Ion	Leve	Levels			Wavelen	ıgth/Å	$v_{\rm rad}$ /	Comment
1011	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	comment
Н г	1	25			913.215			ISM multi-component
Н і	1	24			913.339			ISM multi-component
Н і	1	23			913.480			ISM multi-component
Нг	1	22			913.641			ISM multi-component
Ни	1	21			913.826			ISM multi-component
Ни	1	20			914.039			ISM multi-component
HI	1	19			914.286			ISM multi-component
H I U -	1	18			914.576			ISM multi-component
H I U I	1	1/			914.919			ISM multi-component
пі	1	10			915.529			ISM multi component
	1	15			915.015			ISM multi-component
Нт	1	13			916 429			ISM multi-component
НІ	1	13			917.181			ISM multi-component
Н	1	12			918.129			ISM multi-component
Ge vi	306243	415143	2.34×10^{-4}		918.278			1
Kr vii	170835	279714.8	1.39×10^{-1}	12.2	918.444	918.53	26.4	
Н г	1	11			919.351			ISM multi-component
Kr vi	170084	278787	3.01×10^{-3}		919.938			*
Н і	1	10			920.963			ISM multi-component
O IV	$2s2p^2 {}^2P_{1/2}$	$2p^{3} {}^{2}P^{0}_{3/2}$	5.62×10^{-2}		921.296			
O IV	$2s2p^2 {}^2P_{1/2}$	$2p^3 \ ^2P_{1/2}^{o}$	1.12×10^{-1}		921.365			
N IV	$2s2p^{-3}P_{1}^{0}$	$2p^2 {}^{3}P_2$	9.38×10^{-2}	75.7	921.994	922.07	23.1	
N IV	$2s2p^{-3}P_{0}^{1}$	$2p^2 \ ^3P_1^2$	2.25×10^{-1}	91.6	922.519	922.59	22.8	
N IV	$2s2p^{-3}P_{1}^{0}$	$2p^2 \ ^3P_1$	5.62×10^{-2}		923.056			
Н	1	9			923.150			ISM multi-component
N IV	$2s2p^{-3}P_2^{o}$	$2p^{2} {}^{3}P_{2}$	1.69×10^{-1}		923.220			*
O IV	$2s2p^{2} P_{3/2}^{2}$	$2p^{3} \ ^{2}P_{3/2}^{5}$	1.41×10^{-1}		923.367			
O IV	$2s2p^2 {}^2P_{2/2}$	$2p^3 \ ^2P_{1/2}^{0}$	2.81×10^{-2}		923.436			
N IV	$2s2p^{-3}P_{0}^{3/2}$	$2p^2 \ ^3P_{a}^{1/2}$	7.49×10^{-2}	69.5	923.676	923.75	24.0	
S v	3s3p ¹ P	$\frac{2p}{3p^2}$ $\frac{1}{3}$	1.71×10^{-1}	0710	924.220	20110	2	blend with N IV
N IV	$2s2p^{-3}P^{0}$	$2p^2 \ ^3P$	5.61×10^{-2}		924.284			blend with S v
Ge vi	303696	411886	2.34×10^{-4}		924.302			blend with N IV
Ba vii	226198	334319	1.27×10^{-3}		924.892			newly identified
Ba vii	42514	150634	1.74×10^{-3}		924.898			newly identified
Нг	1	8			926.226			ISM multi-component
Ge vi	303696	411592	3.63×10^{-1}		926.824			ĩ
Kr vi	0	107836	1.58×10^{-3}	16.5	927.334	927.43	31.4	
Xe vi	$5p^2 {}^2D_{2/2}$	$5p^{3} {}^{2}D_{2}^{0}$	3.53×10 ⁻²		928.371			
Xe vi	$5p^2 \ ^2P_{3/2}^{3/2}$	$5p^3 \ ^2P_{3/2}^{o}$	4.87×10^{-2}		929.141			

Ion _		Levels		f	W_{λ} /	Wavelen	igth/Å	$v_{\rm rad}$ /	Comment
Ion	Lower	Uppe	r	J	mÅ	Theoretical	Observed	km/s	Comment
ΓΟ						929.517			ISM multi-component
Ge vi	313025	420542		2.44×10^{-1}		930.082			
Ge vi	306243	413728		8.07×10^{-4}		930.366			
Н і	1	7				930.748			ISM multi-component
Kr vi	8110	115479		2.23×10^{-3}	19.1	931.368	931.43	19.3	
		2			15.3		931.98		unid.
S VI	3s	$^{2}S_{1/2}$ 3p	${}^{2}P_{3/2}^{0}$	4.36×10^{-1}	57.9	933.378	933.47	28.9	
ΙО						936.630			ISM multi-component
Ge iv	190852.5	84102.3		8.91×10^{-1}		936.765	936.82	17.6	
Ba vi	36156	142852		7.40×10^{-3}		937.241			
Ba vii	15507	122163		1.08×10^{-2}		937.595			newly identified
Н і	1	6				927.803			ISM multi-component
Ge iv	190601.5	84102.3		9.89×10^{-2}		938.973			
Ge v	234219	340296		8.22×10^{-3}		942.717			
Ba vii	42514	148547		3.40×10^{-3}		943.102			
Kr vi	170084	276011		3.88×10^{-2}		944.046			
S vi		2 S	$^{2}P^{o}$	2.20×10^{-1}	59.8	944.523	944.62	29.8	
					14.8		946.06		unid.
Ge vi	306243	411886		1.28×10^{-1}		946.589			
Ge vi	303696	409188		1.15×10^{-1}		947.937			blend with C IV
C iv	3s	${}^{2}S_{1/2}$ 4p	${}^{2}P_{3/2}^{0}$	1.36×10^{-1}		948.090			
C IV	3s	${}^{2}S_{1/2}$ 4p	${}^{2}P_{1/2}^{0}$	6.78×10^{-2}		948.208			
ΙО		1/2	1/2			948.686			ISM multi-component
Н	1	5				949.743			ISM multi-component
P iv	3s ²	$^{1}S_{0}$ 3p	${}^{1}P_{1}^{0}$	1.60	33.1	950.655	950.75	30.0	-
ΙО		0	1			950.887			ISM multi-component
Νι						951.079			ISM multi-component
Ge vi	308657	413728		1.03×10^{-1}		951.739			
					40.9		952.90		unid.
Ba vi	23547	128436		6.95×10^{-3}	11.0	953.388	953.47	26.4	
Nи						953.415			ISM multi-component
Nи						953.655			ISM multi-component
Νı						953.970			ISM multi-component
					13.6		954.45		unid.
N IV	2s2p	$^{1}P_{1}^{0}$ $2p^{2}$	${}^{1}S_{0}$	1.33×10^{-1}	71.8	955.334	955.41	24.5	
Kr vi	222122	326657		2.68×10^{-2}		956.617			
Ge v	235967	340296		3.17×10^{-2}		958.509			
Не п	2	9		5.43×10^{-3}		958.698			
Ри						963.800			ISM multi-component
NI						963.990			ISM multi-component

Ion _	Lev	els	- f	W_{λ} /	Wavelen	gth/Å	v _{rad} /	Comment
1011	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	comment
Νι					964.626			ISM multi-component
Kr vi	223040	326657	1.59×10^{-1}	25.6	965.093	965.16	21.8	-
Ge v	235967	339540	3.56×10^{-2}	24.3	965.501	965.59	27.3	
Ge vi	310199	413728	2.62×10^{-1}		965.914			
						966.78		unid.
						966.84		unid.
						966.88		unid.
Ge vi	308657	412038	1.67×10^{-1}		967.300			newly identified
Xe vi	$5p^2 {}^2D_{5/2}$	$5p^{3-2}D^{o}_{3/2}$	1.06×10^{-2}		967.550			
						968.26		unid.
Ge vi	308657	411886	1.96×10^{-1}		968.723			
Kr vi	8110	111193	4.34×10^{-4}		970.092			
Ge v	234219	337168	1.22×10^{-1}	16.0	971.357	971.41	16.4	
Ge vi	306243	409188	1.81×10^{-1}		971.392			blend with Ge v
Ог					971.737			ISM multi-component
Ог					971.738			ISM multi-component
Ог					971.738			ISM multi-component
Неп	2	8	8.04×10^{-5}		972.111			
DI	1	4			972.272			ISM multi-component
HI	1	4			972.537			ISM multi-component
					970.448			ISM multi-component
	2.2.2.35	2m(2D0) 2d 3D0	8.02×10^{-3}		977.020			15M multi-component
	2858 531	$2p(-P^{*})3u^{*}P_{2}^{*}$	8.95×10^{-3}		977.020			
N m	$2a^{2}n^{2}$ ² D	$2n^3 \ ^2D^0$	3.30×10^{-3}		977.790			
IN III N	$282p D_{5/2}$	$2p D_{3/2}$	9.79×10		979.708			
N III	$2p^{2} \ ^{2}D_{3/2}$	$2p^{3} \ ^{2}D_{3/2}^{3}$	$1.2/\times 10^{-1}$		979.832			
N III	$2s2p^2 \ ^2D_{5/2}$	$2p^{3} \ ^{2}D_{5/2}^{0}$	1.33×10^{-1}		979.905			
Νш	2s2p ² ² D _{3/2}	$2p^{3} {}^{2}D_{5/2}^{0}$	1.44×10^{-2}		979.969			
Kr vi	222122	324120	1.31×10^{-1}	22.7	980.411	980.51	28.7	
Сш	$3s^{-3}S_{1}$	$3d^{3}P_{2}^{0}$	8.98×10^{-1}	24.9	981.462	981.53	20.5	
Ge v	238765	340296	1.08×10^{-1}	20.7	984.923	985.00	23.4	
Ge v			1.13×10^{-3}		987.064			
As v	$4s^{-2}S_{1/2}$	$4p^{-2}P_{3/2}^{0}$	5.28×10^{-1}	35.7	987.651	987.74	27.0	
Fe 1		- /			987.687			ISM multi-component
Ge v	235967	337168	1.00×10^{-1}	21.6	988.132	988.22	25.8	
O IV	$3d \ {}^{4}F^{0}_{3/2}$	$4f^{4}G_{5/2}$	7.72×10^{-1}		988.523			
O IV	$3d \ {}^{4}F_{5/2}^{0}$	4f ${}^{4}G_{7/2}^{3/2}$	6.89×10^{-1}		988.573			
О і	512	112			988.578			ISM multi-component
Fe v	357329.1	256177.9	5.88×10^{-1}		988.619			~
O IV	$3d \ {}^{4}F^{o}_{7/2}$	$4f^{4}G_{9/2}$	6.87×10^{-1}		988.627			

Ior	ı —		Levels			f	$f = \frac{W_{\lambda}}{W_{\lambda}}$ Wavelength / Å		$v_{\rm rad}$ /	Comment	
101	1	Lower		Upper		J	mÅ	Theoretical	Observed	km/s	comment
0	I							988.655			ISM multi-component
0	IV	3d	${}^{4}\mathrm{F}^{\mathrm{o}}_{9/2}$	4f	${}^{4}G_{11/2}$	7.20×10^{-1}		988.708			
0	Ι				,			988.773			ISM multi-component
Ν	III	2p	${}^{2}P_{1/2}^{0}$	$2s2p^2$	$^{2}D_{3/2}$	1.23×10^{-1}	37.0	989.799	989.88	24.8	
Si	п							989.873			ISM multi-component
Ge	v	234219		335161		1.13×10^{-1}	10.8	990.668	990.76	27.5	
Ν	III	2p	${}^{2}P_{3/2}^{0}$	$2s2p^2$	$^{2}D_{3/2}$	1.20×10^{-2}		991.511			
Ν	III	2p	${}^{2}P_{3/2}^{o}$	$2p^2$	$^{2}D_{5/2}$	1.11×10^{-1}		991.577			
He	п	2	-7-	7	- ,	1.27×10^{-2}		992.363			
Ba	VII	21499		122163		5.38×10^{-3}	14.2	993.411	993.49	22.6	
Xe	VII	$5s^2$	S ₀	5p	${}^{3}P_{1}^{0}$	2.45×10^{-1}	26.2	995.511	995.59	24.1	
Mo	VI	182404		282826		1.12	12.9	995.806	995.90	28.3	
Xe	VII	5p	${}^{2}P_{1/2}^{0}$	5p ²	${}^{4}P_{3/2}$	5.66×10^{-5}		996.233			
Se	IV		-1-		-,-		21.7	996.710	996.77	18.0	
Р	V	3d	$^{2}D_{5/2}$	4p	${}^{2}P_{3/2}^{0}$	1.50×10^{-1}	28.5	997.612	997.72	33.4	
			- / -		-,-		18.5		999.49		unid.
Zn	V	231122		331087		2.69×10^{-2}		1000.350			uncertain, newly identified
S	VI	4d	$^{2}D_{3/2}$	5f	${}^{2}F_{5/2}^{0}$	6.72×10^{-1}		1000.372			
Zr	v	437678	- 1	537502	- /	1.27×10^{-1}		1001.765			uncertain
							20.2		1001.99		unid.
С	III	3p	${}^{1}P_{1}^{0}$	6d	${}^{1}D_{2}$	4.12×10^{-2}		1001.988			
Zr	V	277146		376898		1.11×10^{-2}		1002.484			
Kr	VI	8110		107836		3.30×10^{-4}	16.3	1002.748	1002.82	21.5	
Ge	V	_	1		1		33.6	1004.380	1004.49	32.8	
С	III	3s	${}^{1}S_{0}$	3d'	$^{1}P_{1}^{0}$	5.49×10 ⁻²		1004.596			
Ge	V	238765		338274		5.41×10^{-2}	14.0	1004.938	1005.00	18.5	newly identified
Ge	V					5.41×10^{-2}	15.9	1005.304	1005.39	25.6	
G		2250(7		005161		1.01 10-2	16.6	1000 100	1007.15	26.2	unid.
Ge	V	235967	300	335161	30	1.21×10^{-2}	11.5	1008.122	1008.21	26.2	
0	III	38	$^{3}P_{2}^{0}$	4p	$^{5}D_{3}$	5.04×10 ⁻²	10.6	1008.384	1009 66		
							19.6		1008.00		unid.
Ca	*7	226072		225020		7.80×10^{-2}	20.4	1000 028	1009.81		uma.
Ua Vr	v	230072		27/270		7.80×10^{-3}		1009.928			
Mo	VI V	157851		256676		1.23×10^{-1}		1011.133			
IVIO	v	137031		230070		1.52×10	85	1011.009	1012 44		unid
							0.5		1012.44		unid
									1014.01		unid.
Ga	v	246093		344668		2.82×10^{-1}	11.0	1014.456	1014.55	27.8	
Ga	v	246133		344668		2.86×10^{-2}		1014.868			

Ion -	Lev	els	- f	W_{λ} /	Wavelen	ıgth/Å	v _{rad} /	Comment
	Lower	Upper	5	mÅ	Theoretical	Observed	km/s	
				13.0		1015.33		unid.
Ga v	231711	330174	9.59×10^{-2}		1015.610			
Kr vi	180339	278787	7.40×10^{-3}	12.0	1015.765	1015.83	19.2	
Сш	$3p^{-3}P_0^{0}$	$6d^{-3}D_{1}$	4.74×10^{-2}		1016.340			
Сш	$3p^{-3}P_1^{0}$	$6d^{-3}D_{1}^{-1}$	1.19×10^{-2}		1016.399			
Сш	$3p^{-3}P_{1}^{0}$	$6d^{-3}D_{2}^{1}$	3.56×10^{-2}		1016.399			
Сш	$3p^{-3}P_{2}^{0}$	$6d^{-3}D_{1}^{2}$	4.78×10^{-4}		1016.534			
Сш	$3p^{3}P_{2}^{5}$	$6d^{-3}D_{2}^{1}$	7.13×10^{-3}		1016.534			
Сш	$3p^{3}P_{2}^{5}$	$6d^{-3}D_{3}^{2}$	3.98×10^{-2}		1016.534			
Ge v	241935	340296	1.95×10^{-1}	27.9	1016.668	1016.77	30.1	
				10.0		1017.21		unid.
Xe vi	$5p^2 {}^2P_{1/2}$	$5p^3 \ ^4S^o_{3/2}$	1.88×10^{-3}		1017.265			
Zn v	231831	330069	3.36×10^{-2}		1017.935			newly identified
				32.7		1018.13		unid.
				20.3		1018.57		unid.
Ga v	246133	344200	3.07×10^{-1}		1019.711			
				9.1		1021.49		unid.
				19.0		1021.73		unid.
Не п	2	6	2.21×10^{-2}		1025.272			
Dг					1025.440			ISM multi-component
Н т	1	3			1025.722			ISM multi-component
	2	2		9.9		1027.13		unid.
As v	$4s^{-2}S_{1/2}$	$4p^{-2}P_{1/2}^{0}$	2.53×10^{-1}	36.1	1029.480	1029.54	17.5	
Zn v	231997	329085	4.38×10^{-2}		1029.992			
P iv	$3p^{-3}P_1^{0}$	$3p^2 {}^3P_1$	1.20×10^{-1}	21.8	1030.517	1030.59	21.2	
						1031.22		unid.
~	2 2	2 200	1 22 10-1		1001010	1031.42		unid.
O VI	$2s^{-2}S_{1/2}$	$2p^{-2}P_{3/2}^{0}$	1.33×10^{-1}		1031.912			
O VI			0.55.40.2		1031.926			ISM multi-component
Zn v	221631	318436	9.66×10 ⁻³		1033.009			blend with Gev, newly identified
Ge v	238765	335560	6.96×10 ⁻²		1033.107			blend with Zn v, newly identified
Ge v			6.96×10^{-2}		1033.428			blend with Ca III
Саш	277380.86	374143.84	1.03×10^{-5}	12.4	1033.453	1033.52	19.4	blend with Ge v
				17.1		1034.18		unid.
C	024010	220701	1.01. 10-2	16.2	1025 504	1034.60		unid.
Ge v	234219	330791	1.01×10^{-3}		1035.504			
Zn v	231831	328369	1.25×10^{-2}		1035.859			
Zn v	285885	382420	5.02×10^{-2}		1035.887			
N IV	$3d^{-3}D_{3}$	$4t^{-3}F_4^{0}$	8.56×10 ⁻¹		1036.119			
N IV	$3d^{-3}D_2$	$4f^{-3}F_3^{0}$	8.28×10 ⁻¹		1036.149			

Table	1.	Continued.	

Ion	Le	vels	- f	$W_{\lambda}/$	Wavelen	gth/Å	v _{rad} /	Comment
ion	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	
N IV	$3d^{-3}D_{1}$	$4f^{-3}F_{2}^{0}$	9.33×10 ⁻¹		1036.196			
N IV	$3d^{-3}D_{2}^{-1}$	$4f^{-3}F_{2}^{5}$	1.05×10^{-1}		1036.237			
N IV	$3d^{-3}D_{3}^{2}$	$4f^{-3}F_{3}^{5}$	7.53×10^{-2}		1036.239			
Сп	5	5			1036.337			ISM multi-component
Сп					1037.018			ISM multi-component
				21.0		1037.24		unid.
O vi	$2s^{-2}S_{1/2}$	$2p^{-2}P_{1/2}^{o}$	6.60×10^{-2}	35.3	1037.613	1037.72	30.9	
O vi	,	,			1037.617			ISM multi-component
Ge v	241935	338274	1.45×10^{-1}	42.3	1038.430	1038.49	17.3	
Mo vi	187331	283611	9.73×10^{-1}		1038.640			blend with Zn v
Ga v	214000	310267	4.38×10^{-2}		1038.778			blend with Mo vi, newly identified
						1038.95		unid.
Οι					1039.230			ISM multi-component
Ge vi	313025	409188	3.69×10^{-2}		1039.892			blend with S v
S v	3s3d ¹ D ₂	$3p3d$ $^{1}F_{3}^{0}$	3.41×10^{-1}	21.0	1039.916	1040.02	30.0	blend with Ge vi
Ош	$2p^{3} P_{1}^{0}$	$3p^{-1}D_2$	2.42×10^{-2}		1040.320			
				35.4		1041.03		unid.
_			1	16.2		1041.32		unid.
Zn v	286575	382420	2.54×10^{-1}	9.8	1043.353	1043.44	25.0	
G				9.4	1044 400	1043.80	20.1	unid.
Sn iv	100220	07(011	5.24 10- ²	19.2	1044.490	1044.56	20.1	
Kr vi	180339	276011	5.24×10^{-2}		1045.238			
O IV	$3p P_{1/2}^{o}$	$4s \ ^{2}S_{1/2}$	9.21×10 ⁻²		1045.364			
Ge v	234219	329848	3.93×10^{-1}	62.5	1045.713	1045.81	27.8	
O IV	$3p \ ^{3}P_{3/2}^{0}$	$4s^{-2}S_{1/2}$	9.19×10^{-2}	29.3	1046.313	1046.39	22.1	
						1047.02		unid.
Zn v	222940	318436	2.65×10^{-2}		1047.164			uncertain, blend with Movi, newly identi- fied
Mo vi	187331	282826	1.07×10^{-1}		1047.182			blend with Zn v
Ga v	242026	337491	1.31×10^{-1}		1047.504			blend with O IV, newly identified
O IV	$3s^{-2}S_{1/2}$	$2s2p(^{3}P^{0})3s^{-2}P^{0}_{3/2}$	2.89×10^{-2}		1047.590			blend with Ga v
Ge v	464652	560097	1.18×10^{-1}		1047.730			newly identified
Ar i					1048.220			ISM multi-component
Ge v	464077	559463	2.43×10^{-1}		1048.371			blend with Zn v, newly identified
Zn v	285523	380902	1.01×10^{-1}		1048.448			blend with Gev, newly identified
						1048.59		unid.
				16.9		1048.97		unid.
Ge v	241935	337168	1.55×10^{-1}	34.5	1050.057	1050.14	23.7	
Ga v	210052	305249	1.95×10^{-1}		1050.453			blend with O IV
O IV	$3s^{-2}S_{1/2}$	$2s2p(^{3}P^{o})3s^{-2}P^{o}_{1/2}$	1.44×10^{-2}		1050.505			blend with Ga v

Ion		Le	vels		f	$W_{\lambda}/$	Wavelength / Å		v _{rad} /	Comment
Ion	Lower		Upper	r	J	mÅ	Theoretical	Observed	km/s	
						14.4		1051.18		unid.
As v					2	19.2	1051.600	1051.69	25.7	
Kr vi	183817		278787		4.76×10^{-3}	12.8	1052.964	1053.04	21.6	
_					• • • • • 1			1053.24		unid.
Zr vi	427119		522036		2.20×10^{-1}		1053.548			
Ge v	235967		330791		8.93×10^{-2}	2 0 4	1054.590	105505	a a 4	
Zn v	221631		316339		5.31×10 ⁻²	30.4	1055.878	1055.95	20.4	
	212121		206629		165×10-1	10.7	1050.980	1057.05	19.9	bland with 7n y
Ga v Zn u	212121		300028		1.03×10^{-3}		1058.125			blend with Cox nowly identified
ZII V	198902		293403		0.01×10	70	1038.185	1050 30		unid
						28.8		1060 70		unid
C IV	4p	$^{2}\mathbf{P}_{a}^{o}$	10d	2 D	1.30×10^{-3}	20.0	1060.740	1000.70		unit.
C IV	4n	$^{2}P_{0}^{3/2}$	10d	${}^{2}D_{}$	1.17×10^{-2}		1060 740			
Kr vi	183817	1 3/2	278062	25/2	6.58×10^{-2}	25.6	1061.064	1061 16	27.1	
	$2s2p(^{3}P^{0})3d$	$^{4}\mathrm{D}^{\mathrm{o}}$	$2s2p(^{3}P^{0})4f$	${}^{4}\mathrm{F}_{4}$	7.40×10^{-1}	23.0	1061.780	1001.10	27.1	
Znv	221631	- 1/2	315801	- 3/2	1.40×10^{-2}		1061 914			newly identified
	$2s2n(^{3}P^{0})3d$	$^{4}D^{o}$	$2s2p(^{3}P^{0})4f$	4 E	6.02×10^{-1}		1062.133			newly identified
O IV	$2s^{2}p(^{3}P^{0})3d$	${}^{4}D^{0}$	$2s2p(^{3}P^{0})4f$	${}^{4}\mathbf{F}_{$	6.60×10^{-1}		1062.271			
Gav	236072	27/2	330174	- 9/2	2.58×10^{-1}	13.9	1062.677	1062 75	20.6	
Ge v	464853		558877		8.57×10^{-1}	15.7	1063 554	1002.75	20.0	
Gav	231711		325713		3.82×10^{-2}		1063.807			newly identified
Zn v	222042		316029		8.15×10^{-2}		1063.979			
Se vi						25.3	1064.620	1064.71	25.3	
Zr vi	421258		515171		4.55×10^{-1}		1064.818			
						24.7		1065.43		unid.
					2	41.8		1065.69		unid.
Si iv	3d	$^{2}D_{5/2}$	4f	${}^{2}F_{5/2}^{o}$	4.34×10^{-2}	64.5	1066.636	1066.74	29.2	
O IV	3d	$^{2}D_{3/2}$	4f	${}^{2}\mathrm{F}^{\mathrm{o}}_{5/2}$	7.97×10^{-1}		1067.768			
O IV	3d	$^{2}D_{5/2}$	4f	${}^{2}\mathrm{F}^{\mathrm{o}}_{7/2}$	7.59×10^{-1}		1067.832			
O IV	3d	$^{2}D_{5/2}$	4f	${}^{2}\mathrm{F}^{\mathrm{o}}_{5/2}$	3.80×10^{-2}		1067.958			
Zn v	221631	- 1	315239	-,-	5.19×10^{-2}		1068.284			
Ge v	234219		327891		6.53×10^{-2}	25.4	1068.430	1068.53	28.1	
Zr v	378753		472338		1.68×10^{-1}		1068.551			blend with Ga v
Ga v	232968		326549		1.61×10^{-1}		1068.593			blend with Zr v
Ga v	242026		335605		1.65×10^{-2}		1068.616			
Ge v	241935		335560		8.73×10^{-2}	27.8	1069.130	1069.23	28.0	
Ge v	461829		555337		5.02×10^{-1}		1069.420			blend with Ga v
Ga v	235609		329103		2.87×10^{-1}		1069.587			blend with Gev, newly identified

Table 1.	Continued.
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Io	n		Lev	els		f	W_{λ} /	Wavelen	ngth/Å	v _{rad} /	Comment
101		Lower		Upper		J	mÅ	Theoretical	Observed	km/s	comment
Zn	v	235599		329085		7.85×10^{-2}		1069.674			blend with Ga v
Ge	v	461815		555299		6.07×10^{-1}		1069.703			
Zn	v	231997		325476		3.03×10^{-2}		1069.764			
Ge	v	461829		555299		1.10×10^{-1}		1069.859			
							6.2		1070.81		unid.
							19.0		1071.04		unid.
Ga	V	235752		329112		2.75×10^{-1}		1071.123			
Ga	V	235752		329108		2.34×10^{-1}		1071.168			
Te	VI						65.0	1071.400	1071.51	30.8	blend with Zn v
Zn	V	221631		314958		3.27×10^{-2}		1071.501			blend with Te vi
Ge	V	461418		554658		9.97×10^{-1}	17.1	1072.495	1072.59	26.6	
Ge	V	241935		335161		2.52×10^{-1}	41.4	1072.661	1072.76	27.7	
Zn	V	222042		315239		2.14×10^{-1}	24.8	1072.992	1073.04		
Ga	V	212121		305249		1.22×10^{-1}		1073.791			
Zn	V	222940		316029		6.35×10^{-2}		1074.241			
Ge	V	461643		554690		9.68×10^{-1}		1074.719	107402		.,
-		240446		222455		2 01 10-1		1075 171	1074.93		unid.
Zn	V	240446		333455		3.01×10^{-1}		10/5.171			
Zn	V	222042		314958		1.95×10 ²	21.2	10/6.239	1076 44		
							21.5		1076.80		unid.
Zn		222040		315801		1.56×10^{-1}	20.9	1076 878	1070.80		uma.
	V	222940 5n	1 D 0	515801 $5n^2$		1.30×10 8 10 × 10 ⁻¹	26.1	1070.878	1077 22	27.8	
Ga	VII V	231711	1 1	324407	D	2.10×10^{-1}	20.1	1077.120	1077.22	27.0	newly identified
	v	201711 3n	2 p 0	324407 $s^{2}n(^{3}P^{0})3n$	2 D	5.18×10^{-2}		1078.795			newry identified
G	1 V 37	214000	1 3/2	206628	$D_{5/2}$	1.56×10^{-1}		1070 587			
Ga	V	214000		307864		1.30×10^{-1}		1079.587			
Ga	V	213237		32/31/		2.23×10^{-2}		1079.339			
Ua Xe	v VI	201711 5n	2 p 0	52+51+ $5n^2$	4 p	1.20×10^{-3}	20.0	1080.077	1080 16	23.0	
7n	VI V	232046	1 1/2	325476	1 1	1.00×10^{-2}	20.0	1080.077	1000.10	25.0	newly identified
	v IV	232340	$^{2}D^{0}$	525470 Af	$^{2}\mathbf{F}$	7.33×10^{-1}		1080.755			newry identified
0	IV IV	24	$2D_{3/2}^{2}$	41 4f	¹ 5/2 2E	7.55×10^{-1}		1080.907			
0	IV	50	$^{-}D_{5/2}^{*}$	41	⁻ _{7/2}	0.98×10^{-2}		1080.909			
U N	IV	Зр	$-P_{1/2}^{\circ}$	4p	$-D_{3/2}$	5.//×10 ⁻²		1081.024			
N	П	~		-		4 47. 10-?		1083.994			15.vi multi-component
не	II	2		5		4.4/×10 ²		1084.942	1096 60		unid
Ca		220765		220701		2.18×10^{-1}		1096 652	1090.00		umu.
Ge	V	230/03		227001		3.10×10^{-1}	27.0	1080.033	1007.05	26.2	
75	V	23390/		321091		3.03×10^{-1}	27.0	1087.833	1087.93	20.2	newly identified
ZII Sn	V	233730		527381		2.0/XIU		1000.709	1080 42	10.2	newry Identified
511	v							1007.330	1002.42	17.4	

Ion		Le	vels		- f	W_{λ} /	Wavelen	ıgth/Å	$v_{\rm rad}$ /	Comment
1011	Lower		Upper	•	J	mÅ	Theoretical	Observed	km/s	
Ge v	235967		327753		1.42×10^{-1}		1089.491			
Zn v	260880		352553		2.98×10^{-1}		1090.831			
Xe vi	5p	$^{2}P_{3/2}^{0}$	5p ²	${}^{4}P_{5}$	2.47×10^{-3}		1091.632			blend with Ga v
Ga v	221488	572	313088	5	2.70×10^{-1}		1091.703			blend with Xe vi
Ge v	238765		330333		1.01×10^{-1}		1092.089			
O IV	3d	$^{2}D_{5/2}$	$2s2p(^{3}P^{o})3d$	${}^{2}F_{7/2}^{0}$	3.78×10^{-2}		1093.774			
		572	• • •	112		22.6		1094.00		unid.
Zn v	236969		328369		2.86×10^{-1}		1094.088			
						33.6		1094.23		unid.
Ga v	218301		309679		1.73×10^{-1}		1094.355			
Ni vi	347278.5		438639.4		2.27×10^{-1}		1094.560			
Se v						36.4	1094.680	1094.79	30.1	
Ga v	232968		324314		6.28×10^{-2}		1094.739			
Ga v	218301		309616		1.81×10^{-1}		1095.110			newly identified
Ge v	464077		555337		1.53×10^{-2}		1095.769			-
Zn v	285885		377144		4.69×10^{-2}		1095.774			blend with Ge v
Zn v	235730		326987		2.94×10^{-2}		1095.797			
Zn v	239843		331087		1.30×10^{-1}		1095.961			
								1096.28		unid.
O IV	3d	$^{2}D_{3/2}$	$2s2p(^{3}P^{o})3d$	${}^{2}\mathrm{F}_{5/2}^{0}$	3.95×10^{-2}		1096.359			
Ge v	464706	572	555852	572	7.69×10^{-1}		1097.134			
Zn v	235599		326664		3.51×10^{-2}		1098.108			newly identified
						15.8		1099.02		unid.
Zr vi	427119		518062		8.55×10^{-1}		1099.591			
						11.6		1099.85		unid.
Ga v	243053		333929		4.24×10^{-1}		1100.401			newly identified
Ge v	469686		560547		9.01×10^{-1}	20.2	1100.585	1100.66	20.4	
Mo v	146977		237760		2.05×10^{-1}		1101.530			
Ga v	246133		336909		2.07×10^{-1}		1101.613			
Mo v	151195		241965		2.02×10^{-2}		1101.690			
Xe vi	$5p^2$	${}^{2}P_{1/2}$	5p ³	$^{2}D_{2/2}^{0}$	1.88×10^{-3}		1101.940			
	1	1/2	1	5/2				1102.26		unid.
Ga v	242026		332707		2.39×10^{-1}		1102.767			
Ga v	210052		300730		1.12×10^{-1}		1102.803			
Ga v	212121		302779		1.34×10^{-1}		1103.047			
						7.5		1103.37		unid.
						6.4		1103.56		unid.
Zn v	236969		327581		2.67×10^{-2}		1103.598			newly identified
Zn v	291107		381670		2.70×10^{-1}	34.7	1104.199	1104.29	24.2	newly identified
Ga v	221488		311991		1.35×10^{-1}		1104.936			

Ion -	Leve	els	- f	W_{λ} /	Wavelen	ngth/Å	v _{rad} /	Comment
1011	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	connient
Ga v	236072	326549	3.18×10 ⁻²		1105.253			
Ni v	229413	319860.4	3.02×10^{-4}		1105.615			blend with Ga v
Ga v	242026	332473	3.45×10^{-1}		1105.620			blend with Ni v
C IV					1106.330			forbidden C IV component
C iv					1106.770			forbidden C IV component
C iv	$3p^{-2}P_{1/2}^{0}$	$4d^{-2}D_{3/2}$	5.41×10^{-1}		1107.591			
C IV	$3p^{-2}P_{3/2}^{o'}$	$4d^{-2}D_{5/2}$	4.86×10^{-1}		1107.930			
С і	$3p^{-2}P_{3/2}^{o^{-2}}$	4d ${}^{2}D_{3/2}^{3/2}$	5.41×10^{-2}		1107.979			
Zn v	221631	311796	1.53×10^{-1}		1109.078			
Zn v	230614	320772	5.16×10^{-2}		1109.166			
Zn v	232946	322969	2.06×10^{-2}		1110.821			weak
Zn v	256235	346201	1.14×10^{-1}		1111.530			
Zn v	255763	345723	2.37×10^{-1}		1111.603			
Zn v	255763	345624	1.46×10^{-1}		1112.829			
			. 1			1114.19		unid.
Zn v	221631	311359	2.16×10^{-1}		1114.482			
Zn v	255482	345146	1.29×10^{-1}		1115.266			
Ga v	236072	325713	1.91×10^{-1}		1115.561			
Zn v	237032	326664	2.83×10^{-1}		1115.668			
Zn v Zn v	227195	316827	1.34×10^{-1}		1115.680			newly identified
Zn v Zn v	236235	345791	3.51×10^{-1}		1116.030			bland with Care
Zn v Ga v	198902	288300	5.70×10^{-1}		1110.842			blend with Zn y
Ue v	234219	525749	1.97×10	113	1110.949	1117 37		unid
Zn v	256235	345723	4.53×10^{-2}	17.3	1117.466	1117.55	22.5	newly identified
S VI	$4f^2 F^0$	$5g^2G_{\pi/2}$	1.34	1,10	1117.756	111,000		
S VI	$4f^{2}F_{-1}^{0}$	$5g^{-2}G_{-12}$	3.78×10^{-2}		1117.756			
S VI	$4f^{2}F^{0}$	$5g^{-2}G$	1 30		1117 756			
D vi	$3s^{2}S$	$35 \ C_{9/2}$ $3n \ ^2P^{0}$	4.50×10^{-1}	95.6	1117.976	1118.06	22.5	
	55 S _{1/2}	3p 1 _{3/2}	4.50×10	15.0	1117.970	1110.00	22.3	ISM multi component
Zr vi	440555	529945	9.37×10^{-1}		1117.977			15Wi multi-component
Zr v	382985	472338	1.42×10^{-1}		1119 158			uncertain
	502705	172330	1.12/(10		1117.120	1119.31		unid.
						1119.68		unid.
Zn v	255482	344771	2.05×10^{-1}		1119.950			
Zn v	232946	322224	8.00×10^{-2}		1120.101			blend with Zn v
I VI					1120.300			blend with I vi
Zn v	226334	315594	2.23×10^{-1}		1120.325			blend with I vi
Zn v	239843	329085	4.82×10^{-2}		1120.545			newly identified
				24.2		1120.95		unid.

Ion —	Leve	Levels $f = W_{\lambda}/$ Wavelength/Å		ıgth/Å	$v_{\rm rad}$ /	Comment		
1011	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	Comment
Zn v	230435	319632	1.26×10^{-1}		1121.109			
Zn v	235903	325068	8.18×10^{-2}		1121.524			weak
Ge v			9.44×10^{-2}		1122.001			blend with S v, very weak
S v	$3s3d^{-3}D_3$	$3p3d$ $^{3}F_{4}^{0}$	1.73×10^{-1}		1122.031			blend with Ge v
	5	- <u>-</u>				1122.24		unid.
Si iv	$3p^{-2}P_{1/2}^{0}$	$3d^{-2}D_{3/2}$	8.07×10^{-1}	43.7	1122.485	1122.59	28.0	
Zn v	240446	329533	1.62×10^{-1}		1122.502			blend with Si IV
				13.2		1122.79		unid.
Zn v	230435	319472	3.03×10^{-2}		1123.127			blend with Gav
Ga v	215237	304272	2.81×10^{-1}	16.8	1123.154	1123.26	28.3	
						1123.70		unid.
Ge v	238765	327753	3.83×10^{-2}		1123.746			
Zn v	221631	310519	1.36×10^{-1}		1125.019			
Zn v	228335	317220	1.72×10^{-1}		1125.048			
Zn v	231997	320871	6.18×10^{-3}		1125.182			newly identified
Ge v	241935	330791	1.29×10^{-2}		1125.424			
Сш	$3d^{-3}D_{1}$	$6f^{3}F_{2}^{o}$	8.13×10^{-2}		1125.629			
Сш	$3d^{-3}D_2$	$6f^{-3}F_3^{\overline{0}}$	7.22×10^{-2}		1125.639			
Сш	$3d^{-3}D_2$	$6f^{3}F_{2}^{o}$	9.19×10^{-3}		1125.643			
Сш	$3d^{-3}D_{3}^{-1}$	$6f^{3}F_{4}^{\overline{0}}$	7.46×10^{-2}		1125.670			
Mo v	240878	329714	5.57×10^{-1}		1125.672			
Сш	$3d^{-3}D_{3}$	$6f^{-3}F_3^0$	6.57×10^{-3}		1125.675			
Сш	$3d^{-3}D_{3}^{-1}$	$6f^{-3}F_{2}^{0}$	1.49×10^{-4}		1125.679			
Mo v	148949	237760	5.53×10^{-1}		1125.988			
Ga v	214000	302779	2.05×10^{-1}	27.0	1126.393	1126.50	28.5	
Ga v	235609	324314	3.96×10^{-2}		1127.332			
Ga v	215237	303911	1.41×10^{-1}		1127.726			
Ga v	246093	334765	3.63×10^{-1}	10.8	1127.752	1127.85	26.1	
Ρv	$3s^{-2}S_{1/2}$	$3p^{-2}P_{1/2}^{o}$	2.21×10^{-1}		1128.006			blend with Gav
Ρv					1128.008			ISM multi-component
Ga v	218301	306947	3.07×10^{-1}		1128.082			blend with P v
Si iv	$3p^{-2}P^{o}_{3/2}$	$3d^{-2}D_{5/2}$	7.25×10^{-1}	53.4	1128.340	1128.45	29.2	
Ga v	212121	300730	1.94×10^{-1}	9.6	1128.554	1128.65	25.5	
S v	$3d^{-3}D_{2}$	$3d^{-3}F_3^0$	1.74×10^{-1}	12.1	1128.699	1128.80	26.8	
S v	$3d^{-3}D_{3}^{-1}$	$3d^{-3}F_3^{\circ}$	1.55×10^{-2}		1128.812			
Zn v	255482	344070	5.38×10^{-2}		1128.813			newly identified
				8.8		1129.07		unid.
			-			1129.45		unid.
Zn v	226334	314838	4.16×10^{-2}		1129.898			blend with Ga v
Ga v	214000	302499	1.75×10^{-1}		1129.956			blend with Zn v

Ior	n		Leve	ls		f	$W_{\lambda}/$	Wavelen	gth/Å	v _{rad} /	Comment
101		Lower		Upper		J	mÅ	Theoretical	Observed	km/s	Comment
Zn	v	228335		316827		9.66×10 ⁻²		1130.051			
Zn	v	222042		310519		1.55×10^{-1}	7.1	1130.242	1130.34	26.0	
Ni	VI	330141		418553.6		3.12×10^{-1}		1131.061			
Zn	v	227195		315594		6.70×10^{-2}		1131.242			
Ga	v	231711		320093		2.30×10^{-1}		1131.452			newly identified
Zn	v	222940		311296		1.33×10^{-1}		1131.788			
Zn	v	231122		319472		1.29×10^{-1}		1131.863			
Zn	v	208715		297033		1.40×10^{-1}		1132.271			
Zn	v	235599		323886		3.93×10^{-1}		1132.659			
Sn	v							1132.790	1132.92	34.4	
Zn	v	200644		288903		3.36×10^{-1}		1133.031			
Zn	v	228335		316586		2.11×10^{-1}		1133.128			
Zn	v	241829		330069		3.40×10^{-1}		1133.278			
Zn	v	222042		310265		1.66×10^{-1}		1133.498			
S	v	3s3d	${}^{3}D_{1}$	3p3d	${}^{3}F_{2}^{o}$	1.84×10^{-1}		1133.901			
S	v	3s3d	${}^{3}D_{2}$	3p3d	${}^{3}F_{2}^{\overline{0}}$	2.19×10^{-2}		1133.973			
Ν	II		-		-			1134.165			ISM multi-component
Ν	Π							1134.415			ISM multi-component
Ν	II					2		1134.980			ISM multi-component
Zn	V	208715		296796		1.50×10^{-2}		1135.324			
Zn	V	200644		288704		4.32×10^{-2}		1135.588			
Ga	V	212121		300144		1.98×10^{-1}		1136.067			
Zn	V	228335	2	316339	2	7.85×10^{-2}		1136.311			blend with Xe vi, newly identified
Xe	VI	5d	$^{2}D_{5/2}$	6р	${}^{2}P_{3/2}^{o}$	1.91×10^{-1}		1136.410			blend with Zn v
Zn	V	198962		286943		4.06×10^{-2}		1136.603			
Zn	V	201973		289925		4.03×10^{-2}		1136.986			
							18.9		1137.33		unid.
Zn	V	235730		323632		5.74×10^{-2}		1137.625			
Mo	V	151195		239069		2.98×10^{-1}		1137.995			
Mo	V	151213		239069		2.30×10^{-1}		1138.229			blend with Zn v
Zn	V	201973		289827		3.67×10^{-1}	36.1	1138.248	1138.35	26.9	blend with Mo v
Zn	V	256235		344070		1.72×10^{-1}		1138.497			
Zn	V	210973		298801		1.93×10^{-2}		1138.586			newly identified
Zn	V	230614		318436		2.59×10^{-2}		1138.671			newly identified
Zn	V	202929		290731		4.08×10^{-3}		1138.933			newly identified
Zn	V	231831		319632		3.28×10^{-3}		1138.937			newly identified
Ge	V	235967		323749		9.14×10^{-3}		1139.187			blend with Zn v
Zn	V	202929		290704		6.62×10^{-2}		1139.278			blend with Ge v
Ni	VI	347278.5		435011.5		2.59×10^{-1}		1139.822			blend with C III
С	III	2s3p	P_1^o	2s5d	D_2	8.86×10^{-2}		1139.899			

Ion	Le	vels	f	$W_{\lambda}/$	Wavelen	ıgth/Å	v _{rad} /	Comment
1011 -	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	Comment
Zn v	222940	310659	8.37×10^{-2}		1139.997			blend with C III, newly identified
Zn v	286575	374241	3.85×10^{-1}		1140.703			•
Zn v	227195	314838	9.68×10^{-2}		1141.003			
Zn v	231997	319632	9.35×10^{-2}		1141.095			
Zn v	222042	309658	7.60×10^{-2}		1141.344			
						1142.10		unid.
Zn v	228335	315840	3.27×10^{-2}		1142.792			
Zn v	202929	290424	3.99×10^{-1}	18.6	1142.925	1143.03	27.5	
Zn v	237032	324526	3.40×10^{-1}		1142.938			
Zn v	203548	291022	8.87×10^{-2}		1143.196			
Fe п					1143.226			ISM multi-component
Ba vii	61083	148547	2.88×10^{-3}		1143.317			newly identified
Zn v	255763	343221	1.16×10^{-1}		1143.403			-
						1143.58		unid.
Zn v	210973	298375	1.27×10^{-1}		1144.136			
Ni vi	298130.5	385520.9	3.52×10^{-1}		1144.290			
Fe 1					1144.938			ISM multi-component
Zn v	222940	310265	7.64×10^{-2}		1145.151			
				9.4		1145.55		unid.
Zn v	241829	329085	6.47×10^{-2}		1146.057			
Zn v	234582	321830	3.55×10^{-1}		1146.149			
Zn v	203548	290731	4.50×10^{-1}	25.3	1147.020	1147.11	23.5	
Zn v	203548	290704	1.63×10^{-1}		1147.371			
Zn v	255482	342616	2.00×10^{-1}		1147.648			newly identified
Mo v	153040	240110	4.03×10^{-1}		1148.502			
Zn v	232946	319984	3.33×10^{-1}	10.7	1148.922	1149.01	23.0	
Zn v	227195	314197	1.89×10^{-1}		1149.398			
Zn v	202929	289925	2.05×10^{-1}		1149.486			
Zn v	256235	343221	1.34×10^{-1}		1149.608			
Zn v	226334	313300	3.62×10^{-1}		1149.873			
Ni vi	330580.5	417538.4	1.17×10^{-1}		1149.982			
Ni vi	376343.7	463301.5	2.29×10^{-1}		1149.983			
Ga v	218301	305249	2.22×10^{-2}		1150.113			
Ga v	210052	296992	2.24×10^{-1}		1150.219			
				25.1		1150.64		unid.
Zn v	212471	299372	1.66×10^{-1}	11.4	1150.743	1150.84	25.3	
Ош	$2p^{3} {}^{3}S_{1}^{0}$	$2p^{4} {}^{3}P_{1}$	8.43×10^{-2}		1150.884	1151.03	38.0	
Se v	- 1	- 1			1151.000	1151.13	33.9	
Ni v	212095.8	298972.3	2.34×10^{-2}		1151.059			
Zn v	255763	342616	1.16×10^{-1}		1151.368			

Table 1. Continued.

Ion	Levels		f	W_{λ} /	Waveler	ngth/Å	v _{rad} /	Comment
1011 -	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	Comment
Zn v	230614	317466	4.50×10^{-2}		1151.393			newly identified
Zr vi	427649	514487	2.33×10^{-1}		1151.571			
Zn v	201973	288704	2.26×10^{-1}	19.6	1152.985	1153.08	24.7	
Zn v	222940	309658	4.82×10^{-2}		1153.160			
				18.4		1153.56		unid.
Ош	$2p^{3} {}^{3}S_{1}^{0}$	$2p^{4} {}^{3}P_{2}$	1.41×10^{-1}	37.2	1153.775	1153.90	32.5	
Zn v	208715	295293	7.17×10^{-2}	3.6	1155.027	1155.14	29.3	
Zn v	232946	319472	1.27×10^{-1}		1155.725			
Zn v	285885	372360	3.17×10^{-1}		1156.394			newly identified
Ga v	246133	332600	3.44×10^{-1}	12.4	1156.511	1156.62	28.3	
Zn v	231997	318436	2.76×10^{-2}		1156.885			
Zn v	203548	289925	2.90×10^{-2}		1157.725			newly identified
Ni vi	337993.9	424363.7	1.04×10^{-1}		1157.812			
			2	15.7		1158.00		unid.
Zn v	239843	326189	7.13×10^{-2}		1158.122			
Zn v	235903	322224	1.83×10^{-1}		1158.475			
Zn v	200644	286943	2.38×10^{-1}	24.6	1158.759	1158.86	26.1	
-	00(00)	212524	1.0.4 10-2	27.3	1160.001	1159.88		unid.
Zn v	226334	312534	1.04×10^{-2}		1160.091			weak
Zn v	234582	320772	2.88×10 ⁻¹	276	1160.221	1160.96	21.0	hland with 7n w
Sn v Zn v	255492	241607	7.26×10^{-2}	37.0	1160.740	1100.80	31.0	blend with Zn v
Zn v	233482	341027	7.20×10 -	40.1	1100.827	1161.00		unid
Zn v	210073	207033	5.56×10^{-2}	40.1	1161 971	1101.99		uma.
Zn v	291107	377144	3.72×10^{-1}		1162 281			
Zn v	230614	316643	9.18×10^{-2}		1162.201			
Gev	241935	327891	1.29×10^{-2}		1163 389			
Znv	230435	316339	7.96×10^{-2}		1164.082			
Znv	212471	298375	6.62×10^{-2}		1164.100			newly identified
O IV	$3d^2F_{e,a}^{o}$	$4f^2G_{r}$	8.50×10^{-1}	16.7	1164.321	1164.41	22.9	· · · · · · · · · · · · · · · · · · ·
0 IV	$3d^{-2}F_{-}^{0}$	$4f^{2}G_{c}$	8.26×10^{-1}	19.9	1164.546	1164.65	26.8	
Znv	255763	341627	5.07×10^{-2}		1164 632			
Znv	228335	314197	1.72×10^{-2}		1164 656			newly identified
Znv	210973	296796	4.52×10^{-2}		1165.186			blend with Ge v
Ge v	241935	327753	1.48×10^{-2}		1165.259			blend with Zn v
		021100		27.0		1165.40		unid.
Zn v	286575	372360	4.41×10^{-2}		1165.706			
Zn v	210973	296757	5.56×10^{-2}		1165.716			
Zn v	234846	320618	3.60×10^{-1}		1165.880			
C IV	$3d^{-2}D_{3/2}$	$4f^{-2}F_{5/2}^{0}$	1.02		1168.849			

Ion -	Leve	els	- f	W_{λ} /	Wavelen	gth/Å	v _{rad} /	Comment
Ion	Lower	Upper	J	mÅ	Theoretical	Observed	km/s	
C IV	$3d^{-2}D_{5/2}$	$4f^{2}F_{7/2}^{0}$	4.88×10^{-2}		1168.993			
C IV	$3d^{-2}D_{5/2}^{3/2}$	$4f^{2}F_{5/2}^{0}$	9.97×10^{-1}		1168.993			
Zn v	226334	311796	1.02×10^{-1}		1170.105			
C iv					1170.130			forbidden C IV component
C iv					1170.330			forbidden C IV component
Zn v	231831	317220	7.01×10^{-2}		1171.106			
Zn v	239843	325068	3.11×10^{-1}		1173.366			
Zn v	198962	284116	3.01×10^{-1}	24.1	1174.346	1174.43	21.4	
	2	2 2		12.3		1174.75		unid.
Сш	$2s2p ^{3}P_{1}^{0}$	$2p^2$ $^{3}P_2$	1.17×10^{-1}	108.5	1174.933	1175.04	27.3	
Zn v	235599	320709	1.24×10^{-1}		1174.945			blend with C III
Сш	$2s2p ^{3}P_{0}^{0}$	$2p^2 {}^{3}P_1$	2.72×10^{-1}	112.4	1175.263	1175.38	29.9	
Сш	$2s2p ^{3}P_{1}^{0}$	$2p^2 {}^{3}P_1$	7.03×10^{-2}		1175.590			
Сш	$2s2p ^{3}P_{2}^{o}$	$2p^2 \ ^3P_2$	2.11×10^{-1}		1175.711			
Сш	$2s2p^{-3}P_1^{o}$	$2p^2 {}^{3}P_0$	9.07×10^{-2}	98.9	1175.987	1176.10	28.8	
Zn v	226334	311359	8.10×10^{-2}		1176.122			blend with C III
Сш	$2s2p^{-3}P_2^{o}$	$2p^{2} {}^{3}P_{1}$	7.02×10^{-2}		1176.370			
Zn v	231831	316827	7.34×10^{-2}		1176.527			blend with C III, newly identified
Ge v	238765	323749	2.06×10^{-3}		1176.690			blend with C III
Zn v	198962	283933	1.86×10^{-1}		1176.868			newly identified
Zn v	201973	286936	1.46×10^{-1}		1176.980			newly identified
Zn v	226334	311295	7.56×10^{-2}		1177.016			newly identified
Zn v	202929	287888	1.00×10^{-1}		1177.036			newly identified
Zn v	200644	285603	1.68×10^{-1}		1177.044			newly identified
Zn v	231831	316786	3.06×10^{-1}		1177.087			newly identified
Zn v	260880	345723	8.22×10^{-2}		1178.639			newly identified
Zn v	241829	326664	1.12×10^{-1}		1178.759			
Ni v	232655.6	317477.9	9.35×10^{-3}		1178.935			
Zn v	236969	321776	1.93×10^{-1}		1179.145			
Zn v	230435	315239	1.10×10^{-1}		1179.179			
Xe vi	$5p^{-2}P^{o}_{3/2}$	$5p^{2} {}^{4}P_{3}$	4.65×10^{-4}	19.9	1179.537	1179.63	23.6	
Zn v	208715	293463	2.79×10^{-1}	17.3	1179.969	1180.10	33.3	
Zn v	260880	345624	4.73×10^{-2}		1180.018			
Xe vi	5d ${}^{2}D_{3/2}$	$6p^{-2}P_{1/2}^{0}$	1.54×10^{-1}		1181.455			
Zn v	227195	311796	2.22×10^{-2}		1182.019			
Mo vi	283610.94	368203.16	7.44×10^{-1}	16.1	1182.142	1182.24	24.9	
Zn v	212471	297033	7.26×10^{-2}	23.5	1182.567	1182.67	26.1	
Zn v	235730	320257	1.94×10^{-2}		1183.041			
Zn v	230435	314958	3.17×10^{-2}		1183.100			
Zn v	232946	317466	2.31×10^{-2}		1183.158			

Table 1. Continued.

Ion –	L	evels	$f W_{\lambda}$	/ Wavelength/Å	v _{rad} / Comment
1011	Lower	Upper	^y mÅ	Theoretical Observed	km/s
Zn v	231831	316339	2.99×10^{-2}	1183.314	
Zn v	230614	314958	8.97×10^{-2}	1185.619	
Zn v	231997	316339	5.02×10^{-2}	1185.645	
Zn v	203548	287888	1.30×10^{-1}	1185.676	
Zn v	212471	296796	3.24×10^{-1}	1185.898	
Zn v	210973	295293	1.84×10^{-1}	1185.948	
Mo v	159857	244170	7.85×10^{-1}	1186.050	blend with Zn v
Zn v	235730	320043	2.18×10^{-1}	1186.057	blend with Mo v
Mo v	151195	235496	4.73×10^{-1}	1186.227	
Mo v	245600	329898	4.77×10^{-1}	1186.277	
Zn v	212471	296757	2.05×10^{-1}	1186.447	
Mo v	148949	233190	3.57×10^{-1}	1187.061	
Zn v	228335	312534	2.72×10^{-1}	1187.664	
Zn v	210973	295168	3.51×10^{-1}	1187.706	