2541.585	3	5	-	0.420e−02	4.12	1
ScIII	$3p^6 3d - 4p$	^{2}D $-^2$P°	1610.194	4	2	-	0.866e−01	5.23	1
			1598.001	4	4	-	0.175e−01	4.54	1
ScIII	$3p^6 3d - 5p$	^{2}D $-^2$P°	780.5966	4	2	-	0.630e−02	3.78	2
			779.538	4	4	-	0.130e−02	3.10	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
Sc III	$3p^6 3d - 4f$	^{2}D $-^2$F°	730.5997	4	6	-	0.140e+00	5.10	2
Sc III	$3p^6 3d - 5f$	^{2}D $-^2$F°	627.0693	4	6	-	0.700e−01	4.73	2
Sc IV	$3p^6 - 3p^5 3d$	^{1}S $-^3$D°	371.160	1	3	-	0.160e−02	2.86	2
Sc IV	$3p^6 - 3p^5 4s$	^{1}S $-^3$P°	299.037	1	3	-	0.800e−01	4.47	2
Sc IV	$3p^6 - 3p^5 4s$	^{1}S $-^1$P°	296.311	1	3	-	0.340e+00	5.09	2
Sc IV	$3p^6 - 3p^5 3d$	^{1}S $-^1$P°	289.851	1	3	-	0.392e+01	6.15	2
Sc V	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	573.355	4	2	-	0.346e−01	4.39	15
Sc V	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$	^{2}P° $-^2$D	296.164	4	2	-	0.410e+00	5.17	15
Sc V	$3s^2 3p^5 - 3p^4(^3\mathrm{P})3d$	^{2}P° $-^2$D	283.913	4	6	-	0.180e+01	5.80	15
			280.992	4	4	-	0.730e−01	4.40	15
Sc VII	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	571.249	4	6	-	0.480e−01	4.53	2
			562.504	4	4	-	0.320e−01	4.35	2
			558.044	4	2	-	0.160e−01	4.04	2
Sc VII	$3p^3 - 3p^2(^3\mathrm{P})3d$	^{4}S° $-^4$P	298.557	4	6	-	0.110e+01	5.61	2
Sc VIII	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	555.672	1	3	-	0.550e−01	4.58	2
Sc VIII	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$P°	481.321	1	3	-	0.590e−01	4.54	2
Sc VIII	$3p^2 - 3p3d$	^{3}P $-^1$P°	268.250	1	3	-	0.310e−02	3.01	5
Sc IX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	521.894	2	4	-	0.730e−01	4.67	2
Sc IX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	416.041	2	2	-	0.140e+00	4.86	2
Sc IX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	390.888	2	2	-	0.290e+00	5.14	2
			385.869	2	4	-	0.182e+00	4.94	2
Sc IX	$3p - 3d$	^{2}P° $-^2$D	318.615	2	4	-	0.670e+00	5.42	2
Sc X	$3s^2 - 3s3p$	^{1}S $-^1$P°	422.850	1	3	-	0.105e+01	5.74	2
Sc XI	$3s - 3p$	^{2}S $-^2$P°	522.777	2	2	-	0.161e+00	5.02	2
			505.108	2	4	-	0.337e+00	5.32	2
Sc XVII	$2s^2 2p - 2s2p^2$	^{2}P° $-^4$P	346.690	2	2	-	0.230e−03	1.99	5
Sc XVIII	$2s^2 - 2s2p$	^{1}S $-^3$P°	348.605	1	3	-	0.510e−03	2.34	2
Sc XIX	$2s - 2p$	^{2}S $-^2$P°	326.028	2	2	-	0.222e−01	3.95	2
			279.817	2	4	-	0.523e−01	4.26	2
Ti I	$3d^2 4s^2 - y$	^{3}F $-^3$F°	3982.888	5	5	-	0.893e−01	7.48	1
			3963.972	5	7	-	0.136e−01	6.66	1
Ti I	$3d^2 4s^2 - x$	^{3}F $-^3$F°	3730.867	5	5	-	0.891e−01	7.45	1
			3718.449	5	7	-	0.123e−01	6.59	1
Ti I	$3d^2 4s^2 - y$	^{3}F $-^3$G°	3636.498	5	7	-	0.223e+00	7.84	1
Ti I	$3d^2 4s^2 - x$	^{3}F $-^3$G°	3342.834	5	7	-	0.152e+00	7.64	1
Ti I	$3d^2 4s^2 - w$	^{3}F $-^3$G°	3187.372	5	7	-	0.170e+00	7.66	1
Ti I	$3d^2 4s^2 - v$	^{3}F $-^3$F°	2942.851	5	5	-	0.135e+00	7.53	1
			2934.392	5	7	-	0.174e−01	6.64	1
Ti II	$3d^2 4s - z$	^{4}F $-^4$G°	3384.740	4	6	-	0.340e+00	7.99	1
Ti II	$3d^2 4s - z$	^{4}F $-^4$F°	3242.929	4	4	-	0.183e+00	7.70	1
			3230.131	4	6	-	0.586e−01	7.21	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
TiII	$3d^2 4s - z$	^{4}F $-^2$D°	3148.961	4	4	-	0.158e−01	6.63	1
			3122.515	4	6	-	0.128e−02	5.53	1
TiII	$3d^2 4s - z$	^{4}F $-^4$D°	3073.877	4	2	-	0.109e+00	7.46	1
			3067.245	4	4	-	0.466e−01	7.09	1
			3058.292	4	6	-	0.466e−02	6.08	1
TiII	$3d^2 4s -$	^{4}F $-^4$F°	1910.938	4	4	-	0.706e−01	7.06	1
			1905.774	4	6	-	0.161e−01	6.42	1
TiII	$3d^2 4s -$	^{4}F $-^4$D°	1910.609	4	2	-	0.975e−01	7.20	1
			1906.239	4	4	-	0.228e−01	6.57	1
			1900.021	4	6	-	0.446e−03	4.86	1
TiIII	$3d^2 - 4p$	^{3}F $-^1$D°	1329.819	5	5	-	0.281e−02	5.50	1
TiIII	$3d^2 - 4p$	^{3}F $-^3$D°	1298.697	5	3	-	0.951e−01	7.02	1
			1295.884	5	5	-	0.668e−01	6.87	1
			1291.582	5	7	-	0.604e−02	5.82	1
TiIII	$3d^2 - 4p$	^{3}F $-^3$F°	1291.625	5	5	-	0.303e−04	3.52	1
			1286.233	5	7	-	0.991e−03	5.04	1
TiIII	$3d^2 - 4p$	^{3}F $-^3$P°	1235.495	5	3	-	0.167e−03	4.24	1
			1234.195	5	5	-	0.422e−04	3.65	1
TiIII	$3d^2 - 4p$	^{3}F $-^1$F°	1203.124	5	7	-	0.123e−04	3.10	1
TiIII	$3d^2 - 4p$	^{3}F $-^1$P°	1193.362	5	3	-	0.156e−03	4.20	1
TiIV	$3d - 4p$	^{2}D $-^2$P°	781.730	4	2	-	0.650e−01	6.64	2
			776.762	4	4	-	0.130e−01	5.93	2
TiIV	$3d - 5p$	^{2}D $-^2$P°	433.635	4	2	-	0.775e−02	5.46	2
			433.042	4	4	-	0.150e−02	4.74	2
TiIV	$3d - 4f$	^{2}D $-^2$F°	423.487	4	6	-	0.198e+00	6.85	2
TiV	$3p^6 - 3p^5 3d$	^{1}S $-^3$D°	323.365	1	3	-	0.190e−02	4.72	2
TiV	$3p^6 - 3p^5 3d$	^{1}S $-^1$P°	252.958	1	3	-	0.363e+01	7.89	2
TiV	$3p^6 - 3p^5 4s$	^{1}S $-^3$P°	228.909	1	3	-	0.970e−01	6.28	2
TiVI	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	508.575	4	2	-	0.355e−01	6.19	2
TiVI	$3p^5 - 3p^4(^3\mathrm{P})3d$	^{2}P° $-^4$P	331.767	4	2	-	0.190e−03	3.73	2
TiVI	$3p^5 - 3p^4(^1\mathrm{D})3d$	^{2}P° $-^2$F	301.913	4	6	-	0.380e−03	3.99	2
TiVI	$3p^5 - 3p^4(^1\mathrm{S})3d$	^{2}P° $-^2$D	282.215	4	6	-	0.100e−02	4.38	2
TiVI	$3p^5 - 3p^4(^1\mathrm{D})3d$	^{2}P° $-^2$S	263.246	4	2	-	0.381e+00	6.93	2
TiVI	$3p^5 - 3p^4(^3\mathrm{P})3d$	^{2}P° $-^2$D	250.482	4	6	-	0.170e+01	7.56	2
			247.450	4	4	-	0.640e−01	6.13	2
TiVIII	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	514.206	4	6	-	0.490e−01	6.33	2
			504.801	4	4	-	0.330e−01	6.15	2
			500.116	4	2	-	0.170e−01	5.86	2
TiVIII	$3p^3 - 3p^2(^3\mathrm{P})3d$	^{4}S° $-^4$P	269.533	4	6	-	0.980e+00	7.35	2
			268.178	4	4	-	0.653e+00	7.17	2
			267.401	4	2	-	0.327e+00	6.87	2
TiIX	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	499.479	1	3	-	0.580e−01	6.39	2
TiIX	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$P°	433.567	1	3	-	0.583e−01	6.33	2
TiIX	$3p^2 - 3p3d$	^{3}P $-^3$P°	280.141	1	3	-	0.390e+00	6.97	2
TiIX	$3p^2 - 3p3d$	^{3}P $-^3$D°	274.411	1	3	-	0.900e+00	7.32	2
TiIX	$3p^2 - 3p3d$	^{3}P $-^1$P°	242.820	1	3	-	0.360e−02	4.87	5

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
TiX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	471.574	2	4	-	0.740e−01	6.47	2
TiX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	378.135	2	2	-	0.150e+00	6.68	2
TiX	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	355.815	2	2	-	0.247e+00	6.87	2
			350.610	2	4	-	0.172e+00	6.71	2
TiX	$3p - 3d$	^{2}P° $-^2$D	289.579	2	4	-	0.629e+00	7.19	2
TiXI	$3s^2 - 3s3p$	^{1}S $-^3$P°	569.3	1	3	-	0.130e−02	4.80	2
TiXI	$3s^2 - 3s3p$	^{1}S $-^1$P°	386.140	1	3	-	0.992e+00	7.51	2
TiXII	$2p^6 3s - 2p^6 3p$	^{2}S $-^2$P°	479.881	2	2	-	0.152e+00	6.79	2
			460.741	2	4	-	0.320e+00	7.10	2
TiXIX	$2s^2 - 2s2p$	^{1}S $-^3$P°	328.336	1	3	-	0.660e−03	4.27	2
TiXX	$2s - 2p$	^{2}S $-^2$P°	309.104	2	2	-	0.212e−01	5.75	2
			259.296	2	4	-	0.509e−01	6.05	2
VI	$3d^3 4s^2 - y$	^{4}F $-^4$F°	3856.455	4	4	-	0.736e−01	6.47	1
			3845.528	4	6	-	0.199e−01	5.90	1
VI	$3d^3 4s^2 - y$	^{4}F $-^4$D°	3819.326	4	2	-	0.736e−01	6.47	1
			3809.599	4	4	-	0.322e−01	6.11	1
			3794.685	4	6	-	0.256e−02	5.01	1
VI	$3d^3 4s^2 - x$	^{4}F $-^4$G°	3184.933	4	6	-	0.547e+00	7.26	1
VI	$3d^3 4s^2 - w$	^{4}F $-^4$F°	3054.542	4	4	-	0.181e+00	6.76	1
			3044.435	4	6	-	0.370e−01	6.07	1
VII	$3d^4 - z$	^{5}D $-^3$D°	2740.525	1	3	-	0.102e+00	6.47	1
VII	$3d^4 - z$	^{5}D $-^5$F°	2706.021	1	3	-	0.137e−01	5.59	1
VII	$3d^4 - z$	^{5}D $-^5$D°	2683.887	1	3	-	0.103e+00	6.46	1
VII	$3d^4 - y$	^{5}D $-^5$D°	2141.767	1	3	-	0.805e−02	5.26	1
VII	$3d^4 - z$	^{5}D $-^5$P°	2138.827	1	3	-	0.820e−01	6.26	1
VII	$3d^4 - z$	^{5}D $-^3$P°	2122.782	1	3	-	0.111e−02	4.39	1
VII	$3d^4 - y$	^{5}D $-^3$P°	1970.880	1	3	-	0.335e−03	3.84	1
VII	$3d^4 - z$	^{5}D $-^3$S°	1916.400	1	3	-	0.199e−03	3.60	1
VII	$3d^4 - 4f$	^{5}D $- 2[\frac{1}{2}]$°	1106.571	1	3	-	0.123e+00	6.15	1
VII	$3d^4 - 4f$	^{5}D $- 2[\frac{3}{2}]$°	1106.449	1	3	-	0.239e−01	5.44	1
VIII	$3d^3 - z$	^{4}F $-^4$G°	1169.262	4	6	-	0.192e−01	5.37	1
VIII	$3d^3 - z$	^{4}F $-^4$F°	1153.179	4	4	-	0.103e+00	6.09	1
			1150.245	4	6	-	0.234e−01	5.45	1
VIII	$3d^3 - z$	^{4}F $-^2$F°	1137.904	4	6	-	0.566e−03	3.83	1
VIII	$3d^3-$	^{4}F $-^2$D°	1129.190	4	4	-	0.102e−02	4.08	1
			1117.847	4	6	-	0.984e−03	4.06	1
VIII	$3d^3-$	^{4}F $-^4$D°	1124.298	4	6	-	0.169e−03	3.30	1
			1123.524	4	2	-	0.561e−01	5.82	1
			1121.158	4	4	-	0.194e−01	5.36	1
VIII	$3d^3 - y$	^{4}F $-^4$D°	1009.354	4	2	-	0.221e−01	5.37	1
			1008.253	4	4	-	0.822e−02	4.94	1
			1005.631	4	6	-	0.574e−03	3.78	1
VIII	$3d^3 - y$	^{4}F $-^2$D°	1004.939	4	4	-	0.740e−03	3.89	1
			1001.958	4	6	-	0.753e−04	2.90	1
VIV	$3d^2 - 3d4p$	^{3}S $-^3$D°	682.923	5	5	-	0.482e−01	5.54	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
V v	$3p^6 3d - 3p^5 3d^2(^3\mathrm{F})$	$^2\mathrm{D} - ^2\mathrm{F}^\circ$	252.440	4	6	-	0.450e+00	6.08	2
V v	$3p^6 3d - 3p^5 3d^2(^3\mathrm{P})$	$^2\mathrm{D} - ^2\mathrm{P}^\circ$	228.301	4	2	-	0.670e+00	6.20	2
V vi	$3p^6 - 3p^5 3d$	$^1\mathrm{S} - ^3\mathrm{D}^\circ$	287.440	1	3	-	0.210e−02	3.80	2
V vii	$3s^2 3p^5 - 3s3p^6$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	456.284	4	2	-	0.358e−01	5.23	2
V vii	$3p^5 - 3p^4(^1\mathrm{D})3d$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	237.50	4	2	-	0.355e+00	5.95	2
V viii	$3s^2 3p^4 - 3s3p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	459.799	5	5	-	0.400e−01	5.28	2
V viii	$3p^4 - 3p^3(^2\mathrm{D}^\circ)3d$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	240.22	5	5	-	0.720e+00	6.26	2
V ix	$3s^2 3p^3 - 3s3p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	467.143	4	6	-	0.490e−01	5.38	2
			457.010	4	4	-	0.330e−01	5.20	2
			452.132	4	2	-	0.170e−01	4.91	2
V ix	$3s^2 3p^3 - 3s^2 3p^2 3d$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	244.89	4	6	-	0.900e+00	6.36	2
			244.46	4	4	-	0.620e+00	6.20	2
			243.58	4	2	-	0.310e+00	5.90	2
V x	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	452.522	1	3	-	0.610e−01	5.46	2
V x	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	393.469	1	3	-	0.570e−01	5.37	2
V xi	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	429.232	2	4	-	0.740e−01	5.52	2
V xi	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	346.123	2	2	-	0.160e+00	5.76	2
V xi	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	325.945	2	2	-	0.220e+00	5.88	2
			320.626	2	4	-	0.164e+00	5.74	2
V xi	$3p - 3d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	265.31	2	4	-	0.570e+00	6.20	2
V xii	$3s^2 - 3s3p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	522.4	1	3	-	0.140e−02	3.88	2
V xii	$3s^2 - 3s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	355.11	1	3	-	0.947e+00	6.55	2
V xiii	$3s - 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	443.429	2	2	-	0.145e+00	5.83	2
			422.785	2	4	-	0.305e+00	6.13	2
V xx	$2s^2 - 2s2p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	309.937	1	3	-	0.830e−03	3.43	2
V xxi	$2s - 2p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	293.742	2	2	-	0.202e−01	4.79	2
			240.423	2	4	-	0.498e−01	5.10	2
Cr i	$3d^5 4s - z$	$^7\mathrm{S} - ^7\mathrm{P}^\circ$	4290.923	7	5	-	0.622e−01	8.11	1
			4275.999	7	7	-	0.839e−01	8.23	1
			4255.529	7	9	-	0.110e+00	8.35	1
Cr i	$3d^5 4s - y$	$^7\mathrm{S} - ^7\mathrm{P}^\circ$	3606.350	7	5	-	0.225e+00	8.59	1
			3594.507	7	7	-	0.290e+00	8.70	1
			3579.705	7	9	-	0.366e+00	8.80	1
Cr i	$3d^5 4s - x$	$^7\mathrm{S} - ^7\mathrm{P}^\circ$	2367.534	7	5	-	0.412e−02	6.67	1
			2366.634	7	7	-	0.462e−02	6.72	1
			2365.453	7	9	-	0.569e−02	6.81	1
Cr i	$3d^5 4s - 3d^5 8p$	$^7\mathrm{S} - ^7\mathrm{P}^\circ$	1940.640	7	5	-	0.693e−02	6.81	1
			1940.561	7	7	-	0.970e−02	6.95	1
			1940.451	7	9	-	0.125e−01	7.06	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CrII	$3d^5 - z$	^{6}S $-^6$P°	2066.161	6	4	-	0.698e−01	7.84	1
			2062.234	6	6	-	0.105e+00	8.02	1
			2056.254	6	8	-	0.140e+00	8.14	1
CrII	$3d^5 - z$	^{6}S $-^4$P°	2040.569	6	4	-	0.441e−02	6.63	1
			2011.816	6	6	-	0.183e−04	4.25	1
CrII	$3d^5 - z$	^{6}S $-^6$D°	2026.269	6	6	-	0.471e−02	6.66	1
			2017.569	6	4	-	0.237e−05	3.36	1
			2014.270	6	8	-	0.875e−03	5.93	1
CrII	$3d^5 - x$	^{6}S $-^6$P°	1084.183	6	4	-	0.177e−02	5.96	1
			1082.041	6	6	-	0.269e−02	6.14	1
			1079.293	6	8	-	0.357e−02	6.27	1
CrII	$3d^5 - 3d^4 5p$	^{6}S $-^6$P°	1064.210	6	8	-	0.432e−02	6.34	1
			1063.801	6	4	-	0.218e−02	6.05	1
			1062.198	6	6	-	0.249e−02	6.10	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^5$F°	1040.050	1	3	-	0.122e+00	7.78	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^5$D°	1033.331	1	3	-	0.640e−01	7.50	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^3$D°	1030.100	1	3	-	0.625e−01	7.49	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^5$P°	923.780	1	3	-	0.811e−01	7.55	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^5$D°	918.569	1	3	-	0.611e−02	6.43	1
CrIII	$3d^4 - 3d^3 4p$	^{5}D $-^3$P°	912.653	1	3	-	0.793e−03	5.54	1
CrV	$3d^2 - 3d4p$	^{3}F $-^3$D°	437.655	5	5	-	0.373e−01	6.89	2
CrV	$3d^2 - 3d4p$	^{3}F $-^3$F°	435.636	5	5	-	0.800e−02	6.22	2
CrVI	$3p^6 3d - 3p^5 3d^2(^1\mathrm{G})$	^{2}D $-^2$F°	280.143	4	6	-	0.100e−01	6.13	2
CrVI	$3p^6 3d - 3p^5 3d^2(^1\mathrm{D})$	^{2}D $-^2$F°	264.078	4	6	-	0.400e−01	6.70	2
CrVII	$3p^6 - 3p^5 3d$	^{1}S $-^3$D°	259.181	1	3	-	0.280e−02	5.54	2
CrVIII	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	413.112	4	2	-	0.357e−01	6.85	2
CrIX	$3s^2 3p^4 - 3s3p^5$	^{3}P $-^3$P°	418.290	5	5	-	0.370e−01	6.87	2
CrX	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	427.551	4	6	-	0.480e−01	6.99	2
			416.690	4	4	-	0.330e−01	6.82	2
			411.655	4	2	-	0.170e−01	6.52	2
CrXI	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	412.629	1	3	-	0.630e−01	7.09	2
CrXI	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$P°	359.203	1	3	-	0.550e−01	6.98	2
CrXII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	393.00	2	4	-	0.770e−01	7.16	2
CrXII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	318.89	2	2	-	0.170e+00	7.41	2
CrXII	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	300.08	2	2	-	0.189e+00	7.43	2
			294.77	2	4	-	0.157e+00	7.35	2
CrXII	$3p - 3d$	^{2}P° $-^2$D	244.70	2	4	-	0.539e+00	7.80	2
CrXIII	$3s^2 - 3s3p$	^{1}S $-^3$P°	482.2	1	3	-	0.190e−02	5.64	2
CrXIII	$3s^2 - 3s3p$	^{1}S $-^1$P°	328.29	1	3	-	0.901e+00	8.15	2
CrXIV	$3s - 3p$	^{2}S $-^2$P°	411.99	2	2	-	0.137e+00	7.43	2
			389.81	2	4	-	0.292e+00	7.74	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CrXX	$2s^2 2p - 2s 2p^2$	^{2}P° $-^4$P	283.8	2	2	-	0.500e−03	4.83	2
CrXXI	$2s^2 - 2s 2p$	^{1}S $-^3$P°	293.15	1	3	-	0.100e−02	5.15	2
CrXXII	$2s - 2p$	^{2}S $-^2$P°	279.733	2	2	-	0.193e−01	6.41	16
MnI	$3d^5 4s^2 - z$	^{6}S $-^6$P°	4035.623	6	4	-	0.258e−01	7.55	1
			4034.202	6	6	-	0.402e−01	7.74	1
			4031.892	6	8	-	0.565e−01	7.89	1
MnI	$3d^5 4s^2 - y$	^{6}S $-^6$P°	2801.907	6	4	-	0.290e+00	8.44	1
			2799.094	6	6	-	0.419e+00	8.60	1
			2795.641	6	8	-	0.565e+00	8.73	1
MnI	$3d^5 4s^2 - x$	^{6}S $-^6$P°	2222.523	6	8	-	0.785e−01	7.77	1
			2214.540	6	6	-	0.544e−01	7.61	1
			2209.497	6	4	-	0.344e−01	7.41	1
MnI	$3d^5 4s^2 - v$	^{6}S $-^6$P°	2004.490	6	8	-	0.608e−01	7.62	1
			1999.500	6	6	-	0.457e−01	7.49	1
			1996.047	6	4	-	0.308e−01	7.32	1
MnI	$3d^5 4s^2 -$	^{6}S $-^4$D°	1492.954	6	8	-	0.594e−01	7.48	1
MnII	$3d^5 4s - z$	^{7}S $-^7$P°	2606.462	7	5	-	0.193e+00	8.23	1
			2594.499	7	7	-	0.271e+00	8.38	1
			2576.877	7	9	-	0.351e+00	8.49	1
MnII	$3d^5 4s - z$	^{7}S $-^5$P°	2305.714	7	7	-	0.124e−02	5.99	1
			2299.663	7	5	-	0.546e−03	5.63	1
MnII	$3d^5 4s - x$	^{7}S $-^5$F°	1219.604	7	9	-	0.147e−03	4.78	1
			1218.745	7	7	-	0.324e−04	4.13	1
			1218.704	7	5	-	0.998e−05	3.62	1
MnII	$3d^5 4s - w$	^{7}S $-^3$D°	1213.305	7	7	-	0.473e−07	1.29	1
			1203.790	7	5	-	0.154e−03	4.80	1
MnII	$3d^5 4s - x$	^{7}S $-^5$D°	1210.576	7	9	-	0.942e−03	5.59	1
			1209.006	7	7	-	0.553e−03	5.36	1
			1208.674	7	5	-	0.143e−03	4.77	1
MnII	$3d^5 4s - w$	^{7}S $-^3$F°	1207.281	7	9	-	0.931e−06	2.58	1
			1206.014	7	5	-	0.811e−04	4.52	1
			1205.749	7	7	-	0.573e−04	4.37	1
MnII	$3d^5 4s - y$	^{7}S $-^7$P°	1201.118	7	5	-	0.881e−01	7.55	1
			1199.391	7	7	-	0.106e+00	7.63	1
			1197.184	7	9	-	0.157e+00	7.80	1
MnII	$3d^5 4s - x$	^{7}S $-^7$P°	1164.208	7	5	-	0.470e−02	6.27	1
			1163.326	7	7	-	0.752e−02	6.47	1
			1162.015	7	9	-	0.102e−01	6.60	1
MnII	$3d^5 4s - w$	^{7}S $-^5$P°	1150.779	7	7	-	0.251e−04	3.99	1
			1150.261	7	5	-	0.885e−05	3.54	1
MnII	$3d^5 4s - v$	^{7}S $-^5$P°	1122.597	7	5	-	0.503e−04	4.28	1
			1118.206	7	7	-	0.916e−04	4.54	1
MnII	$3d^5 4s - w$	^{7}S $-^5$D°	1053.891	7	5	-	0.627e−06	2.35	1
			1052.746	7	7	-	0.200e−04	3.85	1
			1050.351	7	9	-	0.758e−04	4.43	1
MnVI	$3d^2 - 3d4p$	^{3}F $-^3$D°	310.182	5	5	-	0.404e−01	6.63	2
MnVI	$3d^2 - 3d4p$	^{3}F $-^3$F°	308.853	5	5	-	0.110e−01	6.06	2
			307.842	5	7	-	0.230e−02	5.38	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
MnVII	$3p^6 3d - 3p^5 3d^2(^1\mathrm{D})$	$^2\mathrm{D} - ^2\mathrm{P}^\circ$	247.473	4	2	-	0.170e−01	6.15	2
			244.935	4	4	-	0.340e−02	5.45	2
MnVII	$3p^6 3d - 3p^5 3d^2(^1\mathrm{D})$	$^2\mathrm{D} - ^2\mathrm{F}^\circ$	238.617	4	6	-	0.410e−01	6.52	2
MnIX	$3s^2 3p^5 - 3s3p^6$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	376.778	4	2	-	0.355e−01	6.66	2
MnX	$3s^2 3p^4 - 3s3p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	383.036	5	5	-	0.340e−01	6.64	2
MnXI	$3s^2 3p^3 - 3s3p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	393.743	4	6	-	0.480e−01	6.81	2
			382.142	4	4	-	0.320e−01	6.62	2
			377.154	4	2	-	0.170e−01	6.34	2
MnXII	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	386.27	1	3	-	0.660e−01	6.94	2
MnXII	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	329.28	1	3	-	0.540e−01	6.78	2
MnXIII	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	361.57	2	4	-	0.760e−01	6.97	2
MnXIII	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	294.95	2	2	-	0.190e+00	7.28	2
MnXIII	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	277.42	2	2	-	0.160e+00	7.18	2
			272.09	2	4	-	0.150e+00	7.14	2
MnXIV	$3s^2 - 3s3p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	447.4	1	3	-	0.240e−02	5.56	2
MnXIV	$3s^2 - 3s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	304.85	1	3	-	0.863e+00	7.95	2
MnXV	$3s - 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	384.74	2	2	-	0.130e+00	7.23	2
			360.97	2	4	-	0.281e+00	7.54	2
MnXXI	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{S}$	[263.39]	2	2	-	0.630e−03	4.75	
MnXXII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	277.80	1	3	-	0.130e−02	5.09	2
MnXXIII	$2s - 2p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	266.896	2	2	-	0.185e−01	6.22	2
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^7\mathrm{D}^\circ$	5111.8373	9	9	-	0.193e−04	6.50	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^7\mathrm{F}^\circ$	4377.1597	9	11	-	0.104e−03	7.17	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^7\mathrm{P}^\circ$	4217.3714	9	9	-	0.490e−04	6.83	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	3861.0058	9	9	-	0.217e−01	9.43	27
			3825.5289	9	7	-	0.483e−02	8.78	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	3720.9928	9	11	-	0.412e−01	9.70	27
			3680.9611	9	9	-	0.280e−02	8.52	27
			3650.3427	9	7	-	0.700e−04	6.92	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^5\mathrm{P}^\circ$	3441.5921	9	7	-	0.236e−01	9.42	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^3\mathrm{F}^\circ$	3194.1490	9	9	-	0.678e−03	7.85	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^3\mathrm{D}^\circ$	3192.5820	9	7	-	0.282e−03	7.46	27
FeI	$3d^6 4s^2 - y$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	3021.5187	9	9	-	0.104e+00	10.01	27
			2984.4402	9	7	-	0.290e−01	9.45	27
FeI	$3d^6 4s^2 - y$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	2967.7646	9	11	-	0.438e−01	9.62	27
			2937.7624	9	9	-	0.168e−01	9.20	27
			2913.0101	9	7	-	0.328e−02	8.49	27
FeI	$3d^6 4s^2 - z$	$^5\mathrm{D} - ^5\mathrm{G}^\circ$	2875.0157	9	11	-	0.141e−02	8.12	27
			2836.2904	9	9	-	0.391e−03	7.55	27
			2808.0709	9	7	-	0.154e−03	7.15	27
FeI	$3d^6 4s^2 - y$	$^5\mathrm{D} - ^5\mathrm{P}^\circ$	2719.8330	9	7	-	0.119e+00	10.02	27

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FeI	$3d^64s^2 - x$	^{5}D $-^5$D°	2523.6084	9	9	-	0.279e+00	10.36	27
			2501.8858	9	7	-	0.496e−01	9.60	27
FeI	$3d^64s^2 - y$	^{5}D $-^7$P°	2487.1231	9	7	-	0.222e−02	8.25	27
			2473.9041	9	9	-	0.252e−02	8.30	27
FeI	$3d^64s^2 - x$	^{5}D $-^5$F°	2484.0205	9	11	-	0.557e+00	10.65	27
			2463.3923	9	9	-	0.532e−01	9.63	27
			2448.4510	9	7	-	0.231e−02	8.26	27
FeI	$3d^64s^2 - w$	^{5}D $-^5$D°	2298.8769	9	9	-	0.245e−01	9.26	27
			2276.7289	9	7	-	0.101e−01	8.87	27
FeI	$3d^64s^2-$	^{5}D $-^5$D°	2264.1747	9	7	-	0.476e−03	7.54	27
FeI	$3d^64s^2-$	^{5}D $-^5$F°	2260.2097	9	11	-	0.654e−02	8.68	27
			2251.4880	9	9	-	0.143e−02	8.02	27
FeI	$3d^64s^2 - x$	^{5}D $-^5$G°	2186.9338	9	11	-	0.952e−03	7.83	27
FeI	$3d^64s^2 - w$	^{5}D $-^5$P°	2167.4533	9	7	-	0.150e+00	10.02	27
FeI	$3d^64s^2-$	^{5}D $-^5$D°	2140.3726	9	9	-	0.152e−01	9.02	27
			2139.2668	9	7	-	0.150e−02	8.02	27
FeI	$3d^64s^2-$	^{5}D $-^3$F°	2132.6902	9	9	-	0.520e−02	8.55	27
FeI	$3d^64s^2 - z$	^{5}D $-^3$H°	2127.2813	9	11	-	0.534e−03	7.57	27
FeI	$3d^64s^2 - w$	^{5}D $-^5$G°	2108.8053	9	11	-	0.212e−02	8.16	27
FeI	$3d^64s^2 - v$	^{5}D $-^5$F°	2100.5707	9	11	-	0.101e−02	7.84	27
			2086.376	9	9	-	0.108e−02	7.86	27
			2078.011	9	7	-	0.187e−02	8.10	27
FeI	$3d^64s^2 - v$	^{5}D $-^5$P°	2084.7848	9	7	-	0.189e−01	9.11	27
FeI	$3d^64s^2 - u$	^{5}D $-^5$F°	1960.1441	9	11	-	0.284e−02	8.26	27
			1937.2685	9	7	-	0.946e−02	8.77	27
FeI	$3d^64s^2 - v$	^{5}D $-^3$F°	1949.1427	9	9	-	0.179e−02	8.05	27
FeI	$3d^64s^2 - t$	^{5}D $-^5$D°	1946.9880	9	7	-	0.528e−02	8.52	27
FeI	$3d^64s^2 - u$	^{5}D $-^5$P°	1934.5351	9	7	-	0.111e−01	8.84	27
FeI	$3d^64s^2 - 4p$:	^{5}D $-^3$D°	1915.2235	9	7	-	0.586e−03	7.56	1
FeI	$3d^64s^2 - 5p$	^{5}D $-^5$F°	1883.7789	9	11	-	0.527e−02	8.51	27
			1873.0576	9	9	-	0.320e−02	8.29	27
FeI	$3d^64s^2 - 5p$	^{5}D $-^5$D°	1865.3093	9	9	-	0.874e−02	8.72	27
			1859.2635	9	7	-	0.315e−02	8.28	27
FeI	$3d^64s^2-$	^{5}D $-^5$P°	1851.688	9	7	-	0.222e−01	9.12	27
FeI	$3d^64s^2-$	^{5}D $-^5$F°	1851.3804	9	11	-	0.158e−02	7.98	27
FeII	$3d^64s - z$	^{6}D $-^6$D°	2600.1729	10	10	-	0.224e+00	10.28	1
			2586.6500	10	8	-	0.646e−01	9.73	1
FeII	$3d^64s - z$	^{6}D $-^6$F°	2382.765	10	12	-	0.301e+00	10.37	1
			2374.4612	10	10	-	0.282e−01	9.34	1
			2367.5905	10	8	-	0.160e−03	7.09	1
FeII	$3d^64s - z$	^{6}D $-^6$P°	2344.214	10	8	-	0.110e+00	9.92	1
FeII	$3d^64s - z$	^{6}D $-^4$F°	2260.7805	10	10	-	0.372e−02	8.43	1
			2234.4472	10	8	-	0.242e−06	4.24	1
FeII	$3d^64s - z$	^{6}D $-^4$D°	2249.8768	10	8	-	0.251e−02	8.26	1
FeII	$3d^64s - z$	^{6}D $-^8$P°	1901.7730	10	8	-	0.101e−03	6.79	1
			1888.0100	10	10	-	0.115e−04	5.85	1
FeII	$3d^64s - z$	^{6}D $-^4$H°	1642.3706	10	12	-	0.255e−06	4.13	1
			1639.6280	10	10	-	0.647e−07	3.54	1
			1635.1402	10	8	-	0.458e−07	3.38	1
FeII	$3d^64s - z$	^{6}D $-^4$I°	1625.6823	10	10	-	0.303e−07	3.20	1
			1623.7136	10	12	-	0.110e−06	3.76	1
FeII	$3d^64s - y$	^{6}D $-^4$D°	1620.0608	10	8	-	0.240e−04	6.10	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FeII	$3d^6 4s - y$	^{6}D $-^4$F°	1611.2005	10	8	-	0.222e−03	7.06	1
			1608.8005	10	10	-	0.665e−07	3.54	1
FeII	$3d^6 4s - z$	^{6}D $-^2$G°	1610.7441	10	10	-	0.102e−06	3.73	1
			1604.5587	10	8	-	0.840e−05	5.64	1
FeII	$3d^6 4s - y$	^{6}D $-^6$P°	1608.4511	10	8	-	0.619e−01	9.51	1
FeII	$3d^6 4s - z$	^{6}D $-^2$I°	1595.8573	10	12	-	0.150e−06	3.89	1
FeII	$3d^6 4s - x$	^{6}D $-^4$D°	1588.6876	10	8	-	0.124e−03	6.80	1
FeII	$3d^6 4s - y$	^{6}D $-^4$G°	1565.5255	10	12	-	0.172e−04	5.94	1
			1563.7512	10	10	-	0.276e−05	5.15	1
			1561.5024	10	8	-	0.137e−05	4.84	1
FeII	$3d^6 4s - z$	^{6}D $-^2$F°	1555.5403	10	8	-	0.215e−05	5.03	1
FeII	$3d^6 4s - y$	^{6}D $-^2$G°	1542.4495	10	10	-	0.199e−06	4.00	1
FeII	$3d^6 4s - z$	^{6}D $-^2$H°	1529.9036	10	12	-	0.111e−06	3.74	1
FeII	$3d^6 4s - x$	^{6}D $-^4$G°	1524.8542	10	12	-	0.161e−06	3.90	1
			1522.1618	10	10	-	0.564e−05	5.44	1
			1516.7295	10	8	-	0.953e−07	3.67	1
FeII	$3d^6 4s - x$	^{6}D $-^4$F°	1514.8589	10	10	-	0.686e−05	5.53	1
			1506.5395	10	8	-	0.318e−06	4.19	1
FeII	$3d^6 4s - y$	^{6}D $-^4$H°	1504.5846	10	12	-	0.984e−07	3.68	1
FeII	$3d^6 4s - y$	^{6}D $-^2$H°	1481.1231	10	12	-	0.809e−07	3.59	1
FeII	$3d^6 4s - w$	^{6}D $-^4$D°	1376.4269	10	8	-	0.123e−06	3.74	1
FeII	$3d^6 4s - x$	^{6}D $-^2$F°	1369.5601	10	8	-	0.106e−06	3.67	1
FeII	$3d^6 4s - x$	^{6}D $-^6$P°	1260.533	10	8	-	0.250e−01	9.01	1
FeII	$3d^6 4s - v$	^{6}D $-^4$D°	1150.3555	10	8	-	0.126e−05	4.67	1
FeII	$3d^6 4s - y$	^{6}D $-^6$F°	1144.9379	10	12	-	0.105e+00	9.59	1
			1143.2260	10	10	-	0.133e−01	8.69	1
			1142.3656	10	8	-	0.500e−02	8.27	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	1133.665	10	8	-	0.600e−02	8.34	1
			1128.483	10	10	-	0.379e−07	3.14	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	1127.0984	10	10	-	0.300e−02	8.04	1
			1125.4478	10	8	-	0.110e−01	8.60	1
FeII	$3d^6 4s-$	^{6}D $-^6$P°	1121.9748	10	8	-	0.200e−01	8.86	1
FeII	$3d^6 4s-$	^{6}D $-^6$F°	1112.0480	10	12	-	0.912e−02	8.52	1
			1110.2803	10	10	-	0.112e−02	7.60	1
			1107.4120	10	8	-	0.188e−08	1.83	1
FeII	$3d^6 4s-$	^{6}D $-^4$G°	1110.5832	10	10	-	0.785e−07	3.45	1
			1108.504	10	12	-	0.621e−04	6.35	1
FeII	$3d^6 4s-$	^{6}D $-^4$F°	1106.3596	10	10	-	0.150e−02	7.73	1
			1101.5567	10	8	-	0.281e−05	5.00	1
FeII	$3d^6 4s-$	^{6}D $-^4$D°	1106.2208	10	8	-	0.106e−04	5.58	1
FeII	$3d^6 4s - w$	^{6}D $-^6$P°	1096.8769	10	8	-	0.320e−01	9.06	1
FeII	$3d^6 4s - x$	^{6}D $-^4$H°	1085.903	10	8	-	0.129e−05	4.66	1
			1085.579	10	10	-	0.121e−03	6.63	1
			1084.992	10	12	-	0.783e−03	7.44	1
FeII	$3d^6 4s-$	^{6}D $-^6$F°	1085.1381	10	8	-	0.154e−03	6.73	1
			1083.4204	10	10	-	0.406e−02	8.15	1
			1081.8748	10	12	-	0.140e−01	8.69	1
FeII	$3d^6 4s - u$	^{6}D $-^2$G°	1084.9315	10	10	-	0.109e−04	5.58	1
			1079.8821	10	8	-	0.154e−05	4.73	1
FeII	$3d^6 4s - v$	^{6}D $-^4$F°	1083.630	10	8	-	0.409e−06	4.16	1
			1081.935	10	10	-	0.313e−04	6.04	1
FeII	$3d^6 4s-$	^{6}D $-^4$D°	1073.769	10	8	-	0.111e−05	4.59	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FeII	$3d^6 4s - u$	^{6}D $-^4$F°	1069.695	10	10	-	0.324e−05	5.05	1
			1069.660	10	8	-	0.215e−04	5.87	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	1063.9718	10	8	-	0.450e−02	8.19	1
			1063.1764	10	10	-	0.600e−01	9.31	1
FeII	$3d^6 4s - w$	^{6}D $-^4$G°	1063.002	10	8	-	0.312e−05	5.03	1
			1062.152	10	10	-	0.380e−02	8.12	1
			1061.685	10	12	-	0.274e−04	5.97	1
FeII	$3d^6 4s-$	^{6}D $-^6$P°	1055.2617	10	8	-	0.800e−02	8.44	1
FeII	$3d^6 4s-$	^{6}D $-^2$F°	1051.750	10	8	-	0.678e−06	4.36	1
FeII	$3d^6 4s-$	^{6}D $-^4$D°	1039.313	10	8	-	0.141e−03	6.68	1
FeII	$3d^6 4s - v$	^{6}D $-^2$H°	1039.078	10	10	-	0.358e−06	4.08	1
FeII	$3d^6 4s - t$	^{6}D $-^2$F°	1037.808	10	8	-	0.624e−05	5.32	1
FeII	$3d^6 4s-$	^{6}D $-^4$D°	1016.350	10	8	-	0.170e−04	5.75	1
FeII	$3d^6 4s-$	^{6}D $-^4$F°	1014.859	10	8	-	0.374e−04	6.09	1
			1014.233	10	10	-	0.266e−03	6.94	1
FeII	$3d^6 4s-$	^{6}D $-^2$F°	1011.136	10	8	-	0.158e−06	3.71	1
FeII	$3d^6 4s-$	^{6}D $-^2$G°	1003.658	10	8	-	0.217e−06	3.85	1
			1003.480	10	10	-	0.463e−05	5.18	1
FeII	$3d^6 4s-$	^{6}D $-^2$G°	1002.435	10	10	-	0.182e−05	4.77	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	940.192	10	10	-	0.121e−01	8.57	1
FeII	$3d^6 4s-$	^{6}D $-^6$F°	939.165	10	8	-	0.146e−02	7.65	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	938.011	10	8	-	0.183e−02	7.74	1
FeII	$3d^6 4s-$	^{6}D $-^6$F°	937.652	10	12	-	0.195e−01	8.77	1
FeII	$3d^6 4s-$	^{6}D $-^4$D°	935.772	10	8	-	0.323e−03	6.99	1
FeII	$3d^6 4s-$	^{6}D $-^6$F°	935.518	10	12	-	0.372e−02	8.05	1
FeII	$3d^6 4s-$	^{6}D−	933.134	10	8	-	0.110e−03	6.52	1
FeII	$3d^6 4s-$	^{6}D $-^4$G°	928.325	10	12	-	0.356e−03	7.03	1
FeII	$3d^6 4s-$	^{6}D−	926.898	10	8	-	0.590e−02	8.25	1
FeII	$3d^6 4s-$	^{6}D $-^6$D°	926.212	10	10	-	0.438e−01	9.12	1
FeII	$3d^6 4s-$	^{6}D−	923.879	10	8	-	0.186e−02	7.75	1
FeII	$3d^6 4s-$	^{6}D−	921.501	10	8	-	0.570e−03	7.23	1
FeIII	$3p^6 3d^6 - 4p$	^{5}D $-^7$P°	1214.562	9	7	-	0.427e−03	7.22	26
			1207.050	9	9	-	0.442e−05	5.24	1
FeIII	$3p^6 3d^6 - 3d^5(^6\mathrm{S})4p$	^{5}D $-^5$P°	1122.524	9	7	0.797e−01	0.788e−01	9.46	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{G})4p$	^{5}D $-^5$F°	859.723	9	11	0.115e+00	-	9.51	26
			858.609	9	9	0.157e−01	-	8.64	26
			858.551	9	7	0.105e−02	-	7.46	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{P})4p$	^{5}D $-^5$D°	854.200	9	7	0.121e−03	-	6.52	26
			850.907	9	9	0.609e−03	-	7.22	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{P})4p$	^{5}D $-^5$P°	844.288	9	7	0.684e−01	-	9.27	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{D})4p$	^{5}D $-^5$F°	826.387	9	7	0.145e−03	-	6.59	26
			824.799	9	9	0.219e−02	-	7.77	26
			823.256	9	11	0.161e−01	-	8.63	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{D})4p$	^{5}D $-^5$D°	814.137	9	7	0.138e−01	-	8.56	26
			813.379	9	9	0.694e−01	-	9.26	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{D})4p$	^{5}D $-^5$P°	808.078	9	7	0.228e−02	-	7.78	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{F})4p$	^{5}D $-^5$F°	735.344	9	9	0.180e−02	-	7.63	26
			735.247	9	7	0.120e−03	-	6.46	26
			734.296	9	11	0.132e−01	-	8.50	26
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{F})4p$	^{5}D $-^5$D°	728.812	9	9	0.387e−01	-	8.96	26
			727.682	9	7	0.775e−02	-	8.26	26
FeIII	$3p^6 3d^6 - 3d^5(^6\mathrm{S})5p$	^{5}D $-^5$P°	594.072	9	7	0.109e−01	-	8.32	4

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FeIII	$3p^6 3d^6 - 3d^5(^6\mathrm{S})4f$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	541.188	9	7	0.517e−03	-	6.96	4
			541.186	9	9	0.775e−02	-	8.13	4
			541.182	9	11	0.568e−01	-	9.00	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{G})5p$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	502.160	9	11	0.117e−01	-	8.28	4
			501.976	9	9	0.161e−02	-	7.42	4
			501.851	9	7	0.107e−03	-	6.24	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{P})5p$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	497.101	9	7	0.157e−03	-	6.40	4
			497.000	9	9	0.783e−03	-	7.10	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{P})5p$	$^5\mathrm{D} - ^5\mathrm{P}^\circ$	494.559	9	7	0.609e−02	-	7.99	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{D})5p$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	487.799	9	7	0.264e−06	-	3.62	4
			487.585	9	9	0.397e−05	-	4.80	4
			487.341	9	11	0.291e−04	-	5.66	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{D})5p$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	486.211	9	9	0.571e−02	-	7.95	4
			486.068	9	7	0.114e−02	-	7.25	4
FeIII	$3p^6 3d^6 - 3d^5(^6\mathrm{S})5f$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	482.479	9	7	0.293e−03	-	6.66	4
			482.467	9	9	0.440e−02	-	7.84	4
			482.455	9	11	0.323e−01	-	8.70	4
FeIII	$3p^6 3d^6 - 3d^5(^4\mathrm{F})5p$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	455.756	9	11	0.410e−02	-	7.78	4
			455.639	9	9	0.560e−03	-	6.92	4
			455.444	9	7	0.373e−04	-	5.74	4
FeIV	$3p^6 3d^5 - 3d^4(^5\mathrm{D})4p$	$^6\mathrm{S} - ^6\mathrm{P}^\circ$	526.634	6	4	0.914e−01	-	9.19	2
			526.293	6	6	0.138e+00	-	9.37	2
			525.689	6	8	0.183e+00	-	9.49	2
FeV	$3p^6 3d^4 - 3d^3(^4\mathrm{F})4p$	$^5\mathrm{D} - ^5\mathrm{F}^\circ$	387.984	1	3	0.807e−01	-	9.01	2
FeV	$3p^6 3d^4 - 3d^3(^4\mathrm{F})4p$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	386.261	1	3	0.173e+00	-	9.33	2
FeV	$3p^6 3d^4 - 3d^3(^4\mathrm{P})4p$	$^5\mathrm{D} - ^5\mathrm{P}^\circ$	365.440	1	3	0.769e−01	-	8.96	4
FeV	$3p^6 3d^4 - 3d^3(^4\mathrm{P})4p$	$^5\mathrm{D} - ^5\mathrm{D}^\circ$	363.444	1	3	0.439e−02	-	7.71	2
FeVI	$3p^6 3d^3 - 3d^2(^3\mathrm{F})4p$	$^4\mathrm{F} - ^4\mathrm{G}^\circ$	295.634	4	6	0.200e−01	-	8.28	2
FeVI	$3p^6 3d^3 - 3d^2(^3\mathrm{F})4p$	$^4\mathrm{F} - ^4\mathrm{F}^\circ$	294.516	4	4	0.112e+00	-	9.03	2
			293.820	4	6	0.282e−01	-	8.43	2
FeVI	$3p^6 3d^3 - 3d^2(^3\mathrm{F})4p$	$^4\mathrm{F} - ^4\mathrm{D}^\circ$	291.365	4	4	0.258e−01	-	8.39	2
			291.020	4	2	0.646e−01	-	8.78	2
			290.467	4	6	0.185e−02	-	7.24	4
FeVI	$3p^6 3d^3 - 3d^2(^3\mathrm{P})4p$	$^4\mathrm{F} - ^4\mathrm{D}^\circ$	278.244	4	2	0.213e−01	-	8.28	2
			277.947	4	4	0.852e−02	-	7.88	2
			277.232	4	6	0.610e−03	-	6.74	2
FeVII	$3p^6 3d^2 - 3p^6 3d4p$	$^3\mathrm{F} - ^3\mathrm{D}^\circ$	235.221	5	3	0.988e−01	0.846e−01	8.88	2
			233.762	5	5	0.184e−01	0.280e−01	8.14	2
			232.047	5	7	0.524e−02	0.290e−02	7.59	2
FeVII	$3p^6 3d^2 - 3p^6 3d4p$	$^3\mathrm{F} - ^3\mathrm{F}^\circ$	232.442	5	5	0.568e−01	0.170e−01	8.63	2
			231.693	5	7	0.711e−02	0.320e−02	7.73	2
FeVIII	$3p^6 3d - 3p^5 3d^2$	$^2\mathrm{D} - ^2\mathrm{F}^\circ$	231.884	4	6	0.137e−01	-	8.01	2
FeIX	$3p^6 - 3p^5 3d$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	244.912	1	3	-	0.240e−03	6.28	2
FeX	$3s^2 3p^5 - 3s3p^6$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	345.723	4	2	0.286e−01	0.349e−01	8.51	2
FeX	$3p^5 - 3p^4(^3\mathrm{P})3d$	$^2\mathrm{P}^\circ - ^4\mathrm{F}$	234.356	4	6	-	0.270e−03	6.31	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
FeX	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	231.520	4	4	0.272e−02	-	7.31	4
			[231]	4	2	0.533e−03	-	6.60	
FeX	$3s^2 3p^5 - 3p^4(^1\mathrm{D})3d$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	230.089	4	4	0.202e−03	-	6.18	2
FeX	$3p^5 - 3p^4(^3\mathrm{P})3d$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	229.99	4	2	-	0.830e−03	6.79	2
FeXI	$3s^2 3p^4 - 3s3p^5$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	352.661	5	5	0.464e−01	0.320e−01	8.72	2
			341.113	5	3	0.160e−01	0.120e−01	8.25	2
FeXI	$3s^2 3p^4 - 3s3p^5$	$^3\mathrm{P} - ^1\mathrm{P}^\circ$	276.364	5	3	-	0.140e−02	7.10	4
FeXII	$3s^2 3p^3 - 3s3p^4$	$^4\mathrm{S}^\circ - ^4\mathrm{P}$	364.468	4	6	0.507e−01	0.480e−01	8.78	2
			352.107	4	4	0.350e−01	0.320e−01	8.60	2
			346.852	4	2	0.177e−01	0.160e−01	8.30	2
FeXIII	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{D}^\circ$	348.184	1	3	0.533e−01	0.690e−01	8.78	2
FeXIII	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{P}^\circ$	303.320	1	3	0.649e−01	0.510e−01	8.80	17
FeXIII	$3s^2 3p^2 - 3s3p^3$	$^3\mathrm{P} - ^3\mathrm{S}^\circ$	240.713	1	3	0.203e+00	-	9.20	2
FeXIV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{D}$	334.178	2	4	0.709e−01	0.770e−01	8.88	2
FeXIV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{S}$	274.203	2	2	0.578e−01	0.203e+00	8.71	2
FeXIV	$3s^2 3p - 3s3p^2$	$^2\mathrm{P}^\circ - ^2\mathrm{P}$	257.385	2	2	0.293e+00	0.140e+00	9.39	2
			252.190	2	4	0.149e+00	0.145e+00	9.08	2
FeXV	$3s^2 - 3s3p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	417.24	1	3	-	0.320e−02	7.64	2
FeXV	$3s^2 - 3s3p$	$^1\mathrm{S} - ^1\mathrm{P}^\circ$	284.147	1	3	0.824e+00	0.828e+00	9.88	2
FeXVI	$2p^6 3s - 2p^6 3p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	360.798	2	2	0.122e+00	0.125e+00	9.15	2
			335.407	2	4	0.265e+00	0.270e+00	9.46	2
FeXXII	$2s^2 2p - 2s2p^2$	$^2\mathrm{P}^\circ - ^4\mathrm{P}$	247.19	2	2	-	0.790e−03	6.80	2
FeXXIII	$2s^2 - 2s2p$	$^1\mathrm{S} - ^3\mathrm{P}^\circ$	263.76	1	3	-	0.150e−02	7.11	2
FeXXIV	$1s^2 2s - 1s^2 2p$	$^2\mathrm{S} - ^2\mathrm{P}^\circ$	255.090	2	2	0.181e−01	0.177e−01	8.17	2
CoI	$3d^7 4s^2 - z$	$^4\mathrm{F} - ^4\mathrm{F}^\circ$	3527.852	10	10	-	0.240e−01	6.84	1
CoI	$3d^7 4s^2 - x$	$^4\mathrm{F} - ^4\mathrm{D}^\circ$	2522.122	10	8	-	0.229e+00	7.67	1
CoI	$3d^7 4s^2 - x$	$^4\mathrm{F} - ^4\mathrm{F}^\circ$	2425.668	10	10	-	0.282e+00	7.75	1
			2385.587	10	8	-	0.166e−01	6.51	1
CoI	$3d^7 4s^2 - x$	$^4\mathrm{F} - ^4\mathrm{G}^\circ$	2407.983	10	12	-	0.380e+00	7.87	1
			2365.782	10	10	-	0.107e−01	6.31	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^5\mathrm{F}^\circ$	2203.670	9	9	-	0.534e−03	4.98	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^5\mathrm{D}^\circ$	2158.850	9	9	-	0.154e−03	4.43	1
			2125.883	9	7	-	0.869e−04	4.18	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^5\mathrm{G}^\circ$	2112.114	9	11	-	0.179e−02	5.49	1
			2091.719	9	9	-	0.488e−03	4.92	1
			2076.797	9	7	-	0.323e−04	3.74	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^3\mathrm{G}^\circ$	2059.471	9	11	-	0.130e−01	6.34	1
			2026.407	9	9	-	0.605e−01	7.00	1
			1998.539	9	7	-	0.372e−03	4.78	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^3\mathrm{F}^\circ$	2012.161	9	9	-	0.466e−01	6.88	1
			1984.841	9	7	-	0.594e−04	3.98	1
CoII	$3d^8 - z$	$^3\mathrm{F} - ^3\mathrm{D}^\circ$	1941.280	9	7	-	0.755e−01	7.08	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CoII	$3d^8 - y$	^{3}F $-^5$D°	1628.971	9	9	-	0.993e−04	4.12	1
CoII	$3d^8 - z$	^{3}F $-^3$H°	1579.613	9	11	-	0.214e−02	5.44	1
			1567.573	9	9	-	0.885e−02	6.05	1
CoII	$3d^8 - z$	^{3}F $-^5$P°	1578.669	9	7	-	0.384e−03	4.69	1
CoII	$3d^8 - y$	^{3}F $-^3$F°	1574.545	9	9	-	0.801e−01	7.01	1
			1553.754	9	7	-	0.879e−02	6.05	1
CoII	$3d^8 - y$	^{3}F $-^3$D°	1572.648	9	7	-	0.251e−01	6.51	1
CoII	$3d^8 - z$	^{3}F $-^1$G°	1552.760	9	9	-	0.150e−01	6.28	1
CoII	$3d^8 - y$	^{3}F $-^3$G°	1547.946	9	11	-	0.245e−01	6.49	1
			1534.821	9	9	-	0.201e−02	5.40	1
			1534.333	9	7	-	0.457e−03	4.76	1
CoII	$3d^8 - z$	^{3}F $-^1$H°	1539.468	9	11	-	0.256e−02	5.51	1
CoII	$3d^8 - z$	^{3}F $-^1$F°	1514.743	9	7	-	0.151e−02	5.27	1
CoII	$3d^8 - x$	^{3}F $-^3$D°	1480.951	9	7	-	0.463e−01	6.75	1
CoII	$3d^8 - x$	^{3}F $-^3$G°	1466.203	9	11	-	0.140e+00	7.22	1
			1452.566	9	9	-	0.299e−02	5.55	1
			1441.823	9	7	-	0.855e−06	2.00	1
CoII	$3d^8 - w$	^{3}F $-^3$D°	1448.011	9	7	-	0.452e−01	6.73	1
CoII	$3d^8 - x$	^{3}F $-^3$F°	1424.779	9	9	-	0.176e−01	6.31	1
			1419.287	9	7	-	0.326e−03	4.58	1
CoII	$3d^8 - y$	^{3}F $-^3$H°	1394.638	9	11	-	0.112e−03	4.10	1
CoII	$3d^8 - y$	^{3}F $-^1$F°	1378.638	9	7	-	0.339e−03	4.58	1
CoII	$3d^8 - y$	^{3}F $-^1$G°	1367.106	9	9	-	0.812e−04	3.96	1
CoII	$3d^8 - y$	^{3}F $-^1$H°	1344.500	9	11	-	0.146e−03	4.20	1
CoII	$3d^8 - w$	^{3}F $-^3$G°	1203.217	9	7	-	0.322e−04	3.50	1
			1199.061	9	9	-	0.333e−03	4.51	1
			1192.213	9	11	-	0.104e−03	4.00	1
CoII	$3d^8 - w$	^{3}F $-^3$F°	1192.430	9	7	-	0.567e−04	3.74	1
			1188.490	9	9	-	0.407e−02	5.59	1
CoII	$3d^8 - v$	^{3}F $-^3$D°	1187.417	9	7	-	0.124e−01	6.08	1
CoII	$3d^8 - u$	^{3}F $-^3$D°	1149.672	9	7	-	0.717e−04	3.83	1
CoII	$3d^8 - v$	^{3}F $-^3$F°	1147.941	9	9	-	0.245e−03	4.36	1
CoII	$3d^8-$	^{3}F $-^5$F°	1041.920	9	9	-	0.334e−03	4.45	1
CoII	$3d^8-$	^{3}F $-^5$G°	1039.105	9	11	-	0.325e−03	4.44	1
CoII	$3d^8-$	^{3}F $-^3$G°	1031.542	9	11	-	0.290e−03	4.39	1
			1023.487	9	9	-	0.455e−03	4.58	1
			1017.515	9	7	-	0.343e−03	4.45	1
CoII	$3d^8-$	^{3}F $-^3$F°	1030.259	9	9	-	0.312e−02	5.42	1
			1020.744	9	7	-	0.114e−02	4.98	1
CoII	$3d^8-$	^{3}F $-^3$D°	1025.678	9	7	-	0.845e−03	4.85	1
CoIII	$3d^7 - z$	^{4}F $-^6$D°	1017.387	10	10	-	0.940e−05	2.89	1
			1014.751	10	8	-	0.133e−03	4.04	1
CoIII	$3d^7 - z$	^{4}F $-^6$F°	968.567	10	12	-	0.304e−05	2.38	1
			967.240	10	10	-	0.123e−02	4.99	1
			966.165	10	8	-	0.123e−02	4.98	1
CoIII	$3d^7 - z$	^{4}F $-^6$P°	952.297	10	8	-	0.802e−02	5.79	1
CoIII	$3d^7 - z$	^{4}F $-^4$D°	939.061	10	8	-	0.897e−01	6.84	1
CoIII	$3d^7 - z$	^{4}F $-^4$F°	936.637	10	10	-	0.480e−01	6.56	1
			929.972	10	8	-	0.119e−01	5.95	1
CoXI	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	318.85	4	2	-	0.343e−01	5.95	2

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
CoXII	$3s^2 3p^4 - 3s3p^5$	^{3}P $-^3$P°	326.17	5	5	-	0.360e−01	5.98	2
CoXIII	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	338.82	4	6	-	0.470e−01	6.11	2
			325.70	4	4	-	0.330e−01	5.94	2
			[320.4]	4	2	-	0.160e−01	5.62	
CoXV	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	310.69	2	4	-	0.780e−01	6.29	2
CoXV	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	255.88	2	2	-	0.210e+00	6.64	2
CoXV	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$P	239.42	2	2	-	0.110e+00	6.33	2
			234.41	2	4	-	0.140e+00	6.43	2
CoXVI	$3s^2 - 3s3p$	^{1}S $-^3$P°	388.5	1	3	-	0.370e−02	5.07	2
CoXVI	$3s^2 - 3s3p$	^{1}S $-^1$P°	265.74	1	3	-	0.796e+00	7.24	2
CoXVII	$3s - 3p$	^{2}S $-^2$P°	339.494	2	2	-	0.119e+00	6.52	2
			312.542	2	4	-	0.261e+00	6.82	2
CoXXIV	$2s^2 - 2s2p$	^{1}S $-^3$P°	250.79	1	3	-	0.180e−02	4.56	2
CoXXV	$2s - 2p$	^{2}S $-^2$P°	244.190	2	2	-	0.170e−01	5.53	2
NiI	$3d^8 4s^2 - z$	^{3}F $-^5$F°	3438.260	9	9	-	0.787e−02	7.68	1
NiI	$3d^8 4s^2 - z$	^{3}F $-^3$F°	3410.550	9	7	-	0.496e−03	6.48	1
			3392.013	9	9	-	0.114e−01	7.84	1
NiI	$3d^8 4s^2-$	^{3}F−	3370.531	9	7	-	0.243e−01	8.16	1
NiI	$3d^8 4s^2 - z$	^{3}F $-^3$G°	3233.864	9	11	-	0.140e−01	7.91	1
			3227.911	9	9	-	0.351e−03	6.30	1
			3146.018	9	7	-	0.243e−04	5.13	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$F°	3020.020	9	7	-	0.685e−02	7.57	1
NiI	$3d^8 4s^2 - y$	^{3}F $-^3$D°	2984.999	9	7	-	0.685e−02	7.56	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$F°	2348.228	9	9	-	0.184e−01	7.89	1
			2338.202	9	7	-	0.222e−01	7.97	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$D°	2346.259	9	7	-	0.143e+00	8.78	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$G°	2320.744	9	11	-	0.685e+00	9.45	1
			2256.573	9	9	-	0.979e−02	7.59	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$F°	2311.669	9	9	-	0.377e+00	9.19	1
NiI	$3d^8 4s^2-$	^{3}F−	2290.690	9	7	-	0.128e+00	8.72	1
NiI	$3d^8 4s^2-$	^{3}F−	2255.498	9	9	-	0.734e−02	7.47	1
NiI	$3d^8 4s^2-$	^{3}F $-^3$D°	2027.264	9	7	-	0.116e−01	7.62	1
NiII	$3d^9 - 4p$	^{2}D $-^4$D°	1939.569	6	8	-	0.193e−05	3.82	1
			1896.150	6	6	-	0.905e−03	6.48	1
			1864.467	6	4	-	0.307e−05	4.01	1
NiII	$3d^9 - 4p$	^{2}D $-^4$G°	1842.889	6	8	-	0.883e−03	6.46	1
			1817.564	6	6	-	0.152e−03	5.69	1
NiII	$3d^9 - 4p$	^{2}D $-^4$F°	1804.473	6	8	-	0.716e−02	7.36	1
			1783.318	6	6	-	0.117e−02	6.57	1
			1772.280	6	4	-	0.908e−04	5.46	1
NiII	$3d^9 - 4p$	^{2}D $-^2$G°	1773.949	6	8	-	0.622e−02	7.29	1
NiII	$3d^9 - 4p$	^{2}D $-^2$F°	1751.910	6	8	-	0.638e−01	8.30	1
			1709.600	6	6	-	0.688e−01	8.32	1
NiII	$3d^9 - 4p$	^{2}D $-^2$D°	1741.549	6	6	-	0.104e+00	8.51	1
			1703.405	6	4	-	0.122e−01	7.57	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NiII	$3d^9 - 4p'$	^{2}D $-^4$P°	1502.148	6	6	-	0.133e−01	7.55	1
			1501.959	6	4	-	0.769e−03	6.31	1
NiII	$3d^9 - 4p''$	^{2}D $-^2$F°	1477.222	6	6	-	0.106e−02	6.44	1
			1467.756	6	8	-	0.227e−01	7.77	1
NiII	$3d^9 - 4p''$	^{2}D $-^2$D°	1467.259	6	4	-	0.111e−01	7.46	1
			1454.842	6	6	-	0.595e−01	8.19	1
NiII	$3d^9 - 4p''$	^{2}D $-^2$P°	1449.997	6	4	-	0.353e−02	6.96	1
NiII	$3d^9 - 4p'$	^{2}D $-^4$D°	1415.720	6	6	-	0.413e−02	7.02	1
			1414.292	6	4	-	0.240e−02	6.78	1
			1412.866	6	8	-	0.665e−02	7.22	1
NiII	$3d^9 - 4p'$	^{2}D $-^2$D°	1393.324	6	6	-	0.222e−01	7.74	1
			1381.685	6	4	-	0.508e−02	7.10	1
NiII	$3d^9 - 4p'$	^{2}D $-^2$P°	1370.132	6	4	-	0.131e+00	8.50	1
NiII	$3d^9 - 4p'$	^{2}D $-^4$S°	1345.878	6	4	-	0.643e−02	7.19	1
NiII	$3d^9 - 4p'''$	^{2}D $-^2$F°	1317.217	6	8	-	0.146e+00	8.53	1
			1308.866	6	6	-	0.541e−02	7.10	1
NiII	$3d^9 - 4p'''$	^{2}D $-^2$G°	1252.771	6	8	-	0.417e−03	5.97	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^4$F°	1055.900	6	8	-	0.321e−05	3.78	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^4$D°	1028.026	6	6	-	0.174e−05	3.50	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^2$F°	1005.848	6	8	-	0.116e−03	5.32	1
			993.947	6	6	-	0.358e−04	4.80	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^2$G°	1001.561	6	8	-	0.667e−05	4.07	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^2$D°	982.755	6	6	-	0.191e−03	5.52	1
			973.305	6	4	-	0.110e−04	4.28	1
NiII	$3d^9 - 5p$	^{2}D $-^4$D°	956.908	6	6	-	0.315e−03	5.73	1
			955.598	6	8	-	0.547e−03	5.97	1
NiII	$3d^9 - 5p$	^{2}D $-^4$G°	947.876	6	8	-	0.145e−03	5.39	1
			940.883	6	6	-	0.398e−04	4.82	1
NiII	$3d^9 - 5p$	^{2}D $-^4$F°	946.353	6	6	-	0.711e−05	4.08	1
NiII	$3d^9 - 5p$	^{2}D $-^2$F°	944.840	6	8	-	0.733e−03	6.09	1
			933.862	6	6	-	0.585e−03	5.99	1
NiII	$3d^9 - 5p$	^{2}D $-^2$D°	944.633	6	6	-	0.176e−02	6.47	1
			933.340	6	4	-	0.173e−02	6.46	1
NiII	$3d^9 - 5p$	^{2}D $-^2$G°	937.906	6	8	-	0.100e−03	5.22	1
NiII	$3d^9 - (^3\text{P}°)$	^{2}D $-^4$S°	928.179	6	4	-	0.651e−05	4.03	1
NiXII	$3s^2 3p^5 - 3s3p^6$	^{2}P° $-^2$S	295.321	4	2	-	0.337e−01	7.25	19
NiXIII	$3s^2 3p^4 - 3s3p^5$	^{3}P $-^3$P°	303.31	5	5	-	0.400e−01	7.33	2
NiXIV	$3s^2 3p^3 - 3s3p^4$	^{4}S° $-^4$P	316.53	4	6	-	0.460e−01	7.41	2
			302.263	4	4	-	0.300e−01	7.21	18
NiXV	$3s^2 3p^2 - 3s3p^3$	^{3}P $-^3$D°	298.15	1	3	-	0.740e−01	7.59	19
NiXVI	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$D	289.165	2	4	-	0.790e−01	7.61	19
NiXVI	$3s^2 3p - 3s3p^2$	^{2}P° $-^2$S	239.508	2	2	-	0.224e+00	7.98	18
NiXVII	$3s^2 - 3s3p$	^{1}S $-^3$P°	366.7	1	3	-	0.350e−02	6.36	2
NiXVII	$3s^2 - 3s3p$	^{1}S $-^1$P°	249.189	1	3	-	0.768e+00	8.53	18
NiXVIII	$3s - 3p$	^{2}S $-^2$P°	320.558	2	2	-	0.114e+00	7.81	18
			291.985	2	4	-	0.253e+00	8.12	18

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
NiXXV	$2s^2 - 2s2p$	^{1}S $-^3$P°	238.56	1	3	-	0.210e−02	5.95	2
NiXXVI	$2s - 2p$	^{2}S $-^2$P°	234.153	2	2	-	0.164e−01	6.83	18
CuI	$3d^{10}4s - 4p$	^{2}S $-^2$P°	3274.898	2	2	-	0.214e+00	7.12	1
			3248.474	2	4	-	0.431e+00	7.42	1
CuI	$3d^{10}4s - 4p'$	^{2}S $-^4$P°	2492.898	2	4	-	0.579e−02	5.43	21
			2442.377	2	2	-	0.179e−02	4.91	21
CuI	$3d^{10}4s - 4p'$	^{2}S $-^4$D°	2244.961	2	4	-	0.180e−02	4.88	21
			2226.389	2	2	-	0.342e−01	6.15	21
CuI	$3d^{10}4s - 4p'$	^{2}S $-^2$P°	2182.405	2	2	-	0.648e−01	6.42	1
			2179.632	2	4	-	0.130e+00	6.72	1
CuI	$3d^{10}4s - 4p'$	^{2}S $-^2$D°	2165.775	2	4	-	0.717e−01	6.46	1
CuI	$3d^{10}4s - 5p$	^{2}S $-^2$P°	2024.987	2	6	-	0.181e−01	5.83	21
CuII	$3d^{10} - 4p$	^{1}S $-^3$P°	1472.3950	1	3	-	0.838e−02	5.36	1
CuII	$3d^{10} - 4p$	^{1}S $-^3$D°	1367.9509	1	3	-	0.332e−01	5.93	1
CuII	$3d^{10} - 4p$	^{1}S $-^1$P°	1358.7730	1	3	-	0.380e+00	6.98	1
ZnI	$3d^{10}4s^2 - 4p$	^{1}S $-^3$P°	3076.794	1	3	-	0.140e−03	4.28	20
ZnI	$3d^{10}4s^2 - 4p$	^{1}S $-^1$P°	2139.2473	1	3	-	0.146e+01	8.14	1
ZnI	$3d^{10}4s^2 - 5p$	^{1}S $-^1$P°	1589.5610	1	3	-	0.122e+00	6.94	1
ZnI	$3d^{10}4s^2 - 3d^9 4s^2 4p$	^{1}S $-^1$P°	1109.16	1	3	-	0.169e−01	5.92	23
ZnI	$3d^{10}4s^2 - 3d^9 4s^2(^2\mathrm{D}_{5/2})5p$	^{1}S $-\frac{5}{2}[\frac{3}{2}]$°	809.91	1	3	-	0.767e−02	5.44	2
ZnI	$3d^{10}4s^2 - 3d^9 4s^2(^2\mathrm{D}_{3/2})5p$	^{1}S $-\frac{3}{2}[\frac{1}{2}]$°	794.07	1	3	-	0.510e−02	5.26	2
ZnI	$3d^{10}4s^2 - 3d^9 4s^2(^2\mathrm{D}_{3/2})5p$	^{1}S $-\frac{3}{2}[\frac{3}{2}]$°	792.00	1	3	-	0.161e−02	4.75	2
ZnI	$3d^{10}4s^2 - 3d^9 4s^2(^2\mathrm{D}_{5/2})6p$	^{1}S $-\frac{5}{2}[\frac{3}{2}]$°	765.51	1	3	-	0.200e−02	4.84	2
ZnI	$3d^{10}4s^2 - 3d^9 4s^2(^2\mathrm{D}_{5/2})7p$	^{1}S $-\frac{5}{2}[\frac{3}{2}]$°	748.37	1	3	-	0.151e−02	4.70	2
ZnII	$3d^{10}4s - 4p$	^{2}S $-^2$P°	2062.664	2	2	-	0.253e+00	7.37	1
			2026.136	2	4	-	0.515e+00	7.67	1
ZnII	$3d^{10}4s - 5p$	^{2}S $-^2$P°	986.525	2	2	-	0.710e−03	4.50	1
			984.142	2	4	-	0.225e−02	5.00	1
GaI	$4s^2 4p - 5s$	^{2}P° $-^2$S	4034.127	2	2	-	0.123e+00	5.83	1
GaI	$4s^2 4p - 4d$	^{2}P° $-^2$D	2875.078	2	4	-	0.303e+00	6.07	1
GaI	$4s^2 4p - 6s$	^{2}P° $-^2$S	2660.665	2	2	-	0.127e−01	4.66	21
GaI	$4s^2 4p - 5d$	^{2}P° $-^2$D	2450.820	2	4	-	0.504e−01	5.22	21
GaI	$4s^2 4p - 7s$	^{2}P° $-^2$S	2372.014	2	2	-	0.481e−02	4.19	21
GaI	$4s^2 4p - 6d$	^{2}P° $-^2$D	2294.91	2	4	-	0.111e−01	4.54	22
GaI	$4s^2 4p - 8s$	^{2}P° $-^2$S	2255.71	2	2	-	0.236e−02	3.86	23
GaI	$4s^2 4p - 9s$	^{2}P° $-^2$S	2196.03	2	2	-	0.137e−02	3.61	23
GaII	$4s^2 - 4p$	^{1}S $-^1$P°	1414.402	1	3	-	0.180e+01	6.54	1
GaII	$4s^2 - 5p$	^{1}S $-^1$P°	829.60	1	3	-	0.681e−02	3.88	2
GaIII	$4s - 4p$	^{2}S $-^2$P°	1534.462	2	2	-	0.265e+00	5.74	1
			1495.045	2	4	-	0.543e+00	6.04	1
GeI	$4s^2 4p^2 - 5s$	^{3}P $-^3$P°	2652.3577	1	3	-	0.269e+00	6.48	1
GeI	$4s^2 4p^2 - 5s$	^{3}P $-^1$P°	2498.727	1	3	-	0.365e−01	5.59	21
GeI	$4s^2 4p^2 - 4d$	^{3}P $-^3$D°	2042.3676	1	3	-	0.206e+00	6.25	1

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
GeII	$4s^2 4p - 5s$	^{2}P° $-^2$S	1602.4863	2	2	-	0.135e+00	5.97	1
GeII	$4s^2 4p - 4d$	^{2}P° $-^2$D	1237.0589	2	4	-	0.876e−01	5.66	1
GeII	$4s^2 4p - 6s$	^{2}P° $-^2$S	1055.0261	2	2	-	0.116e−01	4.72	1
GeII	$4s^2 4p - 5d$	^{2}P° $-^2$D	999.1011	2	4	-	0.568e−01	5.38	1
GeIII	$4s^2 - 4p$	^{1}S $-^1$P°	1088.5	1	3	-	0.179e+01	6.92	1
GeIV	$4s - 4p$	^{2}S $-^2$P°	1229.840	2	2	-	0.256e+00	6.13	1
			1189.028	2	4	-	0.530e+00	6.43	1
AsI	$4p^3 - 4p^2 5s$	^{4}S° $-^4$P	1972.62	4	2	-	0.584e−01	4.40	2
			1937.59	4	4	-	0.113e+00	4.71	2
			1890.42	4	6	-	0.161e+00	4.85	2
BrI	$4p^5 - 4p^4 5s$	^{2}P° $-^4$P	1576.387	4	6	-	0.117e−02	2.90	2
			1540.654	4	4	-	0.498e−01	4.51	2
BrI	$4p^5 - 4p^4 5s$	^{2}P° $-^2$P	1488.452	4	4	-	0.399e−01	4.40	2
RbI	$5s - 5p$	^{2}S $-^2$P°	7949.79	2	2	-	0.322e+00	5.81	20
			7802.374	2	4	-	0.675e+00	6.12	20
RbI	$5s - 6p$	^{2}S $-^2$P°	4216.744	2	2	-	0.400e−02	3.63	20
			4203.035	2	4	-	0.953e−02	4.00	20
RbI	$5s - 7p$	^{2}S $-^2$P°	3592.593	2	2	-	0.561e−03	2.70	23
			3588.069	2	4	-	0.153e−02	3.14	23
RbI	$5s - 8p$	^{2}S $-^2$P°	3351.772	2	2	-	0.150e−03	2.10	23
			3349.655	2	4	-	0.461e−03	2.59	23
RbI	$5s - 9p$	^{2}S $-^2$P°	3230.085	2	2	-	0.594e−04	1.68	23
			3228.908	2	4	-	0.200e−03	2.21	23
RbI	$5s - 10p$	^{2}S $-^2$P°	3159.170	2	2	-	0.299e−04	1.38	23
			3158.441	2	4	-	0.101e−03	1.90	23
RbI	$5s - 11p$	^{2}S $-^2$P°	3113.948	2	2	-	0.189e−04	1.17	23
			3113.466	2	4	-	0.727e−04	1.75	23
RbI	$5s - 12p$	^{2}S $-^2$P°	3082.896	2	4	-	0.425e−04	1.52	23
RbI	$5s - 13p$	^{2}S $-^2$P°	3061.134	2	4	-	0.295e−04	1.36	23
RbI	$5s - 14p$	^{2}S $-^2$P°	3045.065	2	4	-	0.228e−04	1.24	23
RbI	$5s - 15p$	^{2}S $-^2$P°	3032.859	2	4	-	0.136e−04	1.02	23
RbI	$5s - 16p$	^{2}S $-^2$P°	3023.356	2	4	-	0.113e−04	0.93	23
SrI	$5s^2 - 5s5p$	^{1}S $-^1$P°	4608.622	1	3	-	0.192e+01	6.88	20
SrI	$5s^2 - 5s6p$	^{1}S $-^1$P°	2932.688	1	3	-	0.735e−02	4.26	21
SrI	$5s^2 - 5s7p$	^{1}S $-^1$P°	2570.239	1	3	-	0.157e−01	4.54	21
SrI	$5s^2 - 5s8p$	^{1}S $-^1$P°	2428.832	1	3	-	0.451e−01	4.97	21
SrI	$5s^2 - 5s9p$	^{1}S $-^1$P°	2355.040	1	3	-	0.449e−01	4.95	21
SrI	$5s^2 - 5s10p$	^{1}S $-^1$P°	2308.10	1	3	-	0.287e−01	4.75	21
SrI	$5s^2 - 5s11p$	^{1}S $-^1$P°	2275.99	1	3	-	0.156e−01	4.48	21
SrI	$5s^2 - 5s12p$	^{1}S $-^1$P°	2254.02	1	3	-	0.845e−02	4.21	21
SrI	$5s^2 - 5s13p$	^{1}S $-^1$P°	2238.34	1	3	-	0.518e−02	3.99	21
SrI	$5s^2 - 5s14p$	^{1}S $-^1$P°	2227.07	1	3	-	0.357e−02	3.83	21
SrII	$5s - 5p$	^{2}S $-^2$P°	4216.711	2	2	-	0.338e+00	6.08	20
			4078.865	2	4	-	0.708e+00	6.39	20

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
YI	$4d5s^2 - z$	^{2}D $-^2$D°	6224.31	4	6	-	0.514e−02	3.73	20
			6193.44	4	4	-	0.270e−01	4.44	20
YI	$4d5s^2 - z$	^{2}D $-^2$F°	4644.99	4	6	-	0.873e−01	4.83	20
YI	$4d5s^2 - y$	^{2}D $-^2$D°	4144.03	4	4	-	0.412e+00	5.45	20
YI	$4d5s^2 - y$	^{2}D $-^2$P°	4084.86	4	4	-	0.625e−01	4.63	20
YI	$4d5s^2 - y$	^{2}D $-^2$F°	4078.53	4	6	-	0.411e+00	5.44	20
YI	$4d5s^2 - x$	^{2}D $-^2$P°	3553.71	4	4	-	0.435e−01	4.41	20
YI	$4d5s^2 - z$	^{2}D $-^4$G°	3485.05	4	6	-	0.328e−02	3.28	23
YI	$4d5s^2 - y$	^{2}D $-^4$F°	3173.76	4	4	-	0.149e−02	2.89	23
			3156.57	4	6	-	0.605e−03	2.50	23
YI	$4d5s^2 - y$	^{2}D $-^4$D°	3006.14	4	4	-	0.650e−02	3.51	20
			2997.81	4	6	-	0.170e−01	3.93	20
YI	$4d5s^2 - x$	^{2}D $-^2$F°	2975.46	4	6	-	0.697e−01	4.54	20
YI	$4d5s^2 - x$	^{2}D $-^2$D°	2949.26	4	4	-	0.456e−01	4.35	22
YII	$4d5s - z$	^{1}S $-^3$P°	4205.87	1	3	-	0.175e−01	4.09	20
YII	$4d5s - z$	^{1}S $-^3$D°	3497.08	1	3	-	0.192e+00	5.05	20
YII	$4d5s - y$	^{1}S $-^3$P°	3112.95	1	3	-	0.567e−02	3.47	20
MoI	$4d^5 5s - z$	^{7}S $-^7$P°	3904.074	7	5	-	0.101e+00	4.56	20
			3865.211	7	7	-	0.140e+00	4.69	20
			3799.337	7	9	-	0.192e+00	4.82	20
MoI	$4d^5 5s - z$	^{7}S $-^7$D°	3209.765	7	5	-	0.306e−01	3.95	20
			3159.070	7	7	-	0.693e−01	4.30	20
MoI	$4d^5 5s - y$	^{7}S $-^7$P°	3194.892	7	5	-	0.167e+00	4.69	20
			3171.251	7	7	-	0.207e+00	4.78	20
			3133.499	7	9	-	0.339e+00	4.99	20
RhI	$4d^8 5s - z$	^{4}F $-^4$D°	3693.408	10	8	-	0.149e+00	3.83	20
RhI	$4d^8 5s - z$	^{4}F $-^4$G°	3503.526	10	10	-	0.791e−01	3.53	20
RhI	$4d^8 5s - z$	^{4}F $-^4$F°	3397.82	10	10	-	0.112e+00	3.67	20
RhI	$4d^8 5s - z$	^{4}F $-^2$F°	3124.61	10	8	-	0.539e−02	2.32	22
AgI	$5s - 5p$	^{2}S $-^2$P°	3283.836	2	2	-	0.210e+00	4.08	20
			3281.627	2	4	-	0.452e+00	4.41	20
AgI	$5s - 6p$	^{2}S $-^2$P°	2070.511	2	2	-	0.964e−03	1.54	21
			2061.827	2	4	-	0.395e−02	2.15	21
CdI	$5s^2 - 5s5p$	^{1}S $-^3$P°	3261.991	1	3	-	0.194e−02	2.56	20
CdI	$5s^2 - 5s5p$	^{1}S $-^1$P°	2288.724	1	3	-	0.125e+01	5.22	21
CdII	$5s - 5p$	^{2}S $-^2$P°	2265.719	2	2	-	0.231e+00	4.48	21
			2145.083	2	4	-	0.386e+00	4.68	21
InI	$5p - 6p$	^{2}P° $-^2$S	4102.922	2	2	-	0.141e+00	3.58	20
InI	$5p - 5d$	^{2}P° $-^2$D	3040.24	2	4	-	0.360e+00	3.86	22
InI	$5p - 6d$	^{2}P° $-^2$D	2560.918	2	4	-	0.786e−01	3.12	21
SnI	$5p^2 - 5p6s$	^{3}P $-^3$P°	2864.165	1	3	-	0.199e+00	4.90	21
SnI	$5p^2 - 5p6s$	^{3}P $-^1$P°	2547.313	1	3	-	0.613e−01	4.33	21
SnI	$5p^2 - 5p5d$	^{3}P $-^3$D°	2246.745	1	3	-	0.363e+00	5.05	21
SnI	$5p^2 - 5p7s$	^{3}P $-^3$P°	2073.74	1	3	-	0.696e−02	3.30	21

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
I I	$5p^5 - 5p^4 6s$	^{2}D° $-^4$P	1830.38	4	6	-	0.121e−01	2.86	21
I I	$5p^5 - 5p^4 6s$	^{2}D° $-^2$P	1782.758	4	4	-	0.129e+00	3.87	21
Xe I	$5p^6 - 6s$	^{1}S $-[\frac{3}{2}]^\circ$	1469.621	1	3	-	0.272e+00	4.60	21
Xe I	$5p^6 - 6s$	^{1}S $-[\frac{1}{2}]^\circ$	1295.560	1	3	-	0.189e+00	4.39	21
Xe I	$5p^6 - 5d$	^{1}S $-[\frac{1}{2}]^\circ$	1250.199	1	3	-	0.984e−02	3.09	21
Xe I	$5p^6 - 5d$	^{1}S $-[\frac{3}{2}]^\circ$	1192.040	1	3	-	0.396e+00	4.67	21
Xe I	$5p^6 - 7s$	^{1}S $-[\frac{3}{2}]^\circ$	1170.405	1	3	-	0.986e−01	4.06	23
Xe I	$5p^6 - 6d$	^{1}S $-[\frac{1}{2}]^\circ$	1129.302	1	3	-	0.252e−02	2.45	23
Xe I	$5p^6 - 6d$	^{1}S $-[\frac{3}{2}]^\circ$	1110.708	1	3	-	0.832e−01	3.97	23
Xe I	$5p^6 - 8s$	^{1}S $-[\frac{3}{2}]^\circ$	1099.712	1	3	-	0.236e−01	3.41	23
Xe I	$5p^6 - 7d$	^{1}S $-[\frac{1}{2}]^\circ$	1085.437	1	3	-	0.217e−01	3.37	23
Xe I	$5p^6 - 7d$	^{1}S $-[\frac{3}{2}]^\circ$	1078.579	1	3	-	0.209e+00	4.35	23
Xe I	$5p^6 - 8d$	^{1}S $-[\frac{1}{2}]^\circ$	1061.250	1	3	-	0.962e−02	3.01	23
Xe I	$5p^6 - 8d$	^{1}S $-[\frac{3}{2}]^\circ$	1056.123	1	3	-	0.123e+00	4.11	23
Xe I	$5p^6 - 9d$	^{1}S $-[\frac{1}{2}]^\circ$	1050.101	1	3	-	0.422e−02	2.65	23
Xe I	$5p^6 - 9d$	^{1}S $-[\frac{3}{2}]^\circ$	1047.131	1	3	-	0.641e−01	3.83	23
Cs I	$6s - 7p$	^{2}S $-^2$P°	4594.482	2	2	-	0.253e−02	2.19	20
			4556.698	2	4	-	0.117e−01	2.85	20
Cs I	$6s - 8p$	^{2}S $-^2$P°	3889.667	2	2	-	0.220e−03	1.05	23
			3877.204	2	4	-	0.171e−02	1.94	23
Cs I	$6s - 9p$	^{2}S $-^2$P°	3618.300	2	2	-	0.491e−04	0.37	23
			3612.461	2	4	-	0.587e−03	1.45	23
Ba I	$6s^2 - 6p$	^{1}S $-^3$P°	7913.514	1	3	-	0.839e−02	4.03	20
Ba I	$6s^2 - 6p$	^{1}S $-^1$P°	5537.021	1	3	-	0.164e+01	6.17	20
Ba I	$6s^2 - 6p'$	^{1}S $-^3$D°	4133.588	1	3	-	0.546e−02	3.56	23
Ba I	$6s^2 - 6p'$	^{1}S $-^3$P°	3890.43	1	3	-	0.599e−02	3.58	22
Ba I	$6s^2 - 6p'$	^{1}S $-^1$P°	3502.109	1	3	-	0.105e+00	4.78	20
Ba I	$6s^2 - 7p$	^{1}S $-^1$P°	3072.476	1	3	-	0.174e+00	4.94	20
Ba I	$6s^2 - 8p$	^{1}S $-^1$P°	2786.098	1	3	-	0.977e−02	3.64	21
Ba I	$6s^2 - 7p'$	^{1}S $-^3$D°	2740.053	1	3	-	0.307e−02	3.13	21
Ba I	$6s^2 - 7p'$	^{1}S $-^3$P°	2703.434	1	3	-	0.822e−02	3.56	21
Ba I	$6s^2 - 9p$	^{1}S $-^1$P°	2647.289	1	3	-	0.347e−02	3.17	23
Ba I	$6s^2 - 7p'$	^{1}S $-^1$P°	2597.413	1	3	-	0.364e−01	4.19	21
Ba I	$6s^2 - 10p$	^{1}S $-^1$P°	2543.964	1	3	-	0.119e−01	3.69	23
Ba I	$6s^2 - 11p$	^{1}S $-^1$P°	2500.953	1	3	-	0.422e−02	3.23	23
Ba I	$6s^2 - 12p$	^{1}S $-^1$P°	2473.948	1	3	-	0.127e−02	2.71	23
Ba II	$6s - 6p$	^{2}S $-^2$P°	4935.463	2	2	-	0.349e+00	5.45	20
			4555.310	2	4	-	0.728e+00	5.73	20
Ba II	$6s - 7p$	^{2}S $-^2$P°	1999.54	2	4	-	0.120e−01	3.59	21
Ba II	$6s - 8p$	^{2}S $-^2$P°	1630.36	2	2	-	0.677e−03	2.25	23
Nd II	$6s - z$	^{6}I $-^6$K°	4304.784	8	10	-	0.163e+00	4.32	20
Nd II	$6s-$	^{6}I−	3864.422	8	10	-	0.420e−01	3.68	20
Eu I	$6s^2 - y$	^{8}S° $-^8$P	4663.19	8	6	-	0.318e+00	3.71	20
			4628.52	8	8	-	0.417e+00	3.83	20
			4595.32	8	10	-	0.554e+00	3.95	20

Table 5. Resonance absorption lines above 228 Å ordered by element

Species	Transition	Multiplet	λ, Å	g_i	g_k	f_{ik}	f'_{ik}	P	Ref
TmI	$6s^2 - a$	^{2}F°–	4387.666	8	8	-	0.121e−01	1.86	20
			4361.155	8	6	-	0.278e−01	2.21	20
TmI	$6s^2 - a$	^{2}F°–	3888.448	8	8	-	0.861e−01	2.65	20
YbI	$6s^2 - 6p$	^{1}S $-^3$P°	5558.02	1	3	-	0.158e−01	2.89	20
YbI	$6s^2 - 6p$	^{1}S $-^1$P°	3989.11	1	3	-	0.126e+01	4.65	20
YbII	$6s - 6p$	^{2}S $-^2$P°	3695.24	2	2	-	0.287e+00	3.98	20
			3290.31	2	4	-	0.584e+00	4.23	20
IrI	$6s^2 - a$	^{4}F–	2640.499	10	10	-	0.491e−01	3.48	21
IrI	$6s^2 - a$	^{4}F–	2503.737	10	12	-	0.372e−01	3.34	21
			2475.870	10	10	-	0.193e−01	3.05	21
AuI	$6s - 6p$	^{2}S $-^2$P°	2676.75	2	2	-	0.176e+00	3.50	21
			2428.69	2	4	-	0.352e+00	3.76	21
HgI	$6s^2 - 6p$	^{1}S $-^3$P°	2537.279	1	3	-	0.232e−01	2.86	21
TlI	$6p - 7s$	^{2}P° $-^2$S	3776.797	2	2	-	0.134e+00	3.52	20
TlI	$6p - 6d$	^{2}P° $-^2$D	2768.74	2	4	-	0.290e+00	3.72	21
TlI	$6p - 8s$	^{2}P° $-^2$S	2580.91	2	2	-	0.180e−01	2.49	21
TlI	$6p - 7d$	^{2}P° $-^2$D	2380.31	2	4	-	0.747e−01	3.07	21
TlI	$6p - 9s$	^{2}P° $-^2$S	2316.61	2	2	-	0.627e−02	1.98	21
TlI	$6p - 8d$	^{2}P° $-^2$D	2238.51	2	4	-	0.285e−01	2.62	21
TlI	$6p - 9d$	^{2}P° $-^2$D	2169.27	2	4	-	0.138e−01	2.30	21
PbI	$6p^2 - 6p7s$	^{3}P $-^3$P°	2833.894	1	3	-	0.209e+00	4.82	21
PbI	$6p^2 - 6p6d$	^{3}P $-^3$D°	2170.675	1	3	-	0.318e+00	4.89	21
PbI	$6p^2 - 6p8s$	^{3}P $-^3$P°	2053.93	1	3	-	0.228e−01	3.72	21
PbI	$6p^2 - 6p7s$	^{3}P $-^1$P°	2022.67	1	3	-	0.957e−02	3.34	22
BiI	$6p^3 - 6p^27s$	^{4}S° $-^4$P	3068.623	4	2	-	0.146e+00	3.36	21
			2228.933	4	4	-	0.663e−01	2.88	21
			2062.390	4	6	-	0.947e−01	3.00	21
BiI	$6p^3 - 6p^26d$	^{4}S° $-^2$D	2277.281	4	4	-	0.194e−01	2.36	21
			2231.319	4	6	-	0.291e+00	3.52	21
BiI	$6p^3 - 6p^27s$	^{4}S° $-^2$P	2178.01	4	2	-	0.924e−03	1.01	21
			2021.64	4	4	-	0.368e−02	1.58	21
BiI	$6p^3 - 6p^28s$	^{4}S° $-^4$P	2110.932	4	2	-	0.304e−01	2.52	21
BiI	$6p^3 - 6p^27d$	^{4}S° $-^2$D	1954.70	4	6	-	0.103e+00	3.01	23

References for Table 5

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