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# AN ULTRAVIOLET MULTIPLET TABLE

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Finding List for Spectra of the Elements Molybdenum  
to Lanthanum (Z=42 to 57); Hafnium to Radium  
(Z=72 to 88)

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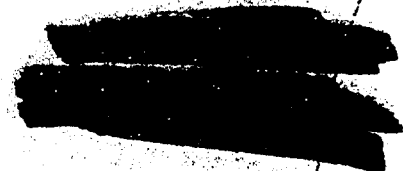
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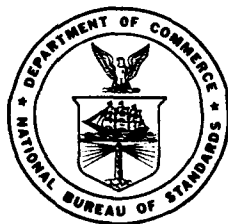
UNITED STATES DEPARTMENT OF COMMERCE, Luther H. Hodges, Secretary  
NATIONAL BUREAU OF STANDARDS, A. V. Astin, Director

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# AN ULTRAVIOLET MULTIPLET TABLE

Finding List for Spectra of the Elements Molybdenum  
to Lanthanum ( $Z = 42$  to  $57$ ); Hafnium to Radium  
( $Z = 72$  to  $88$ )

By CHARLOTTE E. MOORE



DTIC QUALITY INSPECTED 3

Circular of the National Bureau of Standards 488, Section 5

Issued April 6, 1962

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For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.  
Price 30 Cents

### Foreword

The present Section of NBS Circular 488, *An Ultraviolet Multiplet Table*, is the fifth and last one in this Circular. It is a finding list made up of all lines in Section 3 of the Multiplet Table, arranged in order of increasing wavelength and covering the elements molybdenum to lanthanum ( $Z = 42$  to 57), and hafnium to radium ( $Z = 72$  to 88).

The rare-earth elements have been omitted from the Multiplet Table and finding lists. When the analyses of these spectra are further advanced it is hoped that separate tables on rare-earth spectra can be published.

It is a pleasure to acknowledge the cordial collaboration of all who have contributed to the preparation of these extensive tables.

A. V. ASTIN, *Director*.

WASHINGTON, D. C., September 21, 1961.

II

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## Contents

### ELEMENTS AND SPECTRA REPRESENTED IN THE FINDING LIST

Element	Z	Spectrum	Element	Z	Spectrum		
Molybdenum	42	Mo I	Barium	56	Ba I		
		Mo II			Ba II		
		Mo III	Lanthanum	57	La I		
		Mo IV			La II		
		Mo V			La III		
Technetium	43	Tc I	• • • • •				
		Tc II	Hafnium	72	Hf I		
Ruthenium	44	Ru I			Hf II		
		Ru II	Tantalum	73	Ta I		
		Ru III			Ta II		
Rhodium	45	Rh I	Tungsten	74	W I		
		Rh II			W II		
Palladium	46	Pd I	Rhenium	75	Re I		
		Pd II			Re II		
		Pd III			Osmium	76	Os I
Silver	47	Ag I	Os II				
		Ag II	Iridium	77			Ir I
		Ag III			Platinum	78	Pt I
		Cadmium	48	Cd I			Gold
Cd II	Au II						
Cd III	Mercury			80	Hg I		
Cd IV					Hg II		
Indium	49	In I	Thallium	81	Tl I		
		In II			Tl II		
		In III			Lead	82	Pb I
Tin	50	Sn I	Pb II				
		Sn II	Pb III				
		Sn III	Bismuth	83	Bi I		
		Sn IV			Bi II		
		Sn V			Bi III		
Antimony	51	Sb I	Polonium	84	Po I		
		Sb II			Radon	86	Rn I
		Sb III					Radium
Tellurium	52	Te I	Ra II				
		Te II	Iodine	53	I I		
Xenon	54	Xe I			I II		
		Xe II	Cesium	55	Cs I		
Xe III	Cs II						

## 1. Arrangement

The present Finding List has been prepared from Section 3 of this Circular. The Section contains selected multiplets of 78 spectra of 31 elements from Molybdenum through Lanthanum ( $Z = 42$  to  $57$ ) and from Hafnium through Radium ( $Z = 72$  to  $88$ ).

The Finding List is arranged similarly to the one comprising Section 4. The wavelengths are listed in column one in increasing order. From  $\lambda$  355 to  $\lambda$  2000.24 all wavelengths are in vacuum. In the intermediate region where those in vacuum and in air overlap, the entries "Air" and "Vac" are self-explanatory. From  $\lambda$  2000.59 to longer waves, all wavelengths are in Air. This Finding List ends essentially near 3000 Å. Some multiplets extend to longer waves, but the lines are limited to a few scattered miscellaneous members of multiplets.

The symbols in column one are identical with those in the Table. They are as follows:

\* denotes a blend. If an asterisk precedes the wavelength and no symbol follows the wavelength, the line is blended with another in the same spectrum.

§ follows a wavelength (with an asterisk always preceding), to denote that the line is blended with one in a neighboring spectrum of the same element, i.e. first and second spectra, second and third spectra, etc. of a given element.

§§ special symbol following the wavelength (with an asterisk always preceding) used for blends not described by the above symbols.

‡ follows the wavelength of the *raie ultime* for first and second spectra as given by Meggers<sup>1</sup> or taken from later analyses.

P follows the wavelength when the predicted position of the line is given.

Column two indicates the spectrum to which the line listed in column one belongs. Finally, in column three the multiplet numbers taken from Section 3 are entered. As before, if the line is a blend and more than one designation is included in the Multiplet Table, the corresponding multiplet numbers are given separately in column three.

## 2. Scope of the Circular

The present Circular contains a limited number of lines in selected spectra over the range of elements from hydrogen to actinium, excluding the two groups of rare-earth elements, the lanthanides and the actinides. It is recognized that this forms a serious gap in the Ultraviolet Multiplet Table and lessens its general usefulness, at a time when the demand for data on rare-earth spectra is increasing.

Progress is being made with analyses of the rare-earth spectra, but the existing observations are seriously incomplete and the spectra are so complex that some time will be required to obtain sufficient data for a Multiplet Table. Consequently, it has appeared advisable to complete this Circular without the rare-earths, rather than delay publication of the data presented here.

## 3. Acknowledgments

The writer wishes to record here her personal gratitude to all of those who have generously collaborated in the preparation of this extensive table. Spectroscopists in many laboratories have cordially furnished unpublished analyses. The assistance, also, of the National Research Council Committee on Line Spectra of the Elements and especially that of R. C. Gibbs is greatly appreciated.

The details of compilation have been handled largely by Mrs. Isabel D. Murray; those of publication by J. E. Carpenter for special consultation; and Mrs. Betty L. Arnold whose competence in handling the publication details has been invaluable. The many users of the Ultraviolet Multiplet Table are indebted to them for their painstaking effort in handling the manuscript.

<sup>1</sup> W. F. Meggers, J. Opt. Soc. Am. **31**, 44 (1941), first spectra; *ibid.* **31**, 606 (1941), second spectra.

AN ULTRAVIOLET MULTIPLET TABLE††  
 FINDING LIST—ELEMENTS (MOLYBDENUM TO LANTHANUM (Z = 42 TO 57)  
 (HAFNIUM TO RADIUM (Z = 72 TO 88))

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
355.66	Sn III	2	685.31	In III	2	777.367	Pd III	52
361.55	Sn III	3	687.489	Mo v	8	778.783	Pd III	52
373.14	Sn v	1	688.422	Mo v	8	*779.126	Xe III	6, 9
410.35	Mo v	5	689.817	I II	35	780.115	Pd III	36
411.08	Mo v	5	690.551	Mo v	8	*781.019§	Pd III	16
412.42	Mo v	5	691.62	In III	2	783.344	Pd III	15
414.11	Mo v	5	692.263	Mo v	8	783.805	Pd III	52
417.49	Mo v	4	696.30	Tl II	6	784.684	Sn III	10
420.61	Mo v	4	698.284	Mo v	8	784.985	Pd III	17
425.77	Mo v	4	698.541	Xe III	9	785.883	Pd III	17
428.63	Mo v	4	700.624	Sn III	10	787.276	Pd III	12
431.55	Mo v	4	706.055	I II	34	787.837	Pd III	35
434.52	Mo v	4	707.797	Pd III	20	787.950	Pd III	12
493.00	Cd IV	8	709.23	Tl II	5	788.815	I II	57
504.09	Cd IV	8	709.80	Ag III	5	789.08	Ag III	3
504.19	Cd IV	7	709.885	Pd III	53	789.583	Pd III	52
504.49	Cd IV	7	711.944	Pd III	53	790.17	Hg III	1
506.31	Cd IV	7	716.184	Mo v	6	790.192	Pd III	34
514.49	Cd IV	6	717.331	Mo v	6	791.147	I II	56
519.41	Cd IV	7	717.904	Pd III	53	792.35	Ag III	1
524.40	Cd IV	5	719.474	Pd III	20	792.896	Xe III	6
525.18	Cd IV	5	719.546	I II	33	*794.078	Pd III	17, 51
531.08	Cd IV	4	720.70	Cd III	1	794.237	I II	55
531.50	Cd IV	3	721.199	Xe III	7	794.757	I II	54
534.28	Cd IV	4	721.834	Mo v	7	795.585	Pd III	13
536.75	Cd IV	1	722.980	I II	32	796.070	Xe III	5
537.22	Cd IV	6	*725.748	Mo v	1, 6, 7	796.384	Pd III	15
541.73	Cd IV	5	726.96	Ag III	5	797.517	Pd III	12
542.59	Cd IV	2	727.246	I II	31	798.158	I II	25
546.53	Cd IV	1	727.720	Pd III	20	798.427	I II	25
548.00	Cd IV	4	729.172	Mo v	6	799.013	Pd III	15
548.92	Cd IV	1	730.04	Ag III	4	799.202	Pd III	33
551.26	Cd IV	2	730.280	Mo v	7	799.41	Ag III	2
554.04	Cd IV	1	730.83	Ag II	5	799.60	Te II	1
560.25	Cd IV	2	733.314	Xe III	8	800.011	Pd III	11
567.03	Cd IV	1	737.546	I II	28	*800.095	Pd III	16, 32
595.061	Sn IV	6	738.793	Pd III	19	801.223	Pd III	16
605.226	Sn IV	5	740.406	Xe II	8	*801.542	Pd III	11, 11
614.540	Sn III	4	740.75	Hg III	1	801.980	Xe III	3
619.039	Sn IV	6	740.950	I II	28	802.28	Te II	1
624.164	Sn III	3	742.566	Xe III	7	802.286	Pd III	10
628.726	Sn IV	5	748.781	I II	27	803.066	Xe II	8
639.42	Cs II	6	752.80	Ag II	4	*803.665	Pd III	9, 15
651.68	Mo v	3	753.014	Sn III	11	805.725	Pd III	15
659.31	Mo v	3	755.73	Ag III	4	806.317	Pd III	49
660.28	Mo v	2	756.031	Xe III	9	807.672	Pd III	16
661.33	Mo v	2	756.853	Pd III	19	*807.827	Pd III	12, 49
661.40	Mo v	3	758.308	Pd III	37	808.77	Cs II	4
665.14	Mo v	3	763.058	Pd III	37	808.82	Hg III	3
668.09	Mo v	2	*765.594	I II	27, 27	808.88	Ag III	1
668.32	Mo v	2	766.424	Pd III	17	809.536	Pd III	16
668.39	Mo v	3	769.143	Xe III	9	809.695	Pd III	8
668.43	Cs II	5	770.771	I II	28	813.192	Pd III	15
670.87	Tl II	7	772.110	Pd III	18	813.85	Cs II	2
671.37	Mo v	2	772.344	I II	30	*813.989	Pd III	14, 49
672.24	Mo v	3	773.055	I II	29	814.524	Pd III	6
676.42	Mo v	3	775.793	Sn III	11	815.053	Pd III	7
677.39	Cd III	2	776.315	Pd III	17	816.221	Pd III	31
684.58	Cd III	3	776.38	Ag III	3	*816.563	Pd III	13, 14
684.702	Mo v	8	776.681	Pd III	52	817.18	Tl II	4

†Finding List for Section 3.



## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
818.047	I II	24	865.285	Pd III	60	908.871	Pd III	55
818.679	Pd III	50	866.075	Pd III	26	910.309	I II	49
820.012	Pd III	30	867.087	Pd III	43	910.924	Sn III	16
820.342	Pd III	8	867.699	Pd III	24	913.72	Cd II	3
822.39	Ag III	1	867.925	Mo IV	3	913.900	Mo IV	1
822.69	Hg III	3	868.380	I II	24	914.858	Pd III	58
823.210	Xe III	4	870.34?	I II	19	914.957	I II	15
823.426	I II	26	870.43:	Pd III	3	915.582	Pd III	2
824.881	Xe III	3	871.061	Pd III	44	915.87	In III	7
825.076	Pd III	9	*871.491	Pd III	44	916.467	Pd III	2
825.122	I II	23	872.391	I II	18	916.779	Pd III	1
825.345	Pd III	7	873.057	Pd III	5	917.007	I II	48
825.934	I II	18	873.489	I II	10	917.442	Pd III	22
*826.411	Pd III	7, 13	873.71	Pb II	14	917.45	In III	7
827.797	I II	26	873.977	Pd III	60	920.496	Mo IV	1
829.316	Pd III	49	875.674	Mo IV	2	920.93	Bi III	4
829.98	Ag III	2	875.931	Pd III	59	921.343	I II	14
831.168	I II	53	875.941	I II	51	922.492	Pd III	1
834.095	I II	22	877.276	I II	18	923.147	Sn IV	3
834.978	Pd III	8	878.402	Mo IV	2	923.393	Hg II	3
836.34	Tl II	3	878.732	Pd III	2	925.866	Xe II	6
836.476	Pd III	7	879.844	I II	18	926.44	Pb II	11
836.948	Pd III	48	880.590	Pd III	4	926.75 †	Cs II	1
837.146	Pd III	25	880.802	Xe II	7	926.83	In III	6
838.070	I II	18	881.881	I II	17	927.512	Pd III	57
838.11	Ag III	1	882.24	In III	7	929.143	I II	12
838.26	Cd II	5	882.690	Pd III	3	930.133	I II	11
839.94	Cd II	5	884.207	Mo IV	2	930.142	Pd III	56
840.214	Pd III	47	884.786	Mo IV	1	930.506	I II	48
840.579	Pd III	63	885.537	Mo IV	2	930.855	Mo IV	
841.097	I II	25	885.54	Xe II	6	931.139	I II	10
*843.11	Hg III	1, 2	885.913	Pd III	4	935.405	Xe II	5
843.113	I II	21	885.982	Mo IV	2	945.099	Au III	2
843.454	Au III	4	886.820	Pd III	23	947.795	Pd III	21
845.138	Au III	3	*888.842	Pd III	3, 4	956.249	Sn IV	4
845.268	Pd III	8	889.276	Xe III	2	958.76	Pb II	10
845.525	Pd III	29	889.294	Pd III	2	960.643	Pd III	39
846.295	I II	25	889.68	Pb II	13	962.753	Pd III	39
847.342	Pd III	46	890.84	In III	6	965.506	Pd III	21
847.52	Cd II	4	890.995	I II	18	965.540	Xe III	1
847.796	I II	20	891.28	Cd II	3	967.23	Pb II	9
847.926	I II	20	891.674	Mo IV	2	967.378	I II	13
847.943	Pd III	7	892.029	Pd III	4	967.854	Pd III	39
848.868	Pd III	29	892.793	Pd III	40	972.682	Pd III	54
851.247	Pd III	62	893.107	Hg II	3	972.769	Xe II	4
851.593	Pd III	28	893.167	I II	16	976.678	Xe II	6
851.743	Pd III	45	893.989	Xe III	2	977.805	Pd III	38
852.636	Mo IV	3	894.197	Pd III	3	978.394	I II	15
*853.610	Pd III	45	*894.762	Mo IV	2, 2	986.71	Pb II	8
854.354	Pd III	8	895.354	Mo IV	1	989.103	Pd III	39
855.11	Hg III	3	895.599	Pd III	3	995.74	Pb III	3
855.294	Pd III	27	895.844	I II	10	995.768	I II	11
855.494	I II	52	895.957	I II	50	995.89	Pb II	14
855.968	Mo IV	3	896.003	Xe III	2	997.167	Sn II	7
856.470	Pd III	61	896.376	I II	50	1000.572	I II	11
857.722	Mo IV	3	*896.692	I II	21, 50	1003.350	I II	46
858.238	Pd III	3	*896.813	Pd III	23, 41	1003.370	Xe III	1
859.692	Mo IV	3	900.423	Pd III	42	1003.457	I II	13
860.38	Cd II	4	900.490	Pd III	2	1003.612	I II	47
863.200	Pd III	27	901.004	I II	10	1008.385	Pd III	38
863.209	Mo IV	3	901.34	Cs II	3	1009.936	I II	13
863.509	Mo IV	3	902.130	I II	20	1010.918	Sn III	9
863.590	I II	24	902.900	Pd III	1	1011.94	Sb III	4
863.623	Mo IV	3	904.365	Pd III	2	1016.61	Pb II	13
864.044	Pd III	4	905.313	I II	13	1017.216	Sn IV	11

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1017.680	Xe III	1	1096.448	Mo IV		1169.17	Tl II	14
1018.583	I II	8	1096.916	Sn IV	13	1169.325	Mo V	23
1018.85	Tl II	17	1098.41	Pb III	3	1169.63	Xe II	3
1019.230	I II	13	1099.73	La III	2	1169.741	Pt II	23
1019.400	I II	8	1099.97	Mo V	23	1174.30	Te II	1
1019.719	Sn IV	4	1100.432†	Xe II	1	1174.37	Pd II	11
1023.544	I II	9	1100.70	La III	2	1175.79	Te II	1
1026.065	I II	8	1100.735	Sn V	5	1175.841	I II	5
1030.047	I II	8	1101.239	I II	10	1178.650	I II	3
1030.44	Pb III	5	1103.237	Sn IV	12	1183.053	Xe II	2
1032.438	Xe II	3	1103.590	I II	9	1183.41	Tl II	13
1033.801	I II	44	1103.94	Pb II	5	1183.45	Pd II	11
1034.655	I II	6	1105.000	I II	5	1184.156	I II	41
1037.680	Xe II	5	1107.05	Ag II	2	1184.254	Sn III	7
1038.636	Mo IV		1108.128	Sn II	6	1186.216	Pt II	22
1039.99	Bi III	3	1108.43	Pb II	10	1187.338	I II	2
1040.650	Au III	1	1109.028	Mo IV		1188.83	Tl II	12
1040.715	Sn II	7	1109.84	Pb II	9	1189.918	Sn V	6
1041.306	Xe II	3	1111.165	I II	8	1189.96	Mo V	23
1042.154	I II	7	1112.46	Ag II	3	1190.243	Ru II	
1044.487	Sn IV	2	1114.99	Pb III	4	1190.510	Ru III	1
1045.76	Bi III	4	1117.219	I II	7	1190.853	I II	42
1047.801	Xe III	1	1119.344	Sn IV	2	1192.04	Xe I	4
1048.272	Xe II	3	1119.57	Pb II	9	1194.84	Tl II	16
1048.38	Cd II	2	1120.679	Sn IV	2	1195.87	Ag II	1
1048.89	Pb III	2	1121.36	Pb II	6	1196.43	Pd II	12
1049.73	Tl II	17	1125.251	I II	7	1198.884	I II	5
1049.82	Pb II	12	1127.07	Mo V	23	1199.677	I II	41
1050.30	Tl II	17	1130.17	Tl II	14	1200.067	Ru III	1
1050.77	Pb II	12	1130.344	Xe III	1	1200.223	I II	2
1051.810	Bi III	2	1131.504	I II	6	1200.800	Mo IV	
1051.920	Xe II	2	1132.794	Sn V	5	1203.63	Pb II	4
1052.25	Pb III	3	1133.14	Pb II	5	1204.00	Pd II	9
1052.765	Sn IV	10	1137.963	Mo V	23	1204.058	Sn III	19
1053.875	Sn III	9	1139.015	Bi III	4	1204.876	Ru III	1
1054.582	I II	6	1139.293	Sn III	8	1205.723	Sn V	4
1054.742	I II	45	1139.752	I II	6	1205.931	I II	39
1055.83	Cd II	2	1139.805	I II	4	1207.173	Ru III	1
1058.370	Sn IV	14	1145.91	Pb II	8	1208.55	Te II	1
1058.586	Sn IV	9	1148.517	Mo V	23	1209.774	Ru III	1
1060.66	Pb II	7	1151.49	Sb III	3	1210.575	Sn III	8
1065.58	Pb II	11	1154.698	I II	6	1211.306	Ru III	1
1065.90	Sb III	4	1157.74	Sb III	2	1214.388	Ru III	1
1066.273	I II	43	1157.85	Mo V	23	1214.58	Pd II	9
1066.391	Xe III	1	1158.333	Sn III	8	1215.105	Sn III	8
1067.341	I II	6	1158.474	Xe II	3	1216.125	I II	40
1069.12	Pb III	5	1159.010	Sn II	5	1216.238	Ru III	1
1070.43	Sb III	3	1159.297	Sn III	19	1217.000	Ru III	1
1073.09	Au II	4	1159.871	I II	43	1217.142	I I	48
1073.407	Sn IV	3	1160.562	I II	1	1218.136	Sn III	8
1074.476	Xe II	2	1161.092	Sn III	8	1218.411	I I	47
1074.66	Pb III	5	1161.412	Sn II	6	1218.66	Pd II	8
1074.97	Tl II	16	1161.579	Sn III	7	1219.090	Sn II	5
1075.210	I II	5	1162.20	Pd II	12	1220.887	I II	2
1075.82	Sb III	2	1162.55	Tl II	17	1223.430	I I	45
1077.078	Pt II	22	1162.920	Sn II	6	1223.716	Sn II	4
1080.366	Pt II	24	1163.636	Mo IV		1224.077	I I	44
1081.61	La III	2	1163.80	Tl II	17	1224.501	I I	43
1082.540	I II	44	1165.03	Pb III	3	1224.57	Au II	1
1082.551	Mo IV		1166.070	Mo IV		1224.64	Bi III	3
1083.860	Xe II	4	1166.482	I II	4	1224.856	I I	42
1084.06	Sb III	4	1166.96	Pb III	4	1225.33	Pd II	11
1085.405	I II	5	1167.054	I II	5	1228.888	I I	41
1085.47	Bi II	3	1167.43	Tl II	14	1230.171	Sn III	18
1089.347	Sn V	6	1168.282	Pt II	29	1230.222	I II	4

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1230.732	I i	40	1285.302	Au III	7	1336.696	Mo IV	
1231.20	Pb II	7	1285.782	I II	2	1336.700	Au III	7
1231.81	Tl II	12	1286.084	I II	3	1338.377	Mo IV	
1233.069	I II	39	1288.100	Mo III	1	1339.903	I i	49
1233.463	I i	39	1288.278	Mo III	2	1339.939	Mo IV	
1234.063†	I II	1	1289.395	I i	28	1340.709	I i	17
1234.347	Ru II	47	1290.886	Sn II	4	1341.264	I i	48
1235.23	Pd II	7	1291.143	I i	27	1341.348	Mo IV	
1235.878	Pt II	21	1294.357	Sn v	5	1341.660	Au III	65
1236.362	I i	38	1295.560	Xe i	2	1342.13	Rh II	11
1237.12	Pd II	10	1296.36	Sb II	5	1342.757	Mo IV	
1237.231	I i	37	1296.416	I II	2	1343.626	I i	46
1237.892	I i	36	1296.43	Cd II	12	1344.128	Mo IV	
1239.467	Ru II	47	1300.335	I i	26	1346.007	Mo IV	
1239.879	Ru II	47	*1301.010P	Hg i	4, 5	1346.049	Sn III	25
1239.961	Au III	11	*1302.199	Sn v	4, 4	1346.12	Bi III	2
1241.05	Bi II	1	1302.983	I i	25	1347.652	Sn III	15
1241.81	Hg III	3	1305.305	Pt II	9	1348.37	Pb II	5
1242.933	Sn II	4	1305.60	Hg III	4	1348.385	Ru II	
1243.632	Sn III	7	1305.970	Sn III	5	1348.873	Au III	25
1244.756	Xe II	1	1306.69	Sb III	1	1348.903	I i	45
1245.92	Pd II	10	1307.50	Tl II	14	1349.161	Pt II	20
1246.00	Tl II	15	1307.950	Hg II	5	1349.47	Rh II	9
*1246.887	Ru II	26, 47	1308.10	Pb III	3	1349.82	Sb II	5
1248.600	Pt II	37	1308.50	Tl II	11	1350.07	Bi II	4
1249.774	Ru II	47	1310.20	Tl II	14	1350.206	I i	43
1250.199	Xe i	3	1312.262	Sn II	4	1350.302	Au III	7
1250.340	Ru II	47	1313.432	I i	23	1350.709	Mo IV	
1250.45	Pb III	5	1313.947	I i	22	1351.10	Rh II	9
1250.559	I II	39	1314.547	Sn IV	1	1351.259	Mo IV	
1250.826	I i	34	1314.61	Pd II	7	1352.825	Mo IV	
1251.335	I i	33	1314.825	Au III	7	1352.93	Hg III	5
1251.384	Sn III	2	1315.23	Rh II	12	1353.08	Cd II	10
1251.582	Ru II	47	1315.57	Pd II	2	1355.099	I i	16
1254.59	Pd II	6	1316.573	Ru II	114	1355.542	I i	41
1256.00	Cd II	12	1317.54	Sb II	4	1355.598	Au III	65
1257.443	Ru II	47	1317.542	I i	21	1355.995	Mo IV	
1259.153	I i	32	1318.597	Mo IV		1356.109	Au III	29
1259.510	I i	31	1320.05	Pd II	4	1357.971	I i	15
1259.916	Sn III	5	1321.04	Hg III	2	1358.01	Sb II	5
1260.817	Ru II	47	1321.71	Tl II	2	1358.11	Rh II	12
1261.269	I i	12	1321.733	Hg II	5	1358.60	Rh II	12
1264.726	Ru II		1323.22	Hg III	3	1360.46	Hg III	5
1266.78	Pb III	5	1324.92	Te II	2	1360.965	I i	14
1267.27	Pd II	9	1325.46	Bi II	2	1361.111	I i	39
1267.569	I i	11	1326.36	Hg III	5	1361.307	Hg II	5
1267.596	I i	29	1326.50	Cd II	11	1363.76	Pd II	4
1269.62	Pd II	6	1326.84	Bi III	3	1365.372	Au III	6
1269.78	Hg III	2	1327.345	Sn III	5	1365.58	Pd II	5
1273.344	Ru II		1327.39	Sb II	6	1365.80	Pd II	5
1273.60	Pd II	8	1329.34	Pd II	6	1366.506	I i	36
1274.359	Mo III	1	1329.47	Bi II	4	1367.149	Au III	9
1274.53	Pb III	5	1330.189	I i	19	1367.714	I i	13
1274.78	Te II	1	1330.40	Tl II	13	1367.76	Pd II	1
1275.255	I i	11	1330.77	Hg III	2	1368.217	I i	35
1275.424	I II	38	1331.65	Pb II	6	1369.362	Pt II	8
1275.596	I II	3	1331.759	Hg II	5	1369.712	Sn III	6
1277.190	I II	4	1332.79	Rh II	11	1370.48	Cd IV	10
1278.401	Mo III	1	1334.699	Sn III	5	1370.91	Cd II	11
1278.514	Au III	12	1335.08	Hg III	3	1371.65	Cd II	11
1278.543	Ru II		1335.20	Pb II	4	1372.61	Bi II	3
1279.41	Pb III	3	1335.238	I i	51	1372.80	Sb II	4
1280.49	In II	7	1336.163	Mo IV		1373.52	Tl II	21
*1280.80	Hg III	2, 4	*1336.478††	I i	18, 50	1374.84	Te II	2
1283.808	Sn v	6	*1336.517‡	I II	2	1374.878	Pt II	19

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1374.90	Sb II	6	1421.333	Bi III	1	1466.039	Ru II	137
1374.92	Pd II	3	1423.516	Bi III	1	1466.673	I II	36
1377.708	Au III	40	1424.934	Ru II	172	1467.127	Ru II	138
1377.83	Hg III	3	1425.490	I I	9	1467.33	Hg III	4
1378.655	Au III	7	1427.393	Au III	26	1467.723	Ru II	23
1378.96	Hg III	3	1428.751	Ru II	106	1467.933	Ru II	19
1379.951	Au III	24	1428.907	Au III	38	1467.977	Ru II	18
1380.475	Pt II	11	1429.524	Pt II	5	1468.660	Ru II	23
1380.498	Au III	28	1429.539	I I	28	1468.909	Ru II	24
1380.501	I II	37	1429.57	Sb III	1	*1468.97	Au II	3, 7
1381.338	Au III	64	1430.037	Au III	63	1469.39	Cd I	5
1382.284	I I	34	1433.344	Au III	43	1469.621†	Xe I	1
1383.19	Hg III	4	1433.96	Pb II	3	1469.941	Ru II	21
1383.225	I I	12	1434.85	In III	4	*1471.10	Rh II	24
1384.613	Mo IV		1435.784	Au III	62	1471.220	Ru II	138
1384.67	Sb II	2	1436.088	Au III	37	1471.281	Au III	42
1385.763	Au III	10	1436.309	Pt II	10	1472.717	Ru II	19
1386.737	Sn III	5	1436.45	Sb II	2	1473.151	Ru II	19
1387.212	Mo IV		1436.83	Bi II	1	1473.279	Au III	9
1389.388	Au III	27	1437.29	Pd II	1	1474.707	Au III	52
1389.875	Pt II	7	1437.519	Sn IV	1	1475.008	Sn II	3
1390.750	I I	11	1438.11	Sb II	2	1475.187	Mo V	12
1391.100	Sn II	9	1439.100	Au III	7	1475.361	Ru II	137
1391.441	Au III	23	1440.514	Ru II	25	1476.859	Mo IV	
1391.88	Tl II	12	1440.820	Ru II	19	1477.025	Ru II	154
1392.898	I I	31	1440.838	Mo IV		1477.632	Ru II	24
1393.516	Sn II	9	1441.173	Au III	76	1478.021	Ru II	20
1393.670	Mo IV		1442.147	Ru II	39	1479.242	Ru II	17
1393.92	Bi II	3	1444.144	Ru II	106	1481.066	Au III	73
1395.971	Au III	55	1445.491	Ru II	20	1481.435	Ru II	18
1397.46	Pd II	3	1445.552	Ru II	138	1482.823	Pt II	43
1397.65	Cd IV	10	1446.260	I I	25	1484.035	Ru II	21
1398.97	Sb II	5	1446.334	Au III	74	1485.918	I I	4
1399.01	La III	5	1446.701	Au III	25	1486.49	Au II	7
1399.097	Mo V	18	1447.55	Cd III	18	1486.93	Bi II	2
1400.014	I I	30	1447.94	Bi II	4	1486.957	Ru II	15
1400.454	Sn II	3	1448.393	Au III	7	1487.133	Au III	6
1402.236	Pt II	6	1449.625	Pd II	71	1487.18	Mo V	11
1402.619P	Hg I	3	1449.773	Sn III	6	1487.70	In III	5
1402.878	Au III	77	1450.177	Ru II	138	1487.906	Au III	8
1403.08	In III	5	1451.224	Ru II	21	1488.618	Ru II	38
1403.59	Pd II	1	1451.56	Rn I	1	1488.855	Ru II	17
1403.68	Cd IV	10	1453.179	I I	24	1489.106	Sn II	3
1404.11	Cd II	10	1453.25	Pd II	1	1489.136	Ru II	19
1404.18	Sb III	1	1454.927	Au III	8	1489.446	Au III	32
1405.17	Au II	7	1455.11	Bi II	2	1489.734	Ru II	19
1406.48	Pb III	4	1455.74	Cd III	17	1490.50	Tl II	11
1406.562	Mo IV		1456.271	Mo V	20	1490.707	Ru II	
1407.79	Sb II	5	1457.389	I I	8	1491.224	Ru II	21
1408.34	Rh II	7	1457.470	I I	7	1492.888	I I	17
1409.472	Au III	22	1457.981	I I	6	1493.40	Rh II	7
1410.613	Sn III	5	1458.491	Ru II	138	1494.14	In III	5
1412.180	I I	11	1458.721	Ru II	138	1494.524	Ru II	19
1412.206	Ru II	172	1458.794	I I	5	1494.724	Pt II	42
*1412.74	Rh II	8, 10	1459.028	Ru II	91	1498.289	Ru II	20
1413.017	Ru II	106	1459.145	I I	23	1498.53	Sb II	3
1413.779	Au III	7	1461.00	Bi III	1	1499.30	Tl II	10
1414.247	Au III	56	1461.699	Ru II	113	1499.380	Pt II	41
1414.427	Hg II	4	1462.14	Bi II	4	1500.334	Au III	5
1416.28	Cd III	13	1462.26	La III	5	1500.74	Rh II	23
1417.111	Au III	7	1463.215	Ru II		1502.441	Au III	20
1417.368	Au III	39	1463.515	Ru II	21	1502.50	Bi II	4
1418.89	Cd IV	9	1464.692	Au III	53	1502.802	Ru II	19
1420.606	Ru II	106	1464.855	Ru II	20	1503.401	Ru II	19
1421.364	I I	10	1465.828	I I	20	1503.716	Au III	41

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1504.18	Sb II	2	1544.616	Mo V	17	1584.00	Rh II	17
1505.240	Pt II	4	1545.152	Ru II	35	1584.074	Au III	18
1506.279	Pt II		1545.17	Cd III	16	1584.160	Pu III	71
1506.515	Ru II	19	1545.79	Cd IV	9	1584.256	Ru II	36
1507.041	I I	3	1545.957	Pd III	136	1584.57	Sb II	8
1507.37	Ag I	7	1545.961	Ru II	59	1585.033	Pd III	88
*1507.429	Ru II	15, 37	1546.063	Mo V	17	1585.040	Ru II	56
1507.82	Tl II	20	1547.57	Cd III	12	1585.740	Ru II	46
1509.288	Pt II	40	1547.62	Cd IV	9	1585.965	Ru II	58
1509.432	Ru II	13	1547.756	Ru II	16	1586.37 †	In II	2
1512.325	Ru II	17	1548.473	Au III	75	1586.875	Mo V	17
1512.42	Pb II	1	1548.58	Ag I	5	1587.24	Au I	2
1512.483	Ru II	59	1548.679	Ru II	58	1589.32	Rh II	4
1513.26	Sb II	2	1550.45	Cd III	24	1589.559	Au III	16
1513.92	Cd IV	10	1550.740	Ru II	58	1589.645	Ru II	7
1514.26	Cd II	9	1553.1	Pb III	1	1589.680	Au III	5
1514.323	I I	15	1554.00	Sb II	9	1590.19	Rh II	17
1514.673	I I	3	1554.580	Au III	21	1590.370	Mo V	
1515.63	Ag I	6	*1554.877	Sn II	8	1590.774	Ru II	10
*1516.256	Ru II	21, 22	1555.10	Rh II	22	1590.882	Ru II	35
1517.185	Pd III	136	1556.817	Mo V	17	1591.79	Bi II	2
1517.900	Sn II	8	1560.998	Ru II	46	1592.93	Hg III	2
1518.047	I I	14	1561.58	Tl II	10	1593.26	Tl II	9
1518.758	Mo V	21	1562.607	Ru II	14	1593.394	Au III	50
1520.142	Sn II	11	1563.48	Rh II	4	1593.403	Ru II	46
1520.406	Ru II	20	1563.67	Bi II	5	1593.580	I I	10
1520.57	Bi II	2	*1563.928	Ru II	8, 37	1594.35	Rh II	18
1521.238	Ru II	16	1565.202	Pd III	71	1594.398	Ru II	12
1521.407	Mo V	21	1565.512	Sb II	2	1594.603	Ru II	64
1523.408	Ru II	17	1566.128	Ru II	8	1596.482	Ru II	35
1524.35	Sb II	10	1567.308	Ru II	11	1596.688	Mo V	21
1524.725	Pt II	44	*1567.512	Au III	19, 21	1598.23	Rh II	5
1524.937	Ru II	14	1568.57	Tl II	10	1599.309	Ru II	7
1526.252	Pd III	137	1570.104	Ru II	12	1599.44	Hg III	4
1526.448	I I	13	1570.365	Sn III	14	*1599.937	Ru II	8
1526.85	Cd I	4	1570.371	Ru II	74	1600.06	Rh II	6
1527.40	Hg III	5	1570.41	Rh II	6	*1600.183	Ru II	35
1527.44	Mo V	17	1571.58	Cd II	9	1600.40	Sb II	7
1527.813	Ru II	17	1572.089	Ru II	35	1600.496	Au III	35
1528.734	Mo V	19	1572.69	Cd IV	9	1601.04	Cd II	23
1529.30	Cd III	17	1572.96	Mo V	21	1601.58	Bi II	5
1530.190	Pt II	2	1573.42	Cd II	9	1601.59	Cd III	6
1530.21	In III	4	1573.70	Bi II	3	1601.893	Pd III	89
1530.415	Ru II	22	1574.02	Ag I	5	1602.095	Ru II	8
1530.762	Ru II	11	1574.337	Ru II	8	1602.10	Rh II	6
1530.91	Rh II	4	1574.424	Sn II	8	1603.572	Ru II	46
1532.74	Sb I	6	1574.680	Mo V	17	1604.029	Ru II	81
1532.95	In III	3	1574.855	Au III	6	1604.319	Pd III	89
1533.17	Bi II	3	1575.819	Mo V	21	1604.405	Ru II	8
1533.435	Ru II	12	1575.91	Rh II	5	1604.45	Rh II	5
1534.092	Pd III	136	1576.09	Sb II	1	1604.87	Cd III	11
1534.860	Ru II	17	1577.573	Ru II	35	1605.682	Mo V	22
1535.308	Pd III	70	1578.728	Ru III	36	1605.787	Ru II	9
1535.426	Ru II	16	1579.413	Au III	37	1606.40	Bi III	1
1536.77	Bi II	4	1579.578	Ru II	7	1606.96 †	Sb II	1
1537.806	Ru II	37	1579.741	Pd III	70	1607.86	Rh II	4
1538.06	Bi II	3	1581.257	Mo V	10	1609.70	Bi II	4
1538.624	Ru II	16	1581.328	Ru II	65	1610.745	Pd III	80
1538.702	Mo V	11	1581.35	Sb II	1	1611.38	Bi II	3
1541.978	Au III	72	1581.636	Ru II	11	1611.415	Ru II	46
1542.188	Ru II	17	1582.57	Rh II	6	1612.3	Sb I	
1542.293	Ru II	37	1582.610	I I	2	1613.685	Ru II	11
1542.74	Rh II	6	1582.652	Ru II	57	1615.267	Ru II	46
1543.042	Ru II	37	1583.17	Cd II	8	*1616.290	Pd III	79, 88
1544.414	Ru II	11	1583.819	Ru II	58	1617.137	Au III	17

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1617.604	I i	1	1652.733	Au III	61	1702.068	I i	3
1617.663	Ru II	11	1652.81	Bi II	4	1702.235	Au III	46
1617.761	Au III	34	1653.77	Ru III	5	1702.51	In II	6
1619.365	Ru II	57	1654.31	Rh II	2	1703.29	Ru III	5
1619.70	Rh II	4	1655.63	Cd III	5	1703.37	Rh II	3
1620.102	Ru II	81	1655.95	Ru III	5	1703.562	Ru II	70
1620.629	Pd III	115	1657.217	Ru II	54	1704.330	Pd III	68
1621.18	Rh II	21	1657.40	Ru III	5	1704.765	Pt II	38
1621.658	Pt II	1	1659.364	Ru II	72	1705.299	Mo V	16
1621.913	Au III	6	1661.230	Mo V	15	1706.34	Rh II	15
1622.114	Pd III	88	1662.6	Sb I		1707.16	Cd III	5
1622.55	Mo V	21	1662.72	Hg III	4	1707.508	Au III	69
1623.01	Rh II	17	1663.22	Rh II	20	1708.568	Pd III	86
1623.231	Ru II	46	1664.778	Au III	32	1709.26	Ag I	3
1623.3	Sb I		1665.329	Sn II	8	1710.125	Au III	60
1623.390	Ru II	65	1665.545	Mo IV		1710.51	Cd I	2
1624.47	Rh II	4	1665.78	Au I	3	1714.57	Au I	8
1625.178	Ru II	8	1665.845	Mo IV		1715.670	Au III	54
1625.42	In III	1	1666.654	Mo IV		1716.367	Pd III	69
1625.565	Ru II	57	1667.480	Mo IV		1716.697	Au III	19
1627.138	Ru II	46	1668.098	Au III	16	1716.74	In II	5
1627.397	Ru II	8	1668.60	Cd II	23	1717.45	Sb I	
1627.98	Ru III	6	1668.669	Mo V	14	1717.820	Au III	5
1628.54	Cd III	6	*1668.76	Rh II	5	1718.033	Mo V	14
1628.541	Ru II	81	1668.948	Mo IV		1719.856	Pd III	68
1628.94	Rh II	5	1669.29	Cd I	3	1721.171	Ru II	63
1629.092	Ru II	7	1669.51	In II	5	1721.288	Mo V	14
*1629.116	Au III	5, 16	1670.19	Rh II	5	1721.808	Mo V	15
1632.321	Ru II	73	1671.06	Hg III	5	1721.93	Cd III	6
1632.73	Ru III	5	1671.53	Pb II	1	1722.27	Ag III	8
1632.96	Rh II	6	1672.225	Ru II	73	1722.735	Pd III	110
1633.802	Ru II	81	1673.61	Au II	2	1722.95	Cd III	21
1634.13	Ru III	5	1673.919	Au III	61	1723.128	Pt II	15
1634.72	Rh II	3	1674.04	In II	5	1723.43	Sb I	20
1634.99	Ru III	5	1674.22	Rh II	3	1725.20	Re II	7
1635.129	Ru II	46	1674.294	Sn III	13	1725.350	Mo V	15
1635.333	Ru II	55	1675.174	I I	4	1725.66	Cd III	11
1635.948	Ru II	73	1677.90	Hg III	3	1725.89	Au II	4
1637.446	Ru II	56	1678.15	Cd III	10	1726.69	Rh II	15
1637.591	Ru II	54	1679.58	Rh II	3	1726.75 †	Pb II	1
1637.88	Rh II	5	1679.620	Ru II	72	1726.995	Mo V	
1638.876	Au III	6	1680.41	Rh II	19	1727.04	Hg III	6
1639.106	I I	7	1682.15	Pb II	2	1727.281	Au III	14
1639.209	Ru II	81	1683.821	Pd III	80	1727.351	Mo V	
1639.371	Ru II	72	1683.985	Ru II	71	1727.375	Pd III	69
1639.530	Ru II	81	1684.16	Mo V	16	1728.14	Ag III	8
1640.780	I I	5	1686.161	Ru II	55	1731.415	Ru II	34
1641.460	Ru II	8	1686.691	Ru II	70	1731.54	Mo II	47
1642.137	I I	1	1689.838	Pd III	79	1731.889	Hg II	6
1642.28	In III	3	1690.29	Rh II	2	1732.634	Pd III	87
1643.108	Mo V	24	*1691.5 §	Bi II	3	1733.140	Au III	52
1643.57	Sb II	1	1693.51	Ag III	8	1733.537	Ru II	71
1644.189	Au III	32	1693.917	Au III	5	1735.858	Pt II	3
1644.671	Mo V	21	1697.081	Au III	36	1736.19	Sb I	5
1646.59	Au I	3	1698.970	Au III	71	1738.484	Au III	59
1647.47	Hg III	2	1699.419	Sn II	2	*1738.50	Hg III	3, 5
1647.615	Ru II	9	1699.442	Ru II	34	1739.00	Cd III	11
1647.93	Cd II	8	1699.735	Mo V	14	1740.114	Ru II	52
1649.28	Sb II	1	1699.84	Ru III	5	1740.27	Hg III	5
1649.959 †	Hg II	2	1699.990	Au III	32	1740.47 †	Au II	2
1651.08	Ru III	6	1700.01	In II	6	1741.262	Ru II	62
1651.87	Ag I	3	1700.42	Ru III	6	1741.59	In II	5
1651.87	Cd III	6	1700.69	Au II	4	1741.619	Pd III	68
1651.898	Ru II	63	1701.080	Ru II	53	1744.346	Au III	32
1652.45	Hg III	5	1701.50	Rh II	3	1744.45	Ru III	3

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1745.562	Pd III	114	1782.548	Pd III	66	1819.274	Pd III	77
1746.037	Au III	6	1782.758	I I	2	1819.521	Mo IV	6
*1746.446	Ru II	51, 52	*1783.22	Au II	5	1821.169	Au II	15
1747.198	Mo V	15	1783.355	Mo V		*1821.641	Mo IV	6, 6
1747.67	Cd III	9	1784.367	Pd III	124	1821.839	Pd III	66
1748.83	In III	1	1785.42	Rh II	16	1822.03	Pb II	3
1748.973	Mo V	9	1785.70	Ru III	8	1822.515	Pd III	103
1749.29	Bi II	5	1785.84	Cd II	22	1823.24	Au II	4
1749.58	Rh II	13	1786.07 †	Rn I	1	1823.41	Cd III	23
1750.14	Re II	3	1786.106	Au III	30	1823.71	Bi II	4
1751.03	Ag III	7	1786.420	Mo IV	6	1827.70	Cd II	21
1751.703	Pt II	36	1787.00	Ru III	8	1827.86	Tl II	10
1752.002	Mo V		1787.07	Rh II	1	1828.83	Ag III	7
1752.689	Mo V		1787.39	Bi II	4	1829.50	Sb I	17
1753.441	Ru II	33	1788.24	Sb I	16	1830.063	Pd III	129
1756.10	Au II	5	1789.19	Cd III	4	1830.311	Pd III	65
1756.802	Mo V	16	1789.987	Pd III	94	1830.380 †	I I	1
1756.917	Au III	5	1790.25	Ru III	8	1831.753	Sn II	2
1757.904	Sn II	1	1790.772	Pd III	87	1831.753	Pd III	91
1758.187	Pd III	103	1790.889	Mo V	14	1832.067	Pd III	87
1759.49	Ru III	3	1791.253	Ru II	51	1832.144	Ru II	62
1759.78	Cd II	23	1791.82	Bi II	2	*1832.33	Ag III	8
1760.37	Rh II	14	1792.653	Au III	51	1833.300	Pd III	120
1761.030	Ru II	50	1792.76	Tl II	8	1834.386	Pd III	85
1761.80	Rh II	2	1793.31	Au II	3	1834.832	Pd III	87
1761.947	Au III	59	1793.40	Cd III	5	1835.265	Pd III	132
1762.312	Sb II	7	1793.762	Au III	6	1836.013	Ru II	49
1762.614	Mo V		1795.083	Pd III	67	1836.672	Pd III	92
1763.439	Mo IV	6	1795.52	Ru III	7	1837.073	Pd III	85
1764.595	Pt II		1795.628	Mo IV	6	1838.64	Ag III	7
1765.09	Rh II	15	1796.47	Ru III	8	1840.14	Ag III	14
1765.403	Pd III	78	1796.616	Pd III	66	1840.166	Pd III	94
1765.525	Ru II	51	1796.68	Pb II	3	1840.438	Pd III	85
1765.76	Sb I	18	1799.091	I I	2	1841.375	Ru II	198
1766.20	Ag I	4	1799.107	Pd III	103	1842.41	In III	9
1767.415	Au III	31	1799.74	Rh II	16	1843.148	Pd III	85
1767.767	Mo V	14	1800.18	Sb I	19	1843.490	Pd III	119
1768.42	Rh II	1	1800.470	Ru II	33	1843.940	Pd III	94
1768.70	Ag III	8	1800.58	Au II	3	1844.138	Ru II	4
1768.82	Cd III	5	1801.04	Ru III	8	1844.451	I I	1
1770.83	In II	6	1801.435	Mo V	15	1844.66	Cd III	6
1771.40	Mo IV	6	1801.982	Au III	34	1844.889	Au III	33
1771.49	Ru III	8	1802.24	Ag III	8	1845.020	Pd III	65
1772.002	Mo V		1803.315	Pd III	132	1845.368	Ru II	32
1772.37	Ru III	8	1804.908	Pd III	94	1845.700	Mo IV	
1773.06	Cd III	4	1805.235	Au III	5	*1845.974	Ru II	6, 6
1773.676	Mo V	14	1805.976	Mo IV	6	1846.127	Mo IV	
1774.246	Mo V	15	1806.599	Ru II	50	1847.473	Pd III	94
1774.419	Au III	70	1808.23	Ag III	7	1847.73	Ag I	2
1774.79	In II	6	1808.544	Pd III	98	1848.768	Sn I	8
1775.162	Pd III	103	1808.64	Rh II	14	1848.833	Au III	49
1775.166	Au III	6	1809.811	Au III	46	1849.492P †	Hg I	2
1775.582	Mo V		1811.200	Sn II	2	1849.93	Ag III	6
1776.061	Ru II	50	1811.42	Ru III	7	1850.30	In III	3
1776.396	Au III	17	1811.605	Pd III	65	1850.47	Ag I	2
1777.01	Bi II	2	1811.712	Sn III	1	1850.701	Mo IV	6
1777.086 †	Pt II	13	1811.975	Pd III	131	1851.13	Cd III	8
1777.270	Pt II		1812.094	Pd III	129	1851.37	Cd III	11
1777.62	Rh II	16	1812.93	Pb I	11	1851.592	Pd III	66
1779.629	Pd III	87	1813.523	Pd III	130	1852.274	Pd III	66
1780.571	Au III	35	1814.85	Tl II	10	1855.85	Cd III	7
1780.617	Pd III	66	1815.574	Pd III	128	1856.161	Pd III	119
1780.87	Sb I	4	1815.771	Sn I	8	1856.33	Ag III	6
1781.282	Pd III	95	1818.464	Pd III	102	1856.504	Pd III	65
1781.858	Pt II	14	1819.125	Ru II	198	1856.67	Cd III	5

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Vac			Vac		
1857.558	Pd III	123	1904.76	Pb I	8	1941.639	Pd III	64
1858.65	Re II	2	1905.74	Re I	14	*1941.82	Rh II	32
1858.91	Ag III	11	*1906.378	Ru II	49	1941.857	Sn III	22
1859.206	Pd III	66	1908.64 †	Tl II	1	1942.31	Au I	2
1861.799	Au III	5	1908.7	Ra II	1	1942.317	Hg II	2
1862.98	In III	9	1909.36	Re I	14	1943.000	Pd III	91
1863.404	Ru II	69	1909.98	Cd III	22	1943.54	Cd II	20
1865.782	Pd III	93	1911.702	Pt II	14	1943.966	Ru II	4
1865.980	Mo IV		1912.036	Ru II	4	1944.123	Pd III	97
1867.12	Ag III	11	1912.484	Ru II	61	1944.251	Mo IV	
1867.122	Pt II	27	1913.729	Pd III	128	1944.537	Pd III	118
1869.242	Hg II	8	1913.74	Mo II	45	1945.99	Pd I	12
1870.404	Pt II	15	1913.797	Ru II	89	1946.507	Pd III	65
1871.15	Sb I	3	1914.616	Pd III	64	1948.35	W II	3
1871.263	Pd III	85	1916.829	Ru II	5	1948.71	Mo II	25
1871.39	Tl II	9	1916.92	Ag III	7	1948.792	Au III	13
1871.922	Au III	48	1917.08	Ag III	6	1949.423	Ru II	3
1873.197	Pd III	92	1917.281	Pd III	135	1949.44	Mo II	25
1873.45	Ag III	6	1917.472	Pd III	127	*1949.515§	Mo IV	5
1874.08	Cd III	4	1918.278	Au III	47	1949.901	Pt II	35
1874.629	Pd III	90	1918.650	Ru II	4	1950.39	Sb I	
1875.469	Pd III	65	1919.64	Au I	5	1950.55	Mo II	45
1875.564	Ru II	5	1921.66	Pb II	1	1951.06	W II	1
1876.415	I I	1	1922.134	Mo IV	5	1951.117	Pd III	64
1877.027	Pd III	66	1922.23	Cd II	19	1951.500	Pd III	74
1877.186	Ru II	4	1922.443	Pd III	99	1951.93	Au I	2
1877.711	Mo IV	5	1922.522	Pd III	126	1952.141	Sn I	8
1878.50	Sb II	13	1923.28	Sb II	12	1954.039	Pd III	91
1879.094	Pt II	34	1923.95	Pd I	14	1954.440	Mo IV	
1880.064	Pd III	91	1924.77	Ba II	4	1955.516	Sn III	21
1880.326	Pd III	65	1925.30	Ag III	10	1956.892	Pd III	99
1880.36	Ag III	7	1925.472	Pd III	64	1957.04	Mo II	45
1880.547	Pd III	76	*1926.261	Mo IV	5, 5	1957.187	Pd III	113
1881.36	Rh II	32	*1926.770	Pd III	64, 97	1957.62	Ag III	14
1882.56	Sb I	15	1927.08	Sb I	14	1958.45	Mo II	25
1883.051	Pt II	18	1927.623	Ru II	5	1958.472	Au III	67
1883.352	Pd III	65	1927.69	Mo II	45	1960.75	Pd I	9
1883.560	Mo IV		1927.72	Re I	14	1962.14	W II	3
1884.154	Ru II	32	1929.250	Pt II	12	1962.18	Mo II	25
*1885.559	Ru II	49, 90	1929.256	Mo IV	4	1962.285	Ru II	5
1885.834	Pd III	65	1929.55	Pd I	10	1962.530	Mo IV	
1886.49	Cd III	11	1929.677	Pt II	28	1962.861	Pd III	101
1886.795	Mo IV	5	1930.330	Pd III	64	1963.38	Re I	14
1886.978	Pd III	129	1930.511	Mo IV		1965.293	Ru II	68
1887.398	Pd III	65	1930.52	In II	4	1965.54	Cd II	19
1888.045	Ru II	4	1930.717	Ru II	5	1966.076	Ru II	2
1888.7	Ra II	5	1931.090	Pd III	109	1966.082	Mo IV	5
1889.516	Pt II		1932.038	Au III	13	1966.746	Ru II	2
1889.57	Ag III	7	*1932.118	Ru II	89	1966.88	In II	10
1890.41	Pd I	15	1932.273	Mo IV		1966.89	Ag III	9
1891.341	Pd III	100	1933.055	Ru II	4	1967.610	Ru II	5
1891.40	Sn I	9	1934.615	Ru II	4	1968.33	Pd I	18
1892.72	Tl II	8	1935.416	Au III	14	1968.639	Pd III	64
1892.926	Ru II	90	1935.866	Mo IV		1969.212	Mo IV	
1896.441	Ru II	4	1936.25	In II	3	*1969.79	Mo II	45
1897.437	Ru II	4	1937.089	Ru II		1971.092	Mo IV	4
1898.36	Re II	2	1939.056	Ru II	5	1971.452	Sn I	6
1899.890	Sn II	1	1939.521	Ru II	5	1971.752	Pd III	101
1900.83	Re I	14	1939.54	Mo II	46	1972.296	Pd III	90
1901.325	W I	1	1939.800	Pt II	14	1972.575	Pd III	97
1901.94	Pd I	12	1939.911	Ru II	3	1972.6	Ra II	10
1902.83 †	Bi II	3	1940.422	Ru II	67	1972.74	Pd I	8
1903.227	Ru II	5	1940.447	Pd III	76	1973.13 †	Re II	1
1904.16	Ba II	4	1941.332	Pd III	107	1973.623	Mo IV	
1904.721	Pd III	119	1941.346	Ru III	2	1973.93	Pd I	11



## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Vac			Air			Air		
1974.15	Rh II	40	2007.49	Cd II	18	2044.59	Ru III	2
1974.517	Mo IV		2008.08	W II	4	2045.48	Mo II	22
*1974.90	Pd I	10, 16	2009.28	Ru III	2	2045.60	Cd III	20
1975.190	Pd III	118	2009.864	Pd III	128	*2045.98	Mo II	1, 32
1975.354	Pd III	113	2009.92	Re II	17	2046.28	Os II	4
1975.71	Rh II	31	2010.978	Pd III	76	2046.94	Mo II	22
*1975.92	Ag III	10	2011.49	Ag III	10	2047.561	Ru II	2
1976.0	Ra II	1	2011.57	Mo IV	4	2048.03	W II	5
1976.50	Pd I	17	2012.05	Au I	5	2048.28	Os I	9
1976.853	Mo IV		2013.189	Ru II	2	2049.079	Re I	13
1977.03	Ag III	13	2013.831	Pd III	90	2049.111	Ru II	31
1977.17	Mo II	3	2014.226	Pd III	75	2049.38	Pt I	2
1977.204	Mo IV	5	2014.925	Pt II	26	2049.38	Mo I	
1977.45	In II	3	2015.12	Mo II	2	2049.57	Sb I	13
1978.19	Au I	5	2015.89	Ag II	8	2050.48	Po I	5
1978.91	Mo II	25	2016.56	Re I	13	2052.21	Mo II	20
1980.703	Pd III	76	2017.866	Re I	13	2052.929	Hg II	4
1980.882	Pd III	74	2019.55	Pd I	8	2053.27	Pb I	6
1980.939	Pd III	76	2019.82	Pd I	13	2053.670	W II	4
1983.737	Pt II	16	2020.32	Mo II	2	2055.68	Mo II	140
1984.06	Mo II	25	2020.75	Bi III	1	2056.29	Mo IV	4
1986.718	Pd III	134	2020.99	Bi I	3	2056.99	Ag III	9
1986.874	Pd III	125	2021.15	Bi III	1	2059.227	Pd III	74
1986.89	Cd II	22	2022.013	Pd III	75	2059.23	Mo II	21
1987.97	Mo II	3	2022.27	Mo I		2060.29	Mo I	
1988.26	Bi III	6	2023.64	Re II	6	2060.33	Mo II	
1988.426	Pd III	108	2024.18	Ba II	1	2061.03	Mo IV	4
1989.35	Bi II	5	2024.43	Mo IV	4	2061.168	Ag I	1
1989.631	Au III	31	2025.390	Pd III	106	2061.25	Cd III	20
1990.720	Ru II	48	2026.07	W II	4	2061.633	I II	2
*1991.391	Mo IV	5	2026.520	Pd III	64	2061.73	Bi I	1
1992.35	Mo II	3	2026.705	Pd III	100	2062.81	Pt I	7
1993.20	Pd I	7	2026.838	Ru II	2	2063.20	Mo II	17
1993.845	Pd III	122	2026.971	Hg II	4	2063.44	Mo I	
1993.956	Pd III	64	2028.26	Cd II	17	2063.55	Os I	6
1994.32	Ag II	10	2029.90	Rh II	31	2065.57	W II	4
1994.669	Mo IV	5	2029.99	W II	5	2065.67	Mo I	
1995.048	Ru II	68	2030.979	Ru II	88	2065.90	Ag II	9
1995.43	Cd II	16	2032.04	Mo II	21	2066.985	Pd III	128
1995.443	Pd III	91	2032.054	Pd III	100	2067.21	Os II	2
1995.61	Re I	14	2032.333	Pd III	112	2067.36	Mo II	17
1996.550	Pd III	99	2032.44	Cd II	17	2067.52	W II	5
1996.853	Au III	68	2032.776	Pd III	83	2067.53	Pt I	2
1998.812	Pd III	82	2033.78	Re I	17	2067.81	Mo I	
1998.880	Pd III	84	2034.44	Os I	3	2067.89	Re I	17
1998.988	Ru II	3	2035.87	W II	3	2068.20	Mo II	17
*1999.101	Pd III	111, 113	2036.22	Cd II	21	2068.33 †	Sb I	1
1999.54	Ba II	1	2036.461	Pt II	13	*2068.9 ‡	Bi II	4
2000.24	Ag III	10	2037.67	Mo II	32	2069.61	Os I	3
			2038.02	Mo II	32	2069.80	Mo II	66
Air			2038.46	Mo II	2	2069.850	Ag I	1
2000.24	Mo II	24	2038.970	Pd III	105	2069.978	Sn III	12
Vac			2038.99	Re I	13	2070.515	Ru II	88
*2000.553	Pd III	90, 107	2039.204	Re I	13	2070.768	Ru II	2
			2039.43	Ir I	5	2070.96	Pt I	9
Air			2039.626	Ru II	88	2071.193	W II	3
2000.59	Cd III	26	2039.83	Cd III	15	2072.89	Sn I	19
2000.68	Ag II	9	2040.660	Sn I	6	2073.08	Sn I	6
2000.81	Au II	2	2040.802	Pd III	112	2074.31	Mo II	17
2001.516	Pd III	75	2041.45	Mo II	22	2074.546	Pd III	72
2001.70	W II	3	2041.568	Pt II	17	2074.581	Ru II	31
2002.12	Mo II	23	2042.66	Mo II	66	2074.70	Re I	13
2003.532	Re I	13	2043.301	Ru II	66	2075.43	Mo II	20
2003.827	Pd III	74	2044.38	Mo II	22	2075.588	W II	7
2006.58	Tl I	6	2044.54	Au II	4	2076.84	Mo V	
2007.00	Pd I	9						

## FINDING LIST--CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2076.95	Os I	3	2107.6	Ra II	4	2139.45	Mo II	29
2078.325	W II	11	2108.04	Mo II	65	2139.69	Sb I	12
2078.455	Ru II	87	2108.74	Mo II	44	2140.120	Ru II	1
*2079.108	W II	3, 5	2109.23	Mo II	16	2140.98	Mo IV	4
2079.26	In II	3	2109.31	W I	9	2142.237	Mo III	5
2079.967	Ru II	84	2109.65	Pt I	9	2142.44	Mo II	30
2079.97	Os I	3	2109.94	Mo II	43	2142.52	Ta II	5
2079.98	Mo II	17	2110.263	Bi I	4	2142.75 †	Te I	
2080.47	Mo II	20	2110.33	W I		2142.81	La II	
2081.604	Sn IV	16	2110.422	Pd III	104	2142.97	Re I	12
2081.67	Mo II	1	2110.68	Au II	3	*2143.25 ‡	Mo II	3'
2082.09	Au II	2	2111.18	Mo II	15	*2143.251 ‡	Mo III	
2082.55	Pt I	5	2111.60	Cd III	7	2144.22	Pt I	
2082.916	Ru II	86	2111.77	Pb I	11	2144.244	Pt II	1
2083.092	Au III	58	2113.82	Ag II	8	2144.305	Pd III	81
2083.22	Ir I	3	2113.87	Re I	27	2144.408 †	Cd II	1
2083.925	Re I	13	2113.895	Ru II	31	2144.86	Sb I	11
2084.07	Mo II	20	2113.93	Sn I	7	2145.60	Ag II	8
2084.212	Sn IV	16	2114.25	Re II	16	*2145.76	Ag II	19, 29
2084.62	Pt I	7	2114.43	Mo IV	4	2146.43	W I	4
2084.64	Mo II	44	2115.04	Pb I	11	2147.52	Mo II	42
2085.594	Re I	11	2115.10	Mo II	16	2147.995	Pd III	81
2085.74	Ir I	6	2115.44	Mo II	43	2148.003	Hg II	6
2086.77	Mo II	17	2115.569	Pt II	33	2148.22	Ir I	6
2087.10	W I		2116.77	Mo II	31	2148.733	Sn I	6
2087.463	Ru II	31	2117.190	Ru II	31	2149.143	Pd III	72
2087.92	Cd III	14	2117.66	Os I	9	2150.673	Pd III	96
2088.30	Mo II	20	2117.96	Os I	3	2150.931	Pd III	133
2088.41	Pb I	3	2118.887	Pd III	121	2151.92	Tl I	9
2088.82	Ir I	1	2119.21	Rh II	40	2152.07	Pt I	9
2089.53	Mo II	19	2119.71	Mo II	15	2153.54	Pt I	2
2090.477	W I		2120.45	Ag II	10	2154.08	In III	8
2091.07	Rh II	39	2120.53	Mo II	15	2154.42	In III	8
2091.23	Mo II	17	2121.60	W I	4	2154.427	Ru II	66
2092.24	Re I	12	2122.13	Mo II	43	2154.59	Os I	9
2092.53	Mo II	17	2123.302	Pd III	116	2155.062	Cd II	19
2092.54	Mo IV	4	2123.684	Pd III	73	2155.81	Ir I	1
2092.63	Pd I	7	2123.84	Os I	6	2156.673	Re I	12
2093.11	Mo II	19	2124.09	Mo II	15	2156.74	Mo II	42
2095.13	Au II	12	2124.39	Os I	3	2157.08	Os I	6
2095.29	Mo II	19	2125.29	Au II	5	2157.54	Mo I	31
2096.00	Cd II	16	2125.44	Ir I	6	2157.84	Os I	3
2096.18	Hf II	31	2125.50	Ag II	20	2158.05	Ir I	5
2096.39	Sn I	18	2125.92	Mo II	65	2158.373	Ru II	29
2096.55	Mo II	18	2126.46	Mo II	15	2158.53	Os I	9
2097.122	Re I	12	2126.63	Au I	2	2159.085	Au III	13
*2097.60	Os I	10, 14	2127.27	Mo II	43	2159.98	Os I	11
2099.14	Mo II	19	2127.39	Sb I	2	2160.885	W II	
2099.85	W I		2128.122	W I	16	2161.89	Ag III	9
2100.36	Mo II	140	2128.62	Pt I	5	2162.34	Mo I	30
2100.70	Mo II	19	2128.836	Ru II	79	2162.88	Ir I	1
*2100.83	Mo II	18	2129.10	Hf II	38	2162.96	Mo II	41
2101.21	Mo II	44	2129.28	Tl I	10	*2163.54	Mo II	41
2101.538	W I		2130.689	Pt II	25	2163.66	La II	
2102.36	Mo II	140	2131.0	Ra II	9	2163.78	Mo II	13
2103.33	Pt I	7	2131.898	Ru II	85	2163.880	Mo II	10
2103.377	Ru II	79	2132.24	Rh II	76	2164.340	W I	9
2103.43	Mo II	19	2133.06	Mo II	57	2164.480	Ru II	30
2103.508	Pd III	117	2133.39	Mo II	43	2164.49	Os I	14
2104.29	Mo I		2134.01	Mo II	140	2164.85	Os II	4
2105.03	Mo II	19	2134.43	Mo II	41	2164.928	W I	16
2105.394	W I	4	2135.40 ?	Ru II	105	2165.14	Pt I	2
2105.87	Pd I	9	2136.04	Mo II	30	2165.19	Mo II	84
2107.322	Ru II	31	2138.133	W II	5	2165.19	Os I	6
2107.452	Re I	27	2139.29	Mo II	43	2165.80	Mo II	41

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2166.316	W II	4	2185.42	W II	19	2201.736	Ru II	80
2166.51	Ag II	7	2186.300	Cd II	20	2201.93	Os I	10
2166.58	Mo II	39	2186.738	W II	5	2202.09	Ag II	18
*2166.62	Pt I	7	2186.76	Ag II	8	2202.20	Pt I	5
2166.828	Ru II	80	2186.9	Bi II	5	2202.49	Os I	2
2167.668	Mo III	5	2187.794	Cd II	15	2202.577	Pt II	52
2167.938	Re I	12	2187.87	La II	1	2202.71	Rh II	49
2168.59	Tl I	8	2188.04	Mo II	12	2202.856	W I	16
2169.474	W I	13	2188.81	Au II	10	2202.88	Mo I	
2169.9	Ra II	4	2188.96	Mo II	12	2203.5	Pb II	2
*2169.936	W II	2, 3	2188.966	Au III	31	2203.64	Ag II	20
2169.994	Pb I	3	2188.97	Os I	9	2203.837	Ru II	45
2170.572	Mo III	5	*2189.19 §	W II	7	2203.91	Os I	14
2170.75	Au I	8	2189.364	W II	2	2203.986	W II	
2170.87	Ag II	25	2189.40	Mo II	64	2204.482 †	W II	5
2170.94	Mo II	41	2189.494	W II	3	2205.108	Ru II	136
2171.108	Mo III	4	2189.62	Pb I	9	2205.68	Ir I	3
2171.66	Ag II	8	2189.850	W II		2205.95	Ag II	23
2172.200	Au III	66	2190.00	Mo II	40	2206.060	Mo III	5
2172.21	Ir I	4	2190.16	Pt I	5	2206.35	Rh II	28
2172.95	Pd I	7	2190.315	Pt II	32	2206.588	W II	11
2173.550	W II	7	2190.444	Mo III	5	2206.84	Mo II	38
2174.08	Mo II	140	2190.90	Sb II	11	2206.922	W II	9
2174.620	W I	13	2190.91	Rh II	37	2206.97	Tl I	7
2174.713	Ru II	29	2191.109	Mo I		2207.328	Ru II	30
2175.245	Ir I	1	2191.64	Ir I	5	2207.622	Mo III	5
2175.40	Mo II	42	2191.923	Ru II	30	*2208.18 §	Mo II	160
2175.60	Pb I	12	2192.36	W I		*2208.182 §	Mo III	4
2175.81	Sb I	1	*2192.78	Rh II	30, 50	2208.45	Sb I	11
2175.842	W I	9	2192.889	Ru II	30	2208.49	Ag II	23
2176.206	Re I	12	*2193.440	W II	4, 11	2209.067	Ru II	136
2177.08	Rh II	50	*2193.542	W II	8, 14	2209.08	Ru I	32
2177.3	Ra II	10	2194.39	Os II	2	2209.56	Mo II	29
2177.33	Bi I	3	2194.428	Ru I	30	2209.650	Sn I	7
*2177.546	W II	6, 17	2194.494	Sn I	7	2209.653	Cd II	19
2177.85	Re II	19	2194.515	W II	1	2210.71	Tl I	6
2178.171	Ir I	1	2194.557	Cd II	7	*2211.013	Mo III	5, 5
2178.29	Pd I	6	*2194.94	Mo II	14, 39	2211.325	Ru II	28
2178.474	W I	13	2194.970	Ru II	45	2211.39	Mo II	39
2179.19	Sb I	12	2195.744	Ir I	2	2211.96	Os I	9
*2179.366 §	Mo III	5	2196.05	Ta II	4	2212.170	W I	
2179.764	W I	16	2196.26	Mo I		2212.79	Rh II	29
2180.063	Ru II	80	2197.080	W I		2212.809	Pd III	81
2180.48	Mo I	31	2197.27	Mo II	13	2213.26	Mo II	39
2180.49	Pt I	5	2197.412	Pd III	72	2213.55	Bi III	6
2181.254	Ru II	83	2197.48	Mo II	64	2214.0	Bi II	4
2181.36	Mo II	41	2197.8	Ra II	8	2214.16	Os I	14
2181.622	Ru II	79	*2198.15	Mo II	37	2214.26	Mo II	39
2181.77	Re II	11	2198.367	W I		2214.26	Re I	1
2182.081	Ru II	45	2198.676	W II	8	2214.340	W I	26
2182.225	W II	3	2198.79	Rh II	50	2214.39	Mo II	159
2182.72	Ta II	2	2198.854	Ir I	5	2214.46	Hg III	4
2182.76	Mo II	63	2198.914	Re I	12	2214.7	Ba II	3
2182.76	Pt I	7	2198.915	W I	9	2214.76	Os II	7
2182.90	W I	16	2199.165	Ru II	80	2214.830	W I	13
2183.72	Re I	27	2199.300	W I	13	2214.964	Sn III	17
2184.077	Mo I		2199.337	Sn I	5	2215.626	Au II	8
2184.108	Au III	13	2199.52	In III	12	2216.023	W II	3
2184.36	Mo II	29	2199.96	Rh II	29	2216.031	Ir I	1
2184.46	Mo II	39	*2200.25	Mo II	29, 121	2216.08	La III	1
2184.536	Ru II	1	*2200.99	Mo II	40, 124	2216.60	Mo II	144
*2184.59	Mo II	41	2201.02	Rh II	28	2217.33	Pt I	11
*2184.68	Os I	3, 14	2201.32	Sb I	33	2217.52	Mo II	37
2184.73	Mo II	29	*2201.32	Au II	3, 4	2218.110	W II	
2184.89	Mo II	39	2201.504	W I	4	2218.552	Ru II	30

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2220.26	Mo I		2234.91	Pt I	2	2254.45	Ru II	28
2220.373	Ir I	5	2235.289	Ir I	4	2254.58	Cs II	13
2220.73	Sb I	10	2235.37	W II		2254.71	Ru I	24
2220.879	Sn IV	8	2235.440	Re I	10	2254.73	Ba II	3
2220.938	W II	10	2235.64	W II	5	2255.101	Ir I	5
2220.99	Mo II	28	2235.68	Mo II		2255.25	Rh II	48
2221.42	Rh II	82	2235.750	Ir I	5	2255.290	Mo II	83
2221.63	Mo II	39	2235.80	Re II	6	2255.53	Ru I	20
*2221.97	Rh II	56, 61	2235.836	Ru I	30	*2255.729	Re I	17, 17
2221.98	Sb I	31	2236.04	Mo II	14	2255.810	Ir I	3
2222.60	Pt I	9	2237.06	W II	20	2255.847	Os II	1
2223.188	Mo III	5	2237.443	Pb I	8	2256.07	Ru II	28
2223.574	W I	13	2237.71	Rh II	28	2256.187	Ru I	29
2223.85	Os I	6	2237.73	Ru II	196	2256.193	Re I	10
2223.924	Mo I		2237.82	Tl I	5	2256.25	Ru II	60
2224.64	Mo II	14	2237.864	Mo I		2256.67	Ru II	134
2224.710	Hg II	8	2238.35	Ru I	14	2256.77	La II	2
2224.93	Sb I	9	2238.42	Mo II	37	2256.85	W II	13
2225.27	Os II	6	2238.603	Re I	21	2256.982	Mo II	133
2225.437	Mo I	2	2238.818	Ir I	1	*2257.12	Ru II	135, 171
2225.44	Os I	2	2239.42	Mo II	63	2257.24	Rh II	27
2225.544	W I	9	2239.86	Cd I	12	2257.82	Cs II	7
2225.882	W II	1	2240.164	Au II	12	2258.27	Rh II	37
2226.02	Ag II	19	2240.993	Pt II	47	2258.856	Ir I	2
2226.06	Mo II	63	2241.075	Ru I	20	2259.529	Ru I	19
2226.418	Re I	10	2241.080	W II	11	2260.03	Ru II	78
2226.55	Rh II	30	2241.191	Mo III	5	2260.07	Mo II	13
2226.56	W II	5	2241.282	W I	23	2260.10	W I	4
2226.77	W II		2241.62	Os I	6	2260.260	Hg II	7
2226.83	Os I	2	2242.10	Os I	20	2261.26	In III	12
2226.927	Mo III	5	2243.23	Ru I	26	2261.78	Ru II	153
2227.640	Ru I	28	2243.27	Ru II	28	2261.981	Mo II	133
2227.85	Ta II	3	2243.44	Ag II	34	2262.07	Mo I	
2227.98	W I	13	2244.375	Hg III	5	2262.253	Hg II	4
*2227.98 §	Os I	2	2244.93	Pt I	9	2262.51	Sb I	30
*2227.98 §	Os II	3	2245.19	W II	4	2263.43	Rh II	28
2228.240	Bi I	1	2245.518	Pt II	13	2263.51	Ru II	44
2228.88	W II		2245.61	Ba II	3	2263.53	W II	21
2228.880	Au II	11	2245.95	Mo I		2263.620	Au II	14
2229.127	Sn IV	8	2246.048	Sn I	4	2263.880	W I	9
2229.196	W I	9	2246.139	Mo I		2264.178	W II	21
2229.284	Ru II	45	2246.14	Ag II	22	2264.33	Pd II	15
2229.53	Ag II	16	2246.38	Rh II	46	2264.393	Re I	10
2229.620	W II	2	2246.43 †	Ag II	7	2264.607	Ir I	5
2230.07	Mo II		2246.77	W I		2264.696	Ru I	26
2230.542	Mo III	4	*2246.894	Pb I	8, 10	2265.018	Cd II	1
2230.626	Bi I	2	2246.980	Mo II	83	2265.338	W II	17
2230.734	W I		2248.270	W II	4	2266.12	W II	4
2231.08	Mo II	109	2248.560	Au II	14	2266.224	Mo II	37
2231.080	W II	20	2248.74	Ag II	8	2266.25	W II	12
2231.18	Au II	11	*2248.750 §	W II	1	2266.26	In III	12
2231.230	W II		2249.890	W II		2266.331	Ir I	2
2231.49	Mo II	12	2249.934	Mo I		2267.46	Cd I	12
2231.59	Pd II	15	2250.730	W II	3	2267.61	Cs II	14
2231.657	Ir I	3	*2251.14 §	W II	4	2268.14	Ru II	43
2231.725	Sn I	6	2251.523	Pt II	45	2268.28	Os I	9
2232.08	Ru I	30	2251.918	Pt II	46	2268.34	Ru I	31
2232.18	In III	11	2252.780	Hg II	8	2268.913	Sn I	3
2232.248	Ir I	2	2253.182	Mo III	4	*2269.708 §	Mo II	11
2232.44	Mo II	12	2253.45	Ag II	22	*2269.708 §	Mo III	4
2232.471	Ir I	3	2253.65	Ru I	25	2270.17	Os I	9
2232.778	Mo I		2253.910	W I	1	*2270.232	W II	2, 10
2232.98	Rh II	49	2253.947	Pb I	10	2270.322	Ru I	30
2233.110	Pt II	52	2254.146	Mo II	13	2271.300	Re I	24
2234.61	Os I	9	2254.28	Pd I	5	2271.718	Pt II	50

## FINDING LIST--CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2272.091	Ru I	18	2294.486	Re I	6	2312.766	Cd II	7
2272.347	Mo III	4	2294.494	W I	16	2313.154	Mo II	56
2273.240	Mo II		2294.55	W II	4	2313.170	W I	1
2273.83	Cs II	15	2294.66	Rh II	37	2313.37	Ru II	44
2274.618	Re I	10	2294.970	Mo III	3	2313.75	Os II	4
2275.00	Ru II	43	2295.084	Ir I	3	2314.02	Ru II	104
2275.25	Re II	1	2295.09	Ru II	181	2314.174	W I	16
2275.32	Ag II	23	2295.314	Mo III	4	2314.551	Au II	13
2276.14	Ru II	43	*2296.18	Ru II	104, 104	2314.78	Ru II	104
2276.198	Mo II	133	2296.09	Ir I	5	2315.022	W II	3
2276.20	Rh II	37	2296.53 †	Pd II	14	2315.16	Os II	8
2276.43	Ru II	44	2296.926	Re I	24	2315.378	Ir I	1
2276.43	Os I	11	2297.75	La III	1	2315.89	Sb I	32
2276.578	Bi I	2	2297.97	Ru II	104	*2315.90	Ru II	44, 170
2276.89	Rh II	47	2298.04	Tl II	8	2315.90	Tl I	4
2277.16	Hf II	6	2298.080	Tc II	2	2315.956	Re I	28
2277.24	Rh II	56	*2298.26	Rh II	38, 49	2317.05	Ag II	7
2277.43	Ag II	20	2298.45	Ru II	104	2317.23	Sn I	17
2277.518	Au II	12	2298.63	Ru II	43	2317.784	Ru I	20
2277.583	W I	1	2299.289	Ru I	19	2317.82	La II	17
2278.108	W II	7	2299.526	Ir I	6	2317.914	Mo III	4
2278.196	In I	7	2300.499	Ir I	2	2318.46	Ru II	153
2278.198	Ru I	19	2300.90	In III	11	2318.905	Ru I	23
2278.44	Os I	2	2301.642	W II	12	2319.19	Re I	29
2279.496	Mo I		2301.88	Os I	9	2319.28	Ru II	133
2279.584	Ru I		2302.533	Ru I	20	2319.44	La II	3
2280.03	Ag II	15	*2302.992	Re I	8, 9	2320.090	Mo II	143
2281.620	Re I	8	2303.47	Rh II	27	2320.162	Re I	29
2281.72	Ru II	43	2303.819	W II	2	2320.23	Ru I	19
2281.907	Ir I	7	2304.215	Ir I	5	2320.29	Ag II	14
2282.202	W II	21	2304.248	Ba II	2	2320.699	Ru I	19
2282.26	Os II	1	*2304.261 §	Mo II	132	2321.074	Cd II	7
2282.87	Rh II	29	*2304.262 §	Mo III	4	2321.629	W I	9
*2283.02	Ru II	209	2304.32	Mo I		*2321.66	Ru II	27, 44
2283.300	Au II	5	2304.38	Os I	14	2321.86	Rh II	48
2283.67	Os I	6	*2304.63 §	Ru II	44	2322.009	Ru I	19
2284.07	Rh II	81	*2304.630 §	Ru III	4	2322.267	Au III	30
2285.00	Rh II	56	2304.689	Au II	13	2322.48	Hf II	5
2285.17	W I	16	2304.82	Ru II	43	2322.490	Re I	9
2285.382	Ru I	16	2305.466	Ir I	3	2322.57	Ru II	153
2285.451	Tc II	2	2305.517	Ru I	19	2322.58	Rh I	9
2286.517	Os I	20	*2305.61	Ru II	44, 104	2322.83	Ru II	82
2286.681	Sn I	5	2305.673	Mo II	35	2323.26	Hf II	14
2287.05	Ru III	4	*2305.95	Rh II	74	2323.931	Mo III	4
2287.499	Pt II	49	2306.049	In II	1	2323.96	Mo II	121
2287.506	Re I	6	*2306.46	Sb I	28, 33	2324.24	Os I	2
2287.695	Ru I	19	2306.540	Re I	8	2324.68	Ag II	7
2288.018 †	Cd I	1	2306.593	W I	13	2324.86	Rh II	88
2288.197	Pt II	13	2306.61	Cd I	12	2324.876	Mo II	56
2288.24	Rh II	49	2306.918	W II	13	2324.89	Hf II	14
2288.80	Ru II	44	2306.990	Mo II	11	2325.12	Ag II	22
2288.98	Sb I	10	2307.994	Mo II	11	2325.65	Os II	6
2289.890	Mo II	28	2308.63	Ru II	170	2325.75	La II	10
2290.04	Rh II	28	2309.018	W I	16	2325.952	Ru I	19
2290.110	Cd II	17	2309.14	Ru II	28	2326.091	W II	5
*2290.311	Mo II	28, 36	2309.38	Ru II	209	2326.564	W I	16
2290.870	Mo II	56	2309.40	Os I	20	2326.698	W I	9
2291.400	Au II	9	2309.485	Mo II	132	2327.67	Rh II	68
2291.82	Ru II	43	2309.52	Ru II	101	2328.16	Ru II	193
2292.333	Ru I	20	2309.56	Ag I	12	2328.314	W II	2
2293.044	Ru I	15	2310.957	Pt II	12	2328.33	Ru II	101
2293.44	Sb I	9	2311.47	Sb I	1	2328.664	Re I	16
2293.54	Os II	8	2312.01	Ru II	170	*2329.02	Ru II	27
2294.054	Ru I	73	2312.60	Ag I	11	2329.27	Cd I	12
*2294.12	Rh II	47	*2312.65	Rh II	47, 75	2329.708	Mo II	81

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2330.14	Ru II	27	2349.391	Re I	26	2369.83	Ru II	151
2330.929	Mo III	3	2349.69	Rh II	69	2370.169	Ru I	22
2331.06	Ru III	4	2350.120	Mo II	81	2370.250	Mo II	62
2331.292	W I	18	2350.242	Os II	4	2370.410	Mo II	35
2331.40	Ag II	6	2350.35	Rh II	29	*2370.699	Os I	5, 10
2331.43	Ru I	20	2350.53	Ru II	153	2370.76	Re II	6
2331.770	Ru I	27	2351.21	Hf II	4	2371.188	Os I	16
2332.00	Ta II	5	2351.33	Ru I	20	2371.500	Re I	16
2332.131	Mo II	11	2351.579	Os I	20	2371.58	Mo II	81
2332.445	Pb I	9	2351.732	Os I	17	*2371.84	Ru II	152
2333.298	Ir I	3	2352.069	Re I	16	2371.91	Ru II	102
2333.30	Rh II	27	2352.44	Rh II	27	*2372.642	Mo II	59
2333.57	Ru II	27	2352.58	Au I	5	2372.774	Ir I	1
2333.770	W II	2	2353.006	Os I	16	2372.921	Os I	8
2333.839	Ir I	2	2353.95	Re I	26	2373.67	Sb I	30
2333.89	Ru II	42	2354.08	Re I	27	*2373.96	Ru II	98, 131
2334.33	Re I	16	*2354.186	Mo II	11	2374.154	W I	
2334.505	Ir I	2	2354.238	Hg III	5	2374.337	Os I	5
2334.77 †	Rh II	27	*2354.24	Ru II	60, 195	2374.454	W II	18
2334.80	Sn I	4	2354.837	Sn I	4	2374.468	W I	12
2334.96	Ru II	43	2355.022	Mo II	28	2374.527	Os I	22
2335.269	Ba II	2	2355.284	Os II	3	2374.900	Mo II	60
2335.730	Re I	21	2355.309	Mo II	62	2375.02	Ag I	10
2335.738	Ru I	22	2355.460	Mo II	28	2375.073	Re I	23
2335.88	Ru II	103	2355.63	Ru II	103	2375.272	Ru I	20
2336.38	Ru II	103	2355.97	Ru II	132	2375.63	Ru II	42
2336.803	Os II	2	2356.496	Re I	21	2375.815	Re I	26
2336.83	Ru II		2356.552	Ir I	3	2376.23	Ru II	216
*2336.81	Rh II	57, 87	2357.09	Pt I	4	2376.28	Au I	4
2337.432	Mo II	11	2357.267	Os I	16	2376.820	Cd II	16
2337.84	Ru II	44	2357.92	Ru II	42	2377.03	Os I	14
2337.953	Re I	21	2357.92	Ag II	6	2377.275	Ir I	6
2338.482	Mo II	11	2358.165	Ir I	4	2377.276	Pt II	12
2338.650	Os I	2	2358.79	Ru II	42	2377.618	Os I	17
2338.74	Ru II	169	2358.87	Ag II	31	*2377.983	Ir I	6
2339.10	Ru II	60	2359.10	Ru II	103	2378.151	Os I	10
2339.160	W II	12	2359.18	Rh II	57	2378.316	Hg I	12
2339.92	Ru II	169	2359.755	Mo III	3	2378.746	Os I	18
2340.063	Au II	13	2360.093	Ru I	19	2379.379	Ir I	4
2340.199	In I	6	2360.61	Ru II	192	2379.38	La III	1
2340.41	Mo II	61	2360.730	Ir I	7	2379.393	Os I	13
2340.51	Ru II	102	2361.92	Rh I	6	2379.58	Tl I	3
2340.696	Ru I	20	2361.96	Rh II	60	2379.60	Ru II	100
*2341.06	Ru II	27, 153	2362.20	Ag II	27	2379.84	Ru II	27
2341.368	W II	4	*2362.411	Os I	2, 11	2380.008	Mo II	35
2341.57	Mo II	11	2362.771	Os I	2	2380.30	Hf II	14
2341.949	Os I	17	2363.042	Ir I	2	2380.72	Sn I	3
2342.02	Ru I	19	2364.01	Ag II	28	2380.823	Os I	8
2342.72	Ru I	16	2364.23	Ru II	132	2381.136	Mo III	3
2342.85	Ru II	42	2364.26	Ta II	5	2381.136	Re I	21
2343.176	Ir I	3	2364.67	Rh II	26	2381.14	Mo II	117
2343.43	Ru II	169	2365.666	Re I	16	2381.14	Ta II	3
2344.46	Ru II	132	2365.90	Re I	8	2381.480	Mo II	82
2344.84	Ru II	27	2366.105	Mo II	28	2381.55	Ta II	33
2344.89	Rh II	27	2366.743	Ru I	123	2381.622	Ir I	2
2345.282	Re I	18	2366.88	Rh II	46	2381.99	Ru II	42
2345.770	Os I	6	2367.028	Mo II	81	2382.403	Au III	45
2346.38	Ru II	27	2367.22	Ru II	153	2382.479	Os I	17
2346.43	Rh II	68	2367.354	Os II	3	2382.89	Rh I	5
2347.44	Hf II	14	2367.683	Re I	27	2382.990	W I	16
2347.592	Ba II	2	2368.1	Bi II	4	2383.17	Ag II	18
2347.802	Mo II	56	2368.28	Pt I	9	2383.371	Mo II	80
2348.832	Mo II	11	2369.255	Os I	16	2383.42	Ru II	27
2349.005	Mo II	81	*2369.27	Re I	21, 23	2383.59	Rh II	68
2349.338	Ru I	16	2369.73	Ra II	9	2383.64	Sb I	29

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2384.632	Os I	8	2399.1.5	In I	7	2414.6	Bi III	5
2384.824	W I	15	2399.597	Pb I	8	2414.82	Ru II	42
2385.45	Rh II	26	2399.64	La II	9	2415.005	Ru I	124
2386.07	Mo II	82	2399.750	Ru I	121	2415.20	Ru II	100
2386.892	Ir I	2	2400.62 †	Ta II	5	2415.685	W I	4
2386.90	Re II	12	2400.71	Rh II	27	2415.72	Ru II	100
*2386.962 ‡	Mo III	3	2400.80	Hf II	6	2415.84	Rh II	27
*2386.96 ‡	Mo II	96	2401.02	Ru II	128	2416.182	Mo II	88
2387.09	Ta II	4	2401.127	Os I	16	2416.96	Ru II	129
2387.292	Os I	2	2401.940	Mo II	28	2417.367	Mo II	117
2387.75	Au I	4	2401.949	Pb I	5	2417.41	Rh II	45
2387.819	Mo II	59	2402.706	Au III	44	2417.69	Hf II	4
2387.881	Ru I	73	2402.72 †	Ru II	41	2417.964	Mo II	35
2388.23	Ru II	127	2403.10	Pt I	8	2418.106	Ir I	6
2388.703	Mo II	126	2403.173	Ru I	67	2418.694	Cd II	15
2388.802	Pb I	8	2403.428	Mo II	81	2418.72	Pd II	20
2389.110	Re I	8	*2403.60 ‡	Mo II	79	2418.96	Ru II	167
2389.250	Mo II	77	*2403.605 ‡	Mo III	3	*2419.011	Mo II	78, 88
2389.556	In I	5	2403.853	Os I	16	2419.205	Ru I	65
2390.09	Ru II	151	2404.56	Hf II	23	2419.404	Re I	24
2390.102	Mo II	60	2404.65	La II	25	2419.807	Re I	7
2390.32	Ru II	215	2404.680	Mo II	95	2420.11	Ag II	38
2390.371	W II	6	2405.00	Ag II	26	2420.18	Rh II	51
2390.58	Ag II	28	2405.056	Re I	21	2420.180	Mo II	80
2390.617	Ir I	5	2405.118	Au III	46	2420.245	Mo I	36
2390.783	Mo II		2405.180	Ru I	66	2420.826	Ru I	
2390.890	W II	8	2405.22	Rh II	26	2420.990	W II	9
2391.10	Ru II	152	2405.42	Hf II	14	2421.00	Rh II	27
2391.178	Ir I	5	2405.580	W I	4	2421.697	Sn I	15
2391.278	Re I	16	2405.602	Re I	7	*2421.730	Re I	26, 26
2391.743	Mo II	81	2405.689	W I	12	2421.85	Ta II	13
2391.77	Ru II	102	2406.06	Ru II	100	2422.13	Sb I	28
2391.770	Os II	9	2407.151	Mo II	54	*2422.183 ‡	Mo III	3
2392.327	Mo II	142	2407.31	Ru II	99	*2422.185 ‡	Mo II	108
2392.425	Ru I	22	2407.884	Rh I	10	2422.574 ‡	Ru I	126
2392.43	Rh II	93	2407.92	Ru II	42	2422.84	Ru II	177
2392.86	Cs II	11	2408.15	Sn I	16	2423.071	Os II	5
2392.932	W II	4	2408.186	Rh I	9	2423.720	Mo II	95
2392.963	Ru I	127	2408.290	Ru I	214	2423.877	Ru I	64
2393.249	Ru I	16	2408.337	Mo II	80	2423.988	Mo II	76
2393.36	Hf II	14	2408.44	Ru II	127	2424.024	Os II	8
2393.645	Re I	27	2408.73	Rh II	67	2424.206	W I	12
2393.792	Pb I	7	2409.68	Ru II	151	2424.43	Rh II	26
2393.83	Hf II	2	2410.13	Hf II	15	2424.49	Pd II	13
2393.84	Ru II	98	2410.15	Ru II	99	2424.56	Ru II	128
2393.866	Os I	16	2410.37	Re I	16	2424.871	Pt II	13
2394.292	Os I	17	2410.69	Rh II	47	2424.970	Os I	1
2394.326	Ir I	3	2411.272	Mo II	55	2425.98	Hf II	21
2394.37	Re I	16	2411.41	Ag II	8	2426.35	Sb I	26
2395.22	Sb I	27	2411.51	Ru II	127	2426.59	Ru II	181
2395.476	W I		2411.59	Ag II	29	2426.87	Pd II	13
2395.69	Ag III	12	2411.733	Pb I	7	2427.09	Rh II	27
2395.721	Ru I	21	2411.836	Mo II	79	2427.289	Mo II	93
2396.020	Mo II	55	2411.94	Rh II	60	2427.493	W II	3
2396.260	Mo II	108	2412.708	Mo III	3	2427.613	Ir I	4
2396.55	Rh II	56	2412.837	Mo II	54	2427.64	Ta I	21
2396.71	Ru II	41	*2413.017	Mo II	28, 79	2427.685	Rh I	11
2396.784	Os I	18	2413.23	Ag II	7	2427.75	Ru II	99
2396.791	Re I	16	2413.310	Ir I	4	2427.900	Os II	8
*2396.97	Ru II	131	2413.34	Hf II	30	2427.95 †	Au I	1
2397.097	W II	3	2413.40	Ru II	168	2428.576	Re I	8
2397.31	Re I	18	2413.92	Ru II	129	2429.390	Mo II	60
2397.49	Ru II	127	2414.039	W I	9	2429.488	Sn I	4
2397.60	Ru II	41	2414.517	Os I	8	2429.516	Rh I	12
2398.200	Os I	22	2414.587	Re I	24	2429.594	Ru I	123

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2429.65	Ag II	28	2444.828	Ru I	161	2460.079	In I	4
2429.95	Rh II	54	2444.943	Re I	16	2460.160	W I	15
2430.272	Mo II	78	2445.43	Ru I	62	2460.18	Ru II	123
2430.40	Ru II	215	2445.51	Sb I	8	2460.49	Hf II	4
2430.80	Rh II	47	2445.56	La II		2460.55	Ra II	8
2430.94	Pd II	14	2446.17	Pd II	13	2460.59	Ru II	149
*2430.94	Ru II	127, 168	2446.188	Pb I	6	2460.73	Ru I	111
*2431.193	Os I	13, 24	2446.394	W II	6	2461.03	Rh II	26
2431.241	Ir I	1	2447.25	Hf II	6	2461.196	Re I	21
2431.51	Ru I	116	2447.439	Ru I	126	2461.417	Os I	13
*2431.607	Os I	17, 18	2447.85	Rh II	56	2461.805	Mo II	95
*2431.85	Rh II	27, 79	2447.93	Ag II	12	2462.26	Ag II	23
2431.938	Ir I	4	2447.95	Pd I	3	*2462.482	Mo II	53
2432.16	Ru II	151	2448.29	Rh II	26	2462.65	Ru II	149
2432.18	Re I	21	2448.390	W I	18	2462.69	Rh I	25
2432.71	Ta II	5	2448.835	Rh I	7	2462.793	W I	3
2432.915	Ru I	63	2448.98	Sn II	10	2462.943	Ru I	122
2433.11	Pd II	22	2449.03	Re II	15	2463.44	Rh II	55
2433.467	Sn I	4	2449.038	Rh I	30	2463.83	Ta II	17
2433.477	Ru I	71	2449.43	Hf II	15	2463.94	Hf II	23
2433.56	Hf II	33	2449.58	Ru II	223	2464.057	Hg I	9
2433.58	Ru II	191	2449.710	Re I	5	2464.19	Hf II	14
2433.970	Mo II	87	2450.11 †	Po I	2	2464.305	W I	8
2433.982	W I	12	2450.359	Ru I	17	2464.366	Ru I	121
2434.879	Ru I	70	2450.560	Ru I	60	2464.616	W II	8
2434.98	Ru II	99	2450.738	Os I	16	2464.699	Ru I	159
2435.32	Pd II	20	2450.88	Ru II	177	2464.76	Ru II	129
2435.51	Ru II	99	2451.23	Ru II	129	*2465.00	Ru II	190
2435.941	Mo II	55	*2451.468 §	W II	2	2465.879	Mo II	74
2435.957	W I	12	*2451.484 §	W I	3	2466.15	Rh II	86
2436.42	La II	25	2451.726	Os I	8	*2466.522	W II	2, 7
2436.55	Ru II	41	2451.83	Tl II	19	2466.671	Mo II	52
2436.69	Pt I	4	2451.996	W I	1	2466.848	W I	8
2436.86	Rh II	45	2452.73	La II	25	2466.971	Mo II	35
2437.14	La II	25	2452.807	Ir I	5	2467.302	Ir I	4
2437.43	Mo I		2453.143	Mo II	94	2467.350	Mo II	59
2437.688	Mo III	3	2453.31	Ag II	27	2467.42	Pt I	1
2437.790	Ru I	74	*2453.798	Mo II	87	2467.57	Re II	6
2437.81	Ag II	6	2453.82	Ru II	167	2467.576	Ru I	68
2438.02	La II	16	2454.926	Ru I	160	2468.023	In I	6
2438.356	Mo II	77	2454.978	W I	12	2468.42	Ta II	30
2438.42	La II	25	2455.235	Sn I	4	2468.790	Mo II	75
2438.574	Mo II	97	2455.506	W I	15	2468.898	Os II	6
2438.69	Te II	3	2455.53	Ru II	41	2469.03	Tl II	19
2439.69	Ru II		2455.609	Ir I	1	2469.17	Hf II	24
2440.05	Mo II	87	2455.71	Rh II	26	2469.25	Ru II	150
2440.08	Pt I	2	2455.83	Re II	5	2469.29	Pd II	21
2440.265	Mo II	35	2455.88	La II	11	2469.36	Re II	12
2440.335	Rh I	8	2456.18	Rh II	26	2469.733	Cd II	14
2440.80	Ru II	129	2456.279	Ru I	125	2469.77	Ru II	178
2441.47	Re I	7	2456.44	Ru II	42	2470.043	Mo II	75
2441.61	Ru II	130	2456.462	Os I	8	2470.06	Pd II	21
*2442.510	Re I	24, 30	2456.534	W I	9	2470.391	Rh I	25
2442.934	Ru I	115	2456.57	Ru II	41	2470.51	Ru II	41
2443.188	Mo II	77	2457.19	Ru II	124	2470.71	Ru I	119
2443.30	Ru II	129	2457.29	Pd II	14	2470.90	Ta II	5
*2443.69	Rh II	45, 58	2457.76	Pd II	19	2471.05	Ru II	166
2443.840	Pb I	6	2457.771	Mo II	116	2471.06	La II	25
2444.056	W I	4	2458.564	W II	12	2471.18	Pd II	19
2444.06	Rh II	86	2458.622	Ru I	112	2471.472	Rh I	10
2444.22	Ag II	37	2458.655	Mo II	52	2471.48	Ru I	157
2444.38	Ru I	124	*2458.90	Rh II	26	2471.89	Rh II	92
2444.482	Mo II	96	2459.300	W I	8	2471.90	La II	4
2444.735	Mo II	59	2459.762	Mo II	125	2471.962	Mo I	7
2444.74	Rh II	45	2459.876	W II	18	2472.09	Ru I	10



## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2472.44	La II	14	2483.96	Ru II	94	2500.835	Ru I	120
2472.506	W I	12	2483.97	Po I	3	2501.18	La II	22
2472.83	Ru II	177	2484.741	W I	18	2501.48	Ru I	119
2473.086	Rh I	5	2484.752	Mo II	75	2501.721	Re I	23
2473.84	Ag II	13	2485.82	Rh II	66	2501.885	Ru I	70
2473.90	Hf II	23	2486.244	Os II	2	2501.95	Ru II	126
2474.029	Ru I	163	2486.52	Pd II	14	2501.99	Ta II	12
2474.149	W I	15	2486.99	Sn II	10	2502.216	Mo II	141
*2474.703	Mo I	8, 35	*2487.15	Pt I	4	*2502.30	Ru II	176, 177
2474.76	Ru II	177	2487.331	Re I	21	2502.35	Re II	14
2474.846	Ru I	13	2487.495	W I	12	2502.37	Ru I	52
2475.122	Ir I	1	2487.59	La II	11	2502.46	Rh I	7
2475.32	Ta II	31	2488.120	W II	19	2502.983	Ir I	1
2475.395	Ru I	110	2488.29	Rh II	26	2503.594	Mo II	
2475.50	Ra II	7	2488.548	Os I	13	2503.85	Rh II	25
2475.63	Rh II	53	2488.57	Ru II	126	2504.45	Ta I	26
2475.89	Xe II		2488.780	W II	6	2504.51	Ru I	11
2476.32	Ru I	162	2488.92	Pd II	13	2504.698	W I	3
2476.379	Pb I	4	2489.231	W II	4	2505.12	Rh II	25
2476.43	Pd I	2	2489.280	Os II	10	2505.642	Mo II	51
2476.69	Ta II	6	2489.34	Ru II	201	2505.673	Rh I	8
2476.72	La III	3	2489.720	W I	8	2505.73	Pd II	18
2476.836	Os I	1	2489.77	Ru I	107	2506.048	W II	
2476.869	Ru I	156	2489.92	Ru I	54	2506.25	Ru II	148
2477.17	Ru II	127	2490.018	Mo II	86	2506.42	Ru II	176
2477.25	Ag II	17	2490.56	Po I	6	2506.63	Ag II	6
2477.26	Ru II	177	2490.79	Rh II	25	2506.684	Mo II	125
*2477.570	Mo II	75, 125	*2491.08	Ru II	150	2507.00	Ru II	41
2477.796	W II	5	*2491.10	Ru II	97	2507.45	Ta I	22
2478.008	Mo II	93	2491.56	Ru II	176	2508.270	Ru I	104
2478.32	Sb I	25	2491.76	Ru I	72	2508.67	Ru II	202
2478.55	Hf II	33	2491.88	Rh II	65	2508.991	Re I	6
2478.672	Mo II	87	2492.299	Rh I	23	2509.148	Mo II	150
2478.8	La III	4	2492.928	W II	10	2509.697	Rh I	7
2478.93	Ru II	41	2493.68	Ru II	94	2509.708	Os II	11
2479.239	Mo II	116	2494.022	Ru I	121	2509.936	Os I	18
2479.75	Mo II	75	2494.48	Ru II	41	2510.13	Ru I	158
2479.85	La II	12	2494.682	Mo II	51	2510.54	Sb I	7
2480.11	Ra II	3	2495.264	W I	3	2510.65	Rh II	25
2480.130	W I	3	2495.584	Cd II	15	2510.965	Ru I	177
2480.193	Mo II	73	2495.69	Ru II	125	2511.29	Mo II	
2480.298	Ru I	108	2495.704	Sn I	14	2512.69	Hf II	13
2480.41	Ag II	26	2496.280	Mo II	51	2512.81	Ru I	65
2480.44	Sb I	24	2496.520	Mo II	74	2512.873	Os I	16
2480.81	Ru II	97	2496.56	Ru I	106	2513.02	Hf II	11
2480.955	W I	3	*2496.648§	W II	4	2513.12	Mo II	124
2481.11	Ru II	149	2496.767	Tc II	3	2513.246	Os I	13
2481.183	Ir I	1	2496.99	Hf II	11	2513.32	Ru II	41
2481.440	W I	15	2497.020	Mo II	131	2513.435	W II	15
2481.546	W II	19	2497.371	Mo II	75	2513.950	Mo II	75
2481.85	Ru II	124	2497.480	W II	5	2514.45	Ru I	12
2481.87	Ta II	16	2497.680	Ru I	66	2514.603	Mo I	28
2481.996	Hg I	12	2497.80	Mo II	74	2515.044	Os I	13
2482.075	Mo II	76	2497.866	Ru I	116	2515.101	Mo II	58
2482.212	W I	18	2498.088	Mo II	116	*2515.27	Ru I	152
2482.566	Mo II	75	*2498.280	Mo II	27, 93	2515.32	Rh II	65
2482.710	Hg I	12	2498.41	Ru II	41	*2515.324	W II	8
2482.73	Rh II	54	2498.58	Ru II	41	2515.49	Hf II	22
2482.78	Ru II	177	2498.81	Pd II	18	2515.746	Rh I	24
2483.333	Rh I	3	2499.263	Mo II	58	2516.092	Mo II	58
2483.34	Hf II	13	2499.692	W II	6	2516.120	Re I	21
2483.383	Mo II	107	2499.81	Cd III	14	2516.71	Ru II	201
2483.392	Sn I	3	2500.14	Ru II	202	2516.88	Hf II	5
2483.815	Hg I	11	2500.425	Mo II	124	2517.32	Ru II	41
2483.920	Re I	21	2500.74	Hf II	30	2517.51	Rh II	63

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2517.62	Ru I	118	2533.131	Ir I	7	2546.034	Ir I	6
2518.144	W II	12	2533.14	La II	4	2546.14	Ru I	99
2518.41	Ru II	202	*2533.23	Ru I	60, 93	2546.40	La II	24
2518.43	Mo II	141	2533.310	Re I	18	2546.549	Sn I	2
2518.53	Mo II	92	2533.519	Au II	15	2546.668	Ru I	60
2518.70	Cd I	11	2533.590	Mo II	71	2547.136	W I	8
2518.700	Mo II	107	2533.635	W I	3	2547.205	Ir I	2
2519.20	Ru II	111	2533.97	Ru II	125	2547.34	Mo II	85
2519.22	La II	11	2534.41	Mo II	73	2547.562	Mo II	106
2519.444	W II	13	2534.457	Ir I	5	2547.66	Ru II	164
2519.78	Ta I	35	2534.57	Pd II	21	2547.930	Tc II	3
2519.874	W I		2534.57	Rh II	36	2548.19	Hf II	21
2520.009	Re I	5	2534.764	Hg I	8	*2548.212	Mo II	50, 105
2520.392	Mo II	73	2534.92	Ru II	97	2548.832	Os II	11
2520.455	W I	23	2534.95	Po I	5	2549.121	Ru II	95
2520.52	Rh II	25	2535.23	Ru II	201	2549.171	Ru II	125
2520.82	Ru II	96	2535.30	Ag II	6	2549.351	Mo II	115
2521.059	Mo II	104	2535.60	Ru II	111	2549.470	Ru I	98
2521.323	W I	15	2536.000	W II	14	2549.56	Ru I	49
2521.371	In I	5	2536.517	Hg I	1	2549.66	Rh II	91
2521.61	Ru I	176	2537.225	Ir I	3	2549.79	Ru II	146
2521.683	Mo II	73	2537.33	Hf II	12	2549.965	Ru I	137
2522.039	W II	4	2537.73	Rh II	25	2550.09	Re II	15
2522.590	Mo II	107	2537.96	Ta II	12	2550.740	Mo II	114
2522.84	Mo II	113	2537.997	Os II	1	2551.349	W I	1
2522.985	In I	5	2538.444	Mo II	8	2551.37	Hf II	36
2523.410	W I	12	2539.09	Ru I	175	2551.72	Ru I	59
2523.915	Sn I	13	*2539.436	Mo II	91, 92	2551.81	Pd II	22
2524.39	Ru II	124	*2539.72	Ru II	94, 149	2551.976	Cd II	13
2524.85	Ru II	97	2540.133	Mo II	115	2551.98	Ru II	149
2525.17	Ru I	113	2540.30	Ru II	94	2552.021	Re I	23
2525.42	Ru II		2540.431	Mo I	28	2552.193	Mo II	71
2525.63	Ru I	69	2540.513	Re I	16	2552.53	Tl I	10
2526.03	Ta II	11	*2540.741	Os I	10, 22	2552.60	La II	11
2526.7	Pb II	16	2541.18	Rh II	55	2552.666	Au II	15
2526.82	Ru I	101	2541.251	Mo II	8	2552.827	Cd II	13
2526.88	Ru II	176	2541.28	Ru I	155	2552.98	Tl I	10
2527.07	Ru II	202	*2542.016	Ir I	3	2553.168	W I	11
*2527.075	Os I	8, 15, 17	2542.04	Ru II	146	2553.49	Ru II	122
2527.135	Mo II	91	2542.041	Mo II	116	2553.53	Cd I	11
2527.25	Mo II		2542.146	Ru II	148	2553.59	Re II	9
2527.41	In III	8	2542.23	Ru II	165	2553.824	W I	11
2527.756	Os II	10	2542.512	Os I	15	2554.63	Re II	13
2527.763	W I		2542.668	Mo II	8	2554.63	Ta II	3
2527.86	Ru II	149	2542.783	Mo II	8	2554.64	Sb I	26
2528.05	Ru II	214	2543.216	Ru II	96	2554.864	W II	1
2528.383	Mo II	71	2543.227†	Tc II	1	2555.07	Ta I	24
2528.404P	Ba II	6	2543.272	Ru II	94	2555.106	W II	3
2528.486	W I	12	2543.47	Ru II	146	2555.347	Ir I	4
2528.52	Sb I	8	*2543.611	Mo II	50, 139	2555.364	Rh I	23
2528.71	Ru I	111	2543.67	Ru I	149	2555.420	Mo II	72
2528.852	Mo II	85	2543.971†	Ir I	5	2555.93	Ru II	148
2528.874	Ru I	117	2544.22	Ru I	110	2556.004	Ru I	117
2529.340	Tc II	3	2544.37	Ta II	25	2556.08	Ru II	146
2529.474	Ir I	9	2544.456	Mo II	139	2556.309	Mo II	72
2529.61	Ru II	94	2544.5	Bi II	6	2556.316	Ru I	113
2529.807	Mo II	27	2544.72	Cd I	10	2556.512	Re I	23
2530.327	Mo II	85	2544.739	Re I	15	2556.749	W I	3
2530.41	Ru II	125	2544.807	Tc II	3	2556.756	Mo II	72
2530.64	Ru I	148	2545.340	W I	8	2557.21	Rh II	85
2530.86	Tl II	18	2545.36	Rh II	52	2557.33	Po I	4
2531.19	Hf II	11	2545.485	Re I	20	2557.378	Mo II	85
2531.60	La II	23	2545.50	Ta II	2	2557.71	Ta II	12
2532.13	Ta II	3	2545.600	Mo II	71	2558.01	Po I	1
2532.295	Mo II	51	2545.76	Ru I	114	2558.540	Ru I	58

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2558.606	Tc II	3	2572.336	Mo I	28	2582.55	La II	7
2558.867	Mo II	71	2572.366	W II	9	2582.794	I II	58
2559.076	Re I	2	2572.412	Ru I	49	2582.96	La II	11
2559.121	Mo II	72	2572.475	Mo II	85	2583.033	Ru I	144
2559.19	Hf II	29	2572.67	Ru II	95	2583.07	Ru II	124
2559.43	Ta I	11	2572.701	Ir I	3	2584.136	Ru I	103
2559.500	W II	16	2572.873	Mo II	114	2584.386	W I	26
2559.688	Mo II	85	2572.930	Cd II	6	*2584.49	Ta II	22, 32
2559.92	Rh II	25	2573.03	Cs II	15	2585.235	W I	
2560.124	W I	23	2573.44	Ru II	173	2585.340	Ru I	173
2560.150	In I	3	2573.54	Ta I	10	2585.59	Tl I	9
2560.265	Ru I	154	2573.80	Ta I	20	2585.739	Ru I	55
2560.37	La II	11	2573.91	Hf II	28	2585.966	Mo II	70
2560.669	Mo II	91	2574.06	Sb I	22	2586.35	La II	22
2560.845	Ru I		2574.06	Ru II	219	2586.41	Rh II	63
*2561.84	La II	15, 22	2574.425	Mo II	8	2586.61	Ra II	3
2561.968	W I	11	2574.442	Tc II	3	2586.788	Re I	20
2562.078	Mo II	129	2575.242	Ru I	46	*2587.30	Rh II	36, 44
2562.31	Po I		2575.47	Ta I	36	2587.63	Po I	3
2562.87	Ag III	12	2575.63	Ag I	12	2587.87	Ru II	95
2563.157	Ru I	145	2575.807	Mo II	104	2588.58	Re II	13
2563.164	Os II	8	2576.09	Ru II	148	2588.788	Mo II	70
2563.166	W II	21	2576.168	W II	15	2589.171	W II	5
2563.61	Hf II	13	2576.281	Tc II	3	2589.25	Au I	12
2563.855	Hg I	10	2576.285	Hg I	9	2589.43	Ru II	124
2563.914	W II	8	2576.372	W II	19	2589.569	Ru I	64
2564.177	Ir I	6	*2576.565	Mo II	70, 150	2590.04	Au I	7
2564.186	Re I	15	2576.6	Pb II	16	2590.755	Os I	5
2564.334	Mo II	85	2576.83	Hf II	15	2591.04	Ru II	145
2565.188	Ru I	104	2576.954	Ru I	202	2591.116	Ru I	102
2565.51	Pd II	17	2576.99	Ru II	123	*2591.26	Ru II	164, 174
2565.69	Ru II	124	2577.265	Ir I	6	2591.33	Hf II	3
2566.09	La II	7	2577.269	Pb I	5	2591.582	Re I	15
2566.242	I II	58	2577.861	Tc II	3	2591.637	Ru I	149
2566.25	Ru II	213	2578.15	Hf II	11	2591.776	Mo II	69
*2566.257	Mo II	8, 104	2578.25	Ta II	19	2591.982	Mo I	28
*2566.590 §	Ru I	106	2578.321	Os II	9	2592.022	Ru I	148
*2566.59 §	Ru II	112	2578.347	Mo II	105	*2592.056	Ir I	1, 9
2567.034	Tc II	3	2578.571	Ru I	105	2592.14	Cd I	9
2567.051	Mo I	7	2578.910	Mo II	129	2592.16	Rh II	25
2567.507	Mo II	106	2578.948	Ru I	104	2592.54	Ta II	26
2567.620	W II	6	2579.022	Ru I	180	2592.782	Mo II	70
2567.893	Ru I	47	*2579.06	Ta II	13, 17	2593.09	Ta I	27
2568.64	Re II	4	2579.10	Ru II	148	2593.378	Mo II	49
2568.69	Cs II	14	2579.222	Ru I	144	2593.458	I II	58
2568.772	Ru I	96	2579.437	Mo II	8	2593.66	Rh II	80
2568.831	Os I	22	2579.536	Ru I	150	2593.68	Ta II	4
2568.88	Ru II	175	2579.542	W II	6	2593.700	Ru I	213
2569.10	Rh II	53	2579.62	Ta I	9	*2593.707	Mo II	7, 106
*2569.13	Ta II	3, 36	2580.026	Os II	8	2594.424	Sn I	12
2569.298	W II	17	2580.14	Tl I	2	2594.854	Re I	15
2569.56	Pd II	20	2580.27	Cd I	10	2594.855	Ru I	42
2569.729	Ru I	137	2580.337	W I	6	2595.15	Ra II	3
2570.093	Ru I	6	2580.487	W I	3	2595.234	Re I	4
2570.847	Mo II		2580.77	Ag II	21	2595.26	Ta I	27
2570.973	Ru I		2580.803	Ru I	109	*2595.40	Rh II	25
2571.09	Ru II	146	2580.82	La II	7	2595.407	Mo I	28
2571.447	Mo II	115	2581.052	Os I	13	2595.58	Ta II	1
2571.459	W II	3	2581.140	Ru I	108	2595.81	Ru II	124
2571.576	Sn I	10	2581.206	W II	5	2596.08	La II	8
2571.68	Hf II	11	2581.70	Rh II	64	2596.46	Ta II	3
2571.782	Os I	15	2581.911	Ru I	55	2596.637	Ba I	4
2571.81	Re II	4	2581.958	Os I	13	2596.84	Ag II	39
2572.241	Mo II	71	2582.157	Mo I	7	2597.09	Rh II	80
2572.282	Ru I	151	2582.51	Hf II	2	2597.322	Ru I	104

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2597.392	Mo II	70	2612.895	Ru I	8	2626.62	Rh II	58
2597.517	Ru I	178	2613.058	Os I	12	2626.95	Hf II	11
2598.05	Sb I	8	2613.076	W I	8	2627.56	Mo I	27
2598.09	Sb I	7	2613.087	Mo I	28	2627.650	Ru I	91
2598.19	Ta II	31	2613.61	Hf II	37	2627.91	Bi I	7
2598.361	Ru I	104	2613.652	Pb I	3	2628.02	Pt I	4
2598.574	Ru I	101	2613.818	W I	6	2628.14	Rh II	53
2598.748	W II	7	*2614.055	Ru I	5, 5	2628.26	Re II	18
2598.80	Ru II	122	2614.176	Pb I	3	2628.262	Ru I	172
2599.040	Ir I	6	2614.233	Tc I	2	2628.28	Pb I	6
2599.41	Ta I	40	2614.558	Re I	26	2628.536	Ru I	144
2599.856	Re I	18	2614.56	Ag II	21	2628.74	Mo I	28
2600.104	Mo II		2614.585	Ru I	12	2628.75	Ru II	208
2600.233	Mo II	113	2614.86	Ru II	121	2628.84	Ta II	14
2601.05	Ta I	33	2614.984	Ir I	1	2628.996	W II	9
2601.430	W II	13	*2615.05	Ru II	148, 213	2629.06	Cd I	9
2601.456	Ru I		2615.093	Ru I	99	2629.852	Mo I	27
2601.756	In I	4	2615.124	W I	15	2629.925	Ru I	139
2601.79	La II	24	2615.398	Mo I	27	2630.04	Ru II	200
2601.963	W I	11	2615.446	W II	17	2630.231	Ru I	99
2602.516	W II		2615.873	Tc I	2	2630.30	Pd II	23
2602.802	Mo II	7	2616.33	Ru II	188	2630.33	Rh II	25
2603.018	W II	20	2616.401	Au II	16	2630.741	Mo II	102
2603.31	Rh II	52	2616.72	Re II	13	2631.09	Ru II	95
2603.49	Ta II	5	2616.759	Pt II	31	2631.304	Ru I	90
2603.544	W I	11	*2616.792	Mo I	27	2631.569	Ru I	101
2604.13	Ru II	123	2617.01	Ag II	26	2631.79	Sn III	23
2604.315	Ru I	146	2617.08	Ru II	123	2631.94	La II	27
2605.079	Mo II	102	2617.22	Ta II	28	2632.127	Ru I	198
2605.347	Ru I	93	2617.677	Ru I	93	2632.25	Cd I	11
2605.826	Mo II	104	2617.781	Ir I	4	2632.485	W I	18
2605.853	Ru I	60	2617.790	Ru I	153	2632.496	Ru I	144
2606.14	Ag II	21	2618.61	Sn III	24	2632.695	W I	6
2606.37	Hf II	3	2618.737	Ru I	93	2632.73	Ru II	147
2606.388	W I	1	2618.807	Cd III	19	2632.855	Mo II	128
2606.43	Ta II	30	2619.014	Ru I	99	2633.129	W I	2
2606.60	Mo II		2619.340	Mo II	7	2633.446	Ru I	179
2607.03	Hf II	13	2619.35	Ru II	147	2633.52	Mo II	103
2607.348	Ru I	5	2619.666	Ru I	61	2633.686	Mo I	
2607.378	W I	3	2619.759	Mo II	7	*2633.78	Ta II	14, 31
2607.381	Mo I	28	2619.883	Ir I	1	2633.82	Ru II	112
2607.92	Ru II	110	2619.944	Os I	5	2634.578	W II	20
2608.246	Ir I	2	2620.026	Re I	23	2634.778	Ba II	6
2608.320	W I	15	2620.344	Re I	31	2634.909	Tc II	5
2608.50	Re II	4	2620.607	Ru I	133	2635.21	Ru II	144
2608.63	Ta I	18	2620.69	Ru II	145	2635.28	Rh II	36
2608.855	Tc I	2	2620.757	W II	16	2635.34	Ru II	207
2608.99	Tl I	8	2621.28	Ru II	123	2635.379	W II	16
*2609.062	Ru I	51, 109	2621.818	Os I	1	2635.59	Ta II	2
2609.17	Rh II	53	2622.576	Rh I	25	2635.83	Re II	10
2609.215	Mo II	151	2622.74	Hf II	8	*2635.84 §	Ru II	119
2609.44	Cs II	12	2623.408	Mo II	130	*2635.861 §	Ru I	148
2609.476	Ru I	199	2623.824	Ru I	225	2636.54	Ru II	94
2609.77	Tl I	8	2624.17	Ru II	173	2636.637	Re I	3
2609.993	Tc II	1	2624.643	Mo II	103	2636.663	Ru I	212
2610.09	Ru II	109	2625.220	W I	11	2636.67	Ta I	22
2610.34	La II	5	2625.338	Pt II	12	2636.672	Mo II	7
2611.045	Ru I	105	2625.39	Ru II	206	2636.84	Ru II	212
2611.295	Ir I	5	2625.41	Rh II	35	2636.90	Ta I	25
2611.50	Ru II	95	2625.886	Rh I	19	2636.997	Hf I	9
2611.603	Re I	15	2626.099	Mo II	128	2637.01	Re II	13
2612.06	Ru I	93	2626.205	Ru I	92	2637.133	Os I	1
2612.31	Sb I	25	2626.356	Ru I	49	2638.515	Ru I	93
2612.52	Ru II	174	2626.41	Ru II	122	2638.71	Hf II	2
2612.62	Ta II	2	2626.478	Ru I	44	2638.768	Mo II	7

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2639.121	Ru I	144	2651.289	Ru I	42	2861.983	Ir I	5
2639.19	Ta II	18	2651.60	La III	3	2662.626	Ir I	6
2639.33	Pt I	9	2651.71	Cs II	13	2662.835	W I	8
2639.50	Cd I	8	2651.839	Ru I	42	2662.880	Ru II	111
2639.58	Ru II	122	2651.874	Ru I	95	2663.160	Pb I	4
2639.685	Mo I		2651.903	Re I	5	2663.33	Po I	
2639.712	Ir I	1	2651.91	Rh II	44	2663.556	W I	24
2640.324	Ru I	57	2652.039	Hg I	8	2663.633	Re I	20
2640.989	Mo I	28	2652.351	Tc II	5	2663.69	Rh II	35
2641.369	Ba II	6	2652.592	W I	25	2664.25	Ta II	32
2641.41 †	Hf II	7	2652.60	Sb I	23	*2664.321 §	W I	15
2641.49	Au I	4	2652.662	Rh I	4	*2664.346 §	W II	21
2641.63	Ru II	189	2653.27	Ta I	15	*2664.48	Rh II	41
2642.752	Re I	20	2653.348	Mo II	7	2664.761	Ru I	7
2642.80	Ru II	121	2653.424	W II	20	2664.786	Ir I	1
2642.88	Ru II	147	2653.48	La I	6	2664.966	W I	2
2642.946	Ru I	96	2653.568	W II	4	2665.53	Sn III	23
2643.006	Tc II	6	2653.679	Hg I	8	2665.57	Tl I	7
2643.14	Ru II	93	2653.693	Ru I	174	2665.60	Ta II	2
2643.296	W II	13	2653.95	Ru II	121	2665.719	Ru I	141
2643.56	Sn III	23	2654.120	Re I	15	2665.733	Tc II	6
2643.73	Ra II	6	2654.659	W I	24	2665.98	Hf II	20
2643.88	Ta I	32	2654.76	Rh II	63	2666.493	W II	6
2644.114	Os I	1	2654.804	Ru I	201	2666.54	La II	29
2644.138	Mo I		2655.027	Mo I	29	2666.750	Mo I	27
2644.186	Ir I	3	2655.127	Hg I	7	2666.829	Ru I	177
2644.343	Mo II	7	2655.221	Ru I	9	2667.390	Ru II	92
2644.496	Tc II	6	2656.235	Ru II	92	2667.79	Ru II	93
2644.58	Ta II	19	*2656.540	W I	6, 15	2667.969	Ru I	97
2644.62	Ru II	146	2656.563	Ru I	202	2668.06	Ta I	24
2645.97	Ru II	120	2656.698	Ru I	142	2668.290	Hf I	24
2646.002	Ru I	197	2657.005	Mo II	153	2668.342	Ru I	48
2646.10	Sn III	23	2657.094	Pb I	2	2668.473	W I	30
2646.185	W I	8	2657.163	Ru I	201	2668.62	Ta I	4
2646.21	Ta I	40	2657.361	W I	11	2668.993	Ir I	5
2646.245	Tc II	6	2657.49	Hf II	29	2669.20	Rh II	85
2646.36	Ta I	16	2657.70	Te II	5	2669.371	W II	9
2646.487	Mo II	7	2657.85	Hf II	11	2669.39	Sb III	5
2646.87	Pt I	1	2658.036	W II	2	2669.43	Ru II	212
2647.011	Tc II	1	2658.114	Mo I	27	2669.57	Ta II	40
2647.128	Re I	2	2658.14	Ta II	19	2669.913	Ir I	4
2647.264	Ba II	5	2658.16	Pt I	11	2670.110	Tc II	6
2647.281	Rh I	23	2658.391	Ru I	56	2670.395	W II	19
2647.30	Hf II	11	2658.57	Sn III	23	2670.64	Sb I	7
2647.314	Ru I	49	2658.600	Os I	12	2670.818	Tc II	6
2647.47	Ta I	6	2658.75	Pd II	17	2671.472	W I	11
2647.726	W II		2658.86	Ta II	7	2671.838	Ir I	3
2647.730	Os I	8	2659.10	Rh II	65	2671.842	Re I	20
2648.451	Ru I	133	2659.40	Ta II	3	*2671.86	Mo II	10, 155
*2648.78 §	Ru II	93	2659.44 †	Pt I	1	2672.212	Ru II	111
*2648.782 §	Ru I	212	2659.617	Ru I	85	2672.354	Ru II	93
2649.050	Re I	23	2659.833	Os I	15	2672.50	Ta II	11
2649.335	Os I	17	2660.40	Cd I	10	2672.84	Mo II	7
2649.466	Mo I	27	2660.49	Ag II	11	2672.90	La II	13
2649.506	Ru I	100	2660.581	Mo II	6	2673.004	Ru II	93
2649.575	Ru I	99	2661.10	Te II	4	*2673.27	Mo II	10, 49
2649.593	Rh I	29	2661.169	Ru II	93	2673.412	Tc II	6
2649.66	Te II	5	2661.220	Mo I		2673.477	Ru I	85
2650.28	Ta I	36	2661.243	Sn I	2	2673.605	Ru I	47
2650.395	Ru I	89	2661.33	Ta I	25	2673.607	Ir I	3
2650.603	Tc II	5	2661.610	Ru II	40	2673.608	W II	
2650.84	Pt I	6	2661.82	Ru II	93	2674.219	Ru II	93
2650.93	Rh II	25	2661.861	Ru I	147	2674.339	Re I	4
2651.17	Hf II	34	2661.88	Ta I	7	2674.43	Rh II	36
2651.23	Ta II	4	2661.89	Hf II	13	2674.692	W I	

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I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2674.885	Os I	20	2688.583	Ru I	144	2702.632	Ba I	3
2675.223	Tc II	6	2688.72	Au I	6	2702.639	Ru II	163
2675.543	Ru II	212	2688.888	Ru I	81	2702.78	Ta II	1
2675.73	Ta II	37	2689.27	Ta II	7	2702.833	Ru I	42
2675.867	W I	2	2689.61	Rh II	42	2703.467	W II	
2675.90	Ta II	4	2689.816	Os I	12	2703.733	Rh I	22
2675.95	Au I	1	2689.894	Ru I	194	2703.796	Ru I	92
*2676.183	Ru II	92, 197	2690.382	Ru I	135	2704.192	Ru II	163
2676.28	Rh II	73	*2690.810	Ru I	138, 169	2704.585	Ru II	199
2676.489	Mo II	100	2691.094	W I	11	2704.830	Ru II	163
2676.828	Ir I	10	2691.289	W I	20	2704.928	Mo II	153
2676.969	Ru I	53	2691.31	Ta I	4	2705.174	W I	
2677.13	Pt I	1	2692.120	Ru II	40	2705.60	Rh II	35
2677.276	W I	8	2692.25	Sb I	21	2705.612	Hf I	9
2677.56	Hf II	11	2692.251	Ru I	212	2705.88	Pt I	6
*2677.64	Cd I	8, 8	2692.39	Ta I	23	2705.92	Sn IV	15
2677.77	La I	6	2692.63	Mo II	128	2706.017	W I	7
2677.796	W II	4	2692.842	Ru I	87	2706.510	Sn I	1
2678.759	Ru II	40	2693.30	Ru I	85	2706.579	W I	20
2678.81	Ta II	31	2693.34	Ta I	30	2706.64	Hf II	27
2678.878	W I	6	2693.653	Ru I	45	2706.702	Os I	8
2679.638	W II	16	2693.744	Tc II	6	2706.73	Hf II	20
2679.763	Ru I	212	2694.233	Ir I	5	2707.07	La I	3
2679.855	Mo I	27	2694.314	Rh I	4	2707.310	Ru II	163
2680.046	W I	26	2694.382	W II	18	2707.477	Ru I	193
2680.06	Ta II	11	2694.52	Ta II	3	2707.877	W I	31
2680.585	Ru II	208	2694.75	Ta I	30	2707.969	Ru I	7
2680.66	Ta II	4	2694.994	W II	18	2708.188	W I	25
2681.373	Mo II	67	2695.217	Mo II	68	2708.592	W I	23
2681.38	Ag II	17	2695.47	La II	13	2708.635	Ru I	143
2681.422	W I	6	2695.670	W I	8	2708.841	Ru I	94
2681.49	La II	13	2696.75	Bi I	5	2708.927	W I	10
2681.60	Rh II	71	2696.80	Ta I	31	2708.96	Ra II	2
2682.46	La III	3	2696.839	Mo II	153	2709.198	Ru I	90
2682.699	Tc II	5	2697.07	Ru II	220	2709.23	Tl I	5
2682.76	Sb I	22	2697.12	Ru II	145	*2709.27	Ta II	8, 18
2683.226	W II	14	2697.510	Ru I	7	2709.582	W II	16
*2683.234	Mo II	6, 102	2697.514	W I	6	2710.12	Ta I	20
2683.347	W I	18	2697.514	Pb I	13	2710.207	Mo II	10
2683.35	Hf II	28	2697.714	W II	2	2710.228	Ru II	108
2683.558	Re I	26	2697.805	Mo I	26	2710.265	In I	3
2683.58	Rh II	90	2698.167	Ru II	197	2710.67	Tl I	5
2683.676	Ru I	200	2698.29	Ta I	11	2710.73	Ta II	37
2684.089	Ru I	227	2698.40	Pt I	8	2710.792	W II	18
2684.148	Mo II	7	2698.844	W I	11	2710.928	Mo II	101
2684.21	Rh II	36	2699.404	Mo II	48	2711.21	Ag II	33
2684.234	Tc II	5	*2699.589	Os I	15, 22	2711.481	Tc II	6
2684.27	Ta I	12	2699.594	W I	15	2711.58	Te II	5
2684.90	La III	4	2699.793	Ru I	9	2712.00	Hf II	9
2685.152	Ru II	142	2699.882	Ru I	133	2712.07	Ag II	21
*2685.16	Ta II	1, 9	2700.012	W I	18	2712.346	Mo II	155
2686.023	Tc II	5	2700.163	Ru II	163	2712.40	Cd I	9
2686.29	Ta I	43	2700.477	Ru I	133	2712.409	Ru II	40
2686.291	Ru I	85	2700.61	Rh II	44	2712.42	Hf II	8
2686.889	Ru II	145	2700.671	Ru I	87	2712.740	Ir I	2
2686.946	W II	23	2700.90	Au I	4	2713.071	Ru II	207
2687.071	Ru II	120	2700.999	Ru II	118	2713.09	Pt I	10
2687.138	Ru I	9	2701.337	Ru I	42	2713.192	Ru I	133
2687.369	W I	29	2701.409	Mo II	6	2713.3	Bi II	7
2687.494	Ru II	92	2701.485	W II	10	2713.30	Rh II	94
2687.994	Mo II	6	2701.875	Mo II	101	2713.501	Mo II	7
2688.033	Tc II	6	2702.115	W II	22	2713.585	Ru II	119
2688.147	Ru II	92	2702.13	La II	20	2713.728	Ru I	87
2688.230	W II	18	2702.38	Pt I	4	2713.936	In I	3
2688.528	Re I	24	2702.524	W I	32	2714.52	La I	5

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2714.642	Os I	1	*2728.94 §	Rh II	59	2745.158	Ru II	108
2714.66 †	Ta I	3	*2728.946 §	Rh I	3	2745.394	Mo I	34
2715.233	Ru I	198	2729.455	Ru I	89	2745.827	Ru II	92
2715.27	Rh II	34	2729.620	W II	11	2746.068	Ru II	40
2715.346	W II	20	2729.680	Mo II	6	2746.305	Mo II	10
2715.43	La II	32	2729.85	La I	4	2746.404	Mo I	33
2715.474	Re I	20	2729.936	W II	15	2746.695	Ru II	117
2715.503	W I	14	2730.124	I II	60	2746.83	Ta II	24
2715.770	Re I	23	2730.212	Mo II	100	2746.883	Mo I	25
2715.773	Ru I	9	2730.225	Tc II	5	2746.885	Ru I	36
2716.132	Ru II	143	2730.325	Ru I	7	2747.005	W I	19
2716.322	W II	15	2730.700	Hf I	1	2747.438	Re I	15
2716.580	Ru II	120	*2730.74	Ta II	34, 35	2747.63	Rh II	78
2716.78	Ru II	92	2730.932	Ru I	42	*2747.963 §	Ru I	82
2717.001	Ru I	50	2731.56	Re II	13	*2747.963 §	Ru II	40
2717.18	Ta I	19	2731.903	Ru I	136	2748.045	Ru I	196
2717.180	W II	21	2732.206	Re I	27	2748.23	Cs II	10
2717.357	Mo II	10	2732.40	La II	20	2748.24	Au I	4
2717.401	Ru I	9	2732.805	Os I	12	2748.31	La II	32
2717.447	Ru II	92	2732.889	Mo II	6	2748.549	Cd II	6
2717.513	Rh I	2	2733.04	Re II	8	2748.77	Ta I	18
2717.97	Rh II	83	2733.178	W I	17	2748.844	W I	10
2718.044	W II	19	2733.578	Ru I	133	2749.748	In II	11
2718.37	Ta I	29	2733.67	Pt I	12	2750.027	Mo II	148
2718.50	Hf II	32	2733.88	Cd I	7	2750.345	Ru I	210
2718.546	Rh I	23	2733.96	Pt I	3	2750.79	Mo I	
2718.90	Sb I	22	2734.345	Ru II	40	2751.470	Mo I	26
2718.906	W I	6	2735.26	Ta II	8	2751.82	Hf II	13
2719.02	Pt I	6	2735.669	Ru I		2752.110	Ru II	120
2719.331	W I	25	2735.727	Ru I	2	2752.145	Mo I	51
2719.51	Ru I	85	2735.975	W I	31	2752.262	Ru I	186
2719.717	Ru II	141	2736.24	Ta I	8	2752.447	Ru II	40
*2719.858	W I	6, 21, 27	2736.456	Ru II	187	2752.49	Ta II	3
2720.044	Os I	8	2736.826	Ru II	142	2752.763	Ru II	77
2720.404	W II	19	2737.387	W II		2752.84	La II	29
2720.594	W II	7	2737.40	Rh II	34	2753.433	Ru I	
2720.74	Ta I	9	2737.463	Ru I	87	2753.508	Ru II	117
2721.562	Ru I	85	2737.606	Ru II	211	2753.64	Re II	13
2721.650	W I	31	2737.783	Ru II	120	2753.85	Pt I	11
2721.77	Ag I	9	2738.45	Pt I	10	2753.878	In I	2
2721.862	Os I	5	2738.77	Hf II	10	2754.09	Rh II	59
2722.31	La I	1	2739.217	Ru I	85	2754.286	Mo I	5
2722.456	W I	32	2739.243	Ba I	2	*2754.603	Ru I	47, 168
2722.693	Ru I	85	2739.26	Ta II	11	2754.90	Pt I	11
2722.702	Re I	23	2739.372	Ru II	161	2755.258	Ru II	162
2722.805	W II	17	2739.92	Rh II	34	2755.36	Mo I	20
2723.85	Ta II	38	2740.217	Ru I	140	2756.065	Mo II	
2724.066	Ru I	85	2740.554	Rh I	20	2756.266	Mo I	4
2724.193	Tc II	5	2740.801	W II	24	2756.48	Ag II	30
2724.352	W I	6	2741.16	Ta I	35	2756.92	Hf II	37
2724.43	Hg III	6	2741.314	Mo II	101	2757.064	Ru I	82
2724.864	Ru II	163	2741.75	Rh I	33	*2757.09	Mo I	21, 23
*2725.033	W I	7	2742.401	Ru II	140	2757.26	Ta II	19
*2725.062	W I	2	2743.185	Mo II	5	2757.798	Ru I	212
2725.150	Mo I	26	2743.426	W I	20	2757.808	Os I	24
2725.465	Ru II	40	2743.513	Ru II	92	2757.996	Re I	26
2725.52	In III	13	2743.637	Hf I	23	2758.633	Mo I	
2725.57	La I	2	2743.78	Ag II	26	2758.771	Hf I	8
2725.656	Tc II	5	2743.92	Ag II	6	2759.575	Mo I	24
2726.15	In III	13	*2743.934 §	Ru II	40	2759.682	Ru I	87
2726.969	Ru I	222	*2743.934 §	Ru I	35	2760.003	Mo I	32
2726.983	Mo II	112	2744.193	Mo II	101	2760.155	Ru I	211
2727.44	Ta II	3	2744.448	Ru I	134	2760.442	Rh I	17
2727.77	Ta I	40	2745.074	Ru I	90	2760.537	Mo II	101
2728.836	Ru I	168	2745.078	Mo I	6	2760.745	Ru II	144

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2761.28	Rh II	72	2774.476	W I	14	2789.72	Hf II	36
*2761.418	Os I	5, 23	2774.480	Ru I	87	2789.77	Ta I	45
2761.533	Mo I	26	2774.772	Pt II	39	2789.83	Hf II	25
2761.56	La I	5	2775.047	Cd I	7	2790.27	Sb III	5
2761.587	W II	7	2775.11	Ta I	46	2790.427	Mo II	68
2761.634	Hf I	9	2775.175	Ru I	195	2790.72	Ta I	16
2761.65	Ta II	2	2775.358	In I	1	2791.158	Rh I	18
2761.91	Po I	3	2775.386	Mo II	6	2791.290	Re I	29
*2762.05	Ta II	38, 39	2775.631	Ru II	77	2791.37	Ta II	10
2762.071	Ru II	222	2775.77	Rh II	35	2791.51	La II	21
2762.304	Ru I	132	2775.902	Ru I	85	2791.553	Mo II	149
2762.339	W I	1	2776.509	W II	10	2791.67	Ta I	29
2763.08	Pd I	1	2776.85	Pd II	23	2791.961	W I	18
2763.133	Ru I	191	*2776.910	Os I	7, 21	2792.32	Ru II	117
2763.273	Os I	15	2776.99	Cs II	12	2792.641	Ru I	130
2763.295	Re I	19	2777.401	Ru II	205	2792.696	W I	5
2763.305	Mo II	148	2777.54	Ru II	117	2792.78	Rh II	33
2763.413	Ru I	2	2777.86	Mo II	5	2794.213	Pt II	30
2763.626	Mo II	10	2778.15	Rh II	36	2794.678	Ru I	218
2763.792	Re I	27	2778.388	Ru II	40	2794.744	Mo I	
2763.89	Cd I	8	2778.694	W II	19	2795.20	Ta II	19
2763.900	Ru I	133	2778.76	La II	20	2795.21	Ra II	7
2764.19	Cd I	8	2778.975	Ru II	117	2795.508	Ru I	193
2764.263	W II	1	2779.11	Ta I	17	2795.702	Rh I	3
2764.714	Ru I	42	2779.370	Hf I	7	2795.778	Te II	4
2764.83	Rh II	41	2779.538	Rh I	34	2796.052	Mo I	14
2765.134	Ru II	110	2779.78	La II	29	2796.33	Ta I	6
2765.429	Ru II	77	2779.810	Sn I	11	2796.543	Ru I	191
2765.642	W I	28	2780.022	Mo II	5	2796.55	Ta I	42
2766.223	Ru I	88	2780.23	La II	21	2796.697	Ru I	170
2766.46	La I	4	2780.285	W I	32	*2796.727	Os I	7, 22
2766.54	Rh II	35	2780.34	Ta II	2	2796.777	Mo I	55
2766.563	Ru II	218	2780.759	Ru I	166	2797.01	Rh II	84
2766.992	Cd III	19	2780.82	Au I	11	2797.351	Ir I	3
2767.144	W I	35	2781.37	Ta I	39	2797.730	Te II	4
2767.40	La II	31	2781.434	Re I	23	*2797.76	Ta II	2, 27
2767.516	Ru I	191	2781.79	Ta I	46	2797.775	Mo I	19
2767.54	Ag II	12	2781.82	Rh II	70	2797.921	Mo I	16
2767.92	Tl I	1	2782.142	W II	21	2798.029	Mo I	22
2768.326	W II	8	2782.205	Ru I	128	2798.40	Ta I	15
2768.926	Ru II	40	2782.552	Os I	5	2798.56	La II	21
2768.982	W I	2	2783.029	Rh I	19	2798.72	Ta II	16
2769.741	W I	10	2783.570	Re I	20	2798.779	Ru II	143
2769.762	Mo II	101	*2784.516§	Ru I	209	2798.910	Mo II	89
2769.95	Sb I	7	*2784.516§	Ru II	117	2799.042	W II	17
2770.296	Ru I	81	2784.96	Ta II	11	2799.27	Ta II	14
2770.417	Re I	15	2784.990	Mo II	34	2799.70	Ag II	24
2770.698	Ru I	167	2785.030	Sn I	11	2799.928	W I	7
2770.880	W I	6	2785.206	Re I	23	2799.981	Pt II	51
2771.060	Ru II	117	2785.224	Ir I	9	2800.24	Po I	3
2771.348	Ba II	5	2785.276	Ba I	1	2801.058	W II	13
2771.628	W I	20	2785.334	Ru I	36	*2801.484	Mo I	3, 3
2771.65	Pt I	3	2785.649	Ru I	42	2801.991	Pb I	2
2771.710	Mo II	148	2785.741	Ru II	117	2802.06	Ta I	14
2771.82	Ta II	32	2785.87	Ru II	179	2802.064	Au II	10
2772.459	Ru II	92	2786.306	Os I	12	2802.152	Ru II	141
2772.608	Ru I	195	2786.558	Re I	27	2802.30	Rh II	77
2773.07	Rh II	72	2786.798	Os I	7	2802.805	Ru I	85
2773.36	Hf II	7	2787.25	Ru II	221	2802.810	Te I	3
2773.702	W I	33	2787.69	Ta I	34	2803.138	Mo I	
2773.99	Pt I	11	2787.823	Ru II	40	2803.22	Pt I	8
2773.999	W I	10	2787.832	Mo I	24	2803.4	Bi II	4
2774.01	Hf II	11	2787.92	Pd II	25	2803.465	Hg I	12
2774.18	Rh II	64	2787.984	W I	7	2803.496	Ru I	84
2774.401	Mo II	148	2789.50	Hf II	35	2803.95	Rh II	42



## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2804.067	Os I	27	2819.626	Rh I	2	2834.208	W II	19
2804.434	Hg I	12	2819.746	Hf I	3	2834.40	Ta I	41
2804.903	Ru II	162	2819.78	Re II	8	2834.416	Mo II	34
2805.214	Au II	15	2819.800	Au II	11	2834.608	Re I	3
2805.344	Hg I	12	2819.951	Re I	20	2834.784	Mo I	14
2805.588	Cd III	25	2820.23	Hf II	1	2835.342	Mo II	9
2805.787	Rh I	29	2820.836	Rh I	2	2835.44	Rh I	2
2805.936	W II	18	2821.171	Ru I	218	2835.638	W I	5
2806.29	Ta I	29	2821.34	Ru II	159	2835.906	Mo I	16
2806.59	Ta I	5	2821.352	Tc II	4	2836.117	Tc II	4
2806.759	Hg I	11	2821.843	Mo II	152	2836.143	Ru I	221
2806.77	Ru II	77	2821.98	Ta I	50	2836.307	Mo II	9
2806.906	Os I	1	2822.034	Ru I	40	2836.404	Ir I	4
2807.200	Ru II	217	2822.035	Mo II	5	2836.46	Ra II	2
2807.362	Mo I	18	2822.270	Pt II	46	2836.569	Ru I	86
2807.59	Pd II	25	2822.542	Ru II	77	2836.721	Mo II	147
*2807.750	Mo II	5	2822.542	W II	9	2836.90	Cd I	6
2807.915	Tc II	4	2822.550	Au II	17	2836.905	In I	1
2808.00	Hf II	9	2822.68	Hf II	8	2836.970	Mo I	37
2808.221	Ru I	171	2823.170	Au II	18	2837.345	W I	2
2808.383	Mo I	17	2823.176	Ru II	204	2837.422	Os I	22
2808.39	La II	6	2823.196	Pb I	3	2837.870	Au II	12
2808.935	Os I	7	2823.371	Rh I	17	2837.904	Mo I	50
2809.646	Tc II	4	2824.39	Ag I	8	2838.173	Os I	4
2809.94	Mo I	14	2824.448	Ir I	5	2838.23	Ta II	30
2810.029	Ru I	2	2825.042	Tc II	4	2838.615	Ru I	206
2810.551	Ru I	3	2825.484	Ru II	211	2838.626	Os I	12
2810.649	Ru II	199	2826.16	TI I	4	2839.158	Ir I	10
2810.695	Ru I	181	2826.230	Ru II	140	2839.340	W I	17
2810.90	Ta I	41	2826.430	Rh I	33	2839.99	Sn I	1
2811.614	Tc II	4	2826.674	Ru II	140	2840.348	Re I	18
2811.70	Ta II	14	2826.677	Rh I	32	2840.375	Tc II	4
2812.210	W II	13	2826.752	Mo I	37	2840.51	La II	32
2812.817	Ru I		2827.312	Rh I	16	2840.537	Ru I	36
2813.311	Ru II	107	2827.59	Ta II	6	2841.02	Pd II	16
2813.575	Sn I	11	2827.752	Mo II	127	2841.147	Ru II	204
2813.694	Ru II	117	2827.857	Ru I	2	2841.570	W I	10
2813.76	Ra II	2	2828.58	Ta II	42	2841.680	Ru II	77
2813.87	Hf II	3	2828.794	Mo I	53	2842.148	Mo II	5
*2814.200	Os I	7, 23	2829.092	Ru II	141	2842.492	Mo II	90
2814.30	Ta II	5	2829.149	Ru I	38	2842.527	Ru I	224
2814.48	Hf II	19	2829.269	Os I	5	2842.749	Ru I	181
2814.676	Re I	15	2829.33	Hf II	32	2842.80	Ta I	41
2814.77	Hf II	35	2829.788	Mo I	19	2843.000	Re I	24
2814.79	Ta I	29	2829.79	Ta II	4	2843.170	Ru I	84
2814.862	Ru I	78	2829.821	W I	20	2843.51	Ta II	31
2814.93	Hg II	1	2829.946	Mo I	16	2844.24	Ta I	37
2815.34	Au I	13	2830.064	W II	16	2844.396	Mo I	54
2815.57	Ag II	32	2830.29	Pt I	1	2844.396	Os I	12
2815.780	Os I	7	2831.180	Tc II	4	2844.46	Ta II	2
2816.153†	Mo II	4	2831.236	W II	20	2844.716	Ru II	184
2816.515	Tc II	4	2831.379	W I	5	2844.922	W I	
2816.94	Cs II	13	2831.442	Mo II	152	2845.34	Ta I	19
2817.092	Ru I	2	2831.84	Ru II	118	2845.537	Ru I	131
2817.10	Ta II	11	2832.624	Ru I	209	2845.73	Rh II	43
2817.50	Ta I	40	2832.70	Ta II	7	2845.832	Hf I	20
2817.591	Ru II	187	2833.060	Pb I	1	2846.318	Ru I	166
2817.685	Hf I	18	2833.285	Hf I	7	2846.391	Os I	10
2818.060	W I	14	2833.62	Ta I	41	*2846.537	Ru I	217, 226
2818.359	Ru I	1	2833.630	W I	14	2846.632	Mo II	67
2818.809	Ru I	130	2833.806	Ru II	160	2846.750	Ru I	43
2818.950	Ru I	132	2833.999	Ru I	2	2846.962	Au II	18
2819.13	Ta II	15	2834.077	Re I	26	2847.087	Ru II	141
*2819.24	Rh II	43, 89	2834.081	Cd II	14	2847.4	Bi III	5
2819.37	Ta I	13	2834.121	Rh I	34	2847.67	Hg II	7

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2848.022	W I	5	2862.98	La II	18	2876.91	Mo I	
2848.238	Mo II	4	2863.003	Ru I	75	2877.092	Ru I	187
*2848.247	Os I	26, 28	2863.012	W I	2	2877.351	Os I	22
2848.42	Sn IV	15	2863.20	Mo II	67	2877.520	Pt II	48
2848.51	Ta I	11	2863.261	Ru II	158	2877.67	Ta II	12
2848.586	Ru I	2	2863.324	Ru I	39	2877.826	Ru I	130
2849.21	Hf II	26	2863.324	Sn I	1	2877.92	Sb I	7
2849.591	Ru II	205	2863.801	Mo II	99	2878.01	Pd II	24
2849.725	Ir I	1	2864.299	Mo I	52	2878.400	Os I	10
2850.62	Sn I	10	2864.404	Rh I	14	2878.632	I II	59
2850.697	Ru II	221	2864.49	Ta I	47	2878.658	Rh I	13
2850.762	Os I	7	2864.647	Mo I	13	2878.721	W I	7
2850.776	Mo I	15	2864.73	Xe II	9	2878.79	Ag II	40
*2850.967	Hf I	17, 22	2865.051	Pt II	51	2878.84	Sn IV	7
2850.97	Ta I	3	2865.32	Ta II	25	2879.046	Mo II	145
2850.975	Re I	15	2865.64	Mo II	26	2879.09	Ta II	7
2850.98	Ta II	13	2866.062	W I	7	2879.112	W I	5
2851.11	Sb I	21	2866.096	Ru II	218	2879.358	Ru I	41
2851.171	Mo I	19	*2866.14	Ta II	4, 8	2879.396	W I	1
2851.21	Hf II	10	2866.276	Ru II	159	2879.73	Ta I	3
2852.01	Hf II	19	2866.373	Hf I	6	*2879.75	Mo II	119
2852.083	W II		2866.653	Ru I	3	2880.00	Ta I	18
2852.34	Ta II	31	2866.705	Mo II	34	2880.65	La II	19
2853.220	Mo II	99	2866.82	Mo II	152	2880.760	Rh I	15
2853.502	W I	24	2867.41	Ta II	32	2880.77	Cd I	6
2854.075	Ru I	4	2868.116	Mo II	111	2881.19	Cs II	8
2854.59	Pd II	16	2868.183	Ru I	36	2881.23	Cd I	6
2854.722	Ru II	77	2868.26	Cd I	7	2881.273	Ru I	2
2854.980	Ru II	185	2868.310	Ru I	129	2881.60	Ta II	10
2855.337	Os I	15	2868.334	Mo II	118	*2881.606	W I	14, 18
2855.6	Bi III	5	2868.736	W II	19	2881.656	Mo I	12
2855.90	La II	26	2869.117	W I		2882.112	Ru II	76
2856.009	Mo II	127	2869.567	Mo I	16	2882.366	Rh I	31
2856.030	W I	2	2869.83	Hf II	2	2882.545	Mo I	45
2856.044	Ru I	192	2870.213	Ru I	83	*2882.635	Ir I	5, 9
2856.164	Rh I	2	2870.573	Ru II	194	2883.45	Au I	6
2856.68	Ta II	21	2870.903	Mo I	49	2883.594	Ru I	3
2856.900	Mo II	9	2871.186	Ru I	208	2884.500	Ru I	40
2856.935	Hg I	6	2871.37	Pd II	26	2884.843	Ru I	2
2857.128	Tc I	3	2871.40	Ta I	3	2885.13	La II	19
2857.145	W I	22	2871.493	Ru II	159	2885.40	Ta II	11
2857.28	Ta I	39	2871.506	Mo II	4	2885.789	Mo II	89
2857.780	Ru II	116	2871.642	Ru I	38	2885.975	Rh I	29
2858.042	W I	14	2871.897	Mo I		2886.528	Ru I	4
2858.133	In I	1	2872.38	Au I	10	2886.599	Mo I	49
2858.43	Ta II	10	2872.405	Os I	1	*2886.923	W II	6
2859.002	Mo II	120	2872.880	Mo II	154	2886.982	Mo II	98
2859.110	Tc I	3	2873.318	Pb I	2	2887.132	Hf I	7
2859.484	W II	12	2873.370	Ru I	36	2887.542	Hf I	15
2859.574	Mo I	48	2873.42	Au I	12	2887.66	Sn IV	7
2860.014	Ru I	2	*2873.56 §	Ta I	9	2887.676	Re I	19
2860.063	Os I	28	*2873.56 §	Ta II	29	2887.734	Tc I	3
2860.369	Ru I	204	2873.62	Ag II	24	2887.993	Ru I	1
2860.558	Hf I	1	2873.636	Mo I	54	2888.171	Mo II	154
2860.678	Pt II	51	2874.050	Ru I	80	2888.624	Ru I	206
2860.88	Ta II	7	*2874.14	Ta I	29, 49	*2889.104	Rh I	1
2860.956	Os I	12	2874.847	Mo II	156	2889.37	Ta I	48
2860.988	Tc I	1	2874.955	Os I	15	2889.62	Hf I	4
2861.01	Hf II	1	2874.984	Ru I	1	2889.829	Mo I	13
2861.408	Ru I	34	2875.605	Ir I	7	2889.841	Rh I	28
2861.70	Hf II	10	2875.849	Pt II	53	2890.180	In II	9
2861.718	Ru I	80	2875.983	Ir I	11	*2890.26	Ta II	3, 22
2862.830	Mo I		2876.09	Ta I	41	2890.995	Mo II	4
2862.848	Ru II	141	2876.23	Hf II	26	2891.130	Ru I	185
2862.935	Rh I	22	2876.530	Mo I	48	2891.290	Mo II	34

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2891.84	Ta I	2	2906.051	Mo I	43	2920.07	Ag II	35
2892.220	Rh I	2	2906.315	Ru I	76	2920.254	Ru I	220
2892.567	Mo I	43	*2907.056	Au II	7, 15	2920.949	Ru I	188
2892.817	Mo II	34	2907.113	Mo II	34	2921.52	Tl I	3
2893.08	La II	19	2907.209	Rh I	2	2921.912	Tc I	3
2893.226	Mo I	58	*2907.235	Ir I	2	2922.13	Ta II	24
2893.26	Pt I	12	2908.883	Ru I	4	2922.347	Ru II	221
2893.299	Au II	19	2909.061†	Os I	1	2922.50	Pd I	4
2893.731	Ru I	167	2909.108	Mo II	4	2922.732	Mo II	146
2893.87	Pt I	3	2909.120	W I	17	2923.103	W I	10
2894.15	Ta I	41	*2909.212	Ru I	75, 223	2923.215	Mo II	34
2894.322	Tc I	3	2909.750	Ru II	186	2923.387	Mo II	4
2894.446	Mo II	4	2909.820	Re I	29	2923.539	W I	5
2895.064	Os I	22	2910.15	Rh II	33	2923.90	La II	28
2895.137	Mo II	118	2910.425	Ru I	80	2923.906	Ru II	182
2895.22	Xe II	11	2910.483	W I	7	2924.024	Rh I	2
2895.802	Ru I	205	2910.997	W I	1	2924.10	Rh II	43
2896.009	W I	2	2911.915	Mo II	4	2924.320	Mo II	99
2896.012	Re I	1	2912.30	Pt I	10	2924.613	Hf I	14
2896.06	Sn III	20	*2912.334	Os I	4, 30	2924.792	Ir I	1
2896.063	Os I	19	2912.41	Ta II	22	2925.067	Ru I	183
*2896.340	Tc I	1, 3	2912.433	Ru I	40	2925.28	Ta I	41
2896.442	W I	5	2912.616	Rh I	21	2925.41	Pd II	26
2896.50	Ag II	36	2912.745	Ru I	76	2925.410	Hg I	9
2896.523	Ru I	3	2913.147	Tc I	3	2925.416	Mo II	137
2897.42	Mo II	146	2913.163	Ru I	190	*2925.568	Os I	4, 29
2897.627	Mo II	26	2913.531	Mo I		2925.834	W II	
*2897.63	Rh II	33, 63	2913.536	Au II	6	2926.15	Mo II	137
2897.713	Ru II	139	2913.543	Sn I	20	2926.743	Mo II	137
2897.89	Pt I	6	2913.74	Mo II	156	2926.80	Rh II	77
2897.98	Bi I	7	2913.748	W II	20	2927.119	Ru I	219
2898.242	Ru II	210	2913.82	Mo II	138	2927.42	Re I	20
2898.256	Hf I	3	2913.844	Os I	20	2927.535	Ru II	76
2898.477	Mo II	156	2913.999	Ru II	115	2927.542	Mo II	146
2898.644	Mo I	45	2914.12	Ta I	46	2927.867	Cd II	24
2898.71	Hf II	19	2914.294	Ru I	189	2928.194	W I	7
2899.03	Ta I	2	2914.672	Cd II	24	2928.198	Tc I	3
2899.20	Ta II	40	2914.73	Ta II	41	2928.487	Ru I	187
2899.716	Ru I	165	2914.84	Au I	6	2929.107	Rh I	20
2900.35	Ta I	39	2915.253	Mo I	57	2929.271	Cd II	24
2900.74	Ta II	19	2915.389	Mo I	44	2929.37	Ag II	11
2900.780	Mo II	138	2915.419	Rh I	27	2929.434	Ru I	129
2901.784	Ru I	80	2915.587	W I		*2929.507	Os I	1, 17
2901.816P	Ru I	2	2915.614	Ru I	203	2929.79	Pt I	1
2901.87	Ta II	20	2916.112	Mo I	11	2929.86	La II	28
2901.937	Ru I	34	2916.251	Ru I	1	2929.895	Hf I	16
2901.951	Ir I	10	2916.27	Hg II	6	2930.39	Mo I	
2902.026	Ru II	77	2916.365	Ir I	4	2930.478	Mo II	4
2902.04	Ta I	41	2916.370	Ru II	75	2931.09	Cs II	9
2902.087	Ru I	181	2916.48	Hf I	10	2931.092	Mo I	13
2902.09	Ag II	24	2917.132	Ru I	189	2931.280	Os I	4
2902.235	Mo I		2917.258	Os I	15	2931.941	Rh I	26
2902.48	Re I	32	*2917.56	Ta II	26, 27	2932.630	In I	2
2902.621	Mo I	44	2918.250	Au II	19	2933.232	Ru II	183
2902.854	Ru I	181	2918.254	W I	14	2934.173	Ru I	33
2903.055	Mo II	99	2918.32	Tl I	3	2934.293	Mo II	4
2903.074	Ru I	80	2918.521	Ru II	185	2934.24	Ag II	24
2904.412	Hf I	11	2918.591	Hf I	1	2934.642	Os I	7
2904.760	Hf I	4	2918.633	W II	8	2934.996	W I	2
2904.799	Ir I	6	2918.835	Mo II	26	2935.01	Pd II	24
2905.24	Ta II	9	2918.96	Ta II	25	*2935.196	Mo II	26
2905.260	Mo I	13	2919.31	Po I	7	2935.517	Ru II	180
2905.651	Ru I	4	2919.59	Hf II	8	2935.698	Mo II	134
2905.730	Os I	11	2919.604	Ru I	4	2936.005	Ru I	79
2905.91	Au I	12	2919.794	Os I	7	2936.009	W I	36

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2936.247	Ru I	3	*2952.262	W II	12, 16	2969.47	Ta I	5
2936.504	Mo I	47	2952.489	Ru I	3	2969.618	W I	21
2936.61	W II		2953.00	Ta II	12	2970.08	Mo I	
2936.773	Mo II	137	2954.084	Ru II	139	2970.972	Os I	4
*2936.95	Ta II	22, 28	2954.201	Hf I	4	2971.547	Mo I	42
2937.043	Ru II	217	2954.224	Au II	13	2971.757	Ru II	205
2937.142	W I	34	*2955.154	Mo II	118, 137	2971.904	Mo II	99
2937.336	Ru I	79	2955.32	Ta II	39	2972.607	Mo II	33
2937.67	Mo I		2955.348	Ru I	207	2972.922	W I	18
2937.78	Hf II	7	2955.593	Ru I	76	2972.95	Mo I	
2938.02	Ta II	29	2955.65	Ra I	1	2973.390	Hf I	13
2938.24	Bi I	7	2955.828	Mo II	110	2973.976	Ru I	79
2938.292	Mo II	136	2956.057	Mo II	4	2974.377	W II	8
2938.55	Ag II	21	2956.84	Ta II	24	2974.54	Ta II	26
2939.047	W I	14	2956.915	Mo II	158	2975.390	Mo II	145
2939.135	Ru I	4	2956.997	In I	1	2975.89	Hf II	7
2939.26	Ta I	41	2957.59	Ta I	13	2976.22	Ta II	19
2939.265	Ir I	6	2957.88	Ta II	8	*2976.294	Re I	20
2939.676	Ru I	164	2957.996	Ru I	38	2976.476	W II	7
2939.757	W II	14	2958.01	Hf I	21	2976.578	Ru II	75
2939.938	Ru I	181	2958.90	Po I	6	*2976.898	Mo II	122
2940.090	Mo II	98	2959.812	Mo I	11	2976.923	Ru I	1
2940.10	Ta I	41	2960.146	W I	19	2976.99	Ta II	19
2940.204	W II	9	2960.228	Mo II	4	2977.106	W I	33
2940.68	Au I	9	*2961.012	Os I	4, 23	2977.219	Ru II	75
2940.762	Hf I	3	2961.020	W II	12	2977.26	Mo I	41
2941.050	In II	8	2961.327	Mo II	33	2977.471	Ru II	155
2941.214	Mo II	146	2961.538	Ru II	185	2977.59	Hf II	17
2941.36	Ta I	44	2961.685	Ru I	167	2977.637	Os I	15
2942.11	Te II	6	2961.80	Hf II	16	2977.679	Rh I	19
2942.244	Ru II	75	2962.148	Os I	4	2977.760	Mo II	120
2942.848	Os I	4	2962.212	Mo II	145	*2978.20	Ta II	29, 31
2942.860	Mo I	11	2962.266	Re I	15	2978.28	Mo I	11
2943.145	Re I	23	2962.884	Mo I		2978.361	Ru I	215
2943.151	Ir I	2	2962.90	La II	28	2978.607	Mo II	123
2943.364	Mo II	137	2962.994	Ir I	8	2978.638	Ru II	156
2944.214	Mo I	1	2963.398	Ru II	76	2979.288	Hf I	19
2944.398	W I	5	2963.54	Rh II	33	2979.32	Xe II	10
*2944.57	Ta II	33, 41	2963.786	Mo II	4	2979.713	Ru II	76
2944.71	Hf I	2	2964.02	Ta II	23	2979.787	Mo II	
2944.814	Mo II	157	2964.062	Os I	10	2979.860	W I	7
2945.098	Ru II	210	2964.520	W I	5	2979.946	Ru II	75
2945.59	Ta II	29	2964.885	Hf I	2	2980.6216	Cd I	6
2945.661	Ru II	76	2965.112	Re I	22	2980.815	Hf I	2
2945.680	Mo I	46	2965.14	Ta II	1	2980.966	Ru II	203
2945.946	Mo II	146	2965.168	Ru I	1	2981.116	Rh I	1
2946.03	Mo I	9	2965.202	Ir I	7	2981.34	Cd I	6
2946.61	Rh II	62	2965.276	Mo II	4	2981.517	Mo I	9
2946.68	Te II	7	2965.54	Ta I	1	2981.89	Cd I	6
2946.692	Mo II	145	2965.554	Ru II	75	2981.934	Ru I	1
2946.989	W I	5	2965.756	Re I	20	2982.130	Mo I	11
2947.14	Hf II	27	2965.93	Ta II	1	2982.727	Hf I	25
2947.290	Mo II	137	2966.549	Ru I	216	2982.80	In III	10
2947.388	W I	10	2966.953	Hf I	12	*2982.902	Os I	17, 25
2947.80	Ta I	30	2966.985	Mo II	135	2983.035	Mo I	38
2948.5	Pb II	15	2967.23	Hf II	16	2983.085	Rh I	2
2949.532	Os I	7	2968.29	Ta II	18	2983.44	La II	18
2949.762	Ir I	10	2968.398	Ru I	203	2983.590	Mo II	118
2949.92	Ta II	13	2968.468	Ru I	182	*2983.955	Mo II	134, 158
2950.4	Bi II	8	2968.663	Rh I	13	2985.15	Mo I	10
2950.50	La II	33	2968.775	Mo II	134	2985.309	Mo II	98
2950.670	Hf I	8	2968.81	Hf II	10	2985.76	La II	18
2951.401	Ru I	1	2968.94	Hf II	18	2985.800	Ir I	2
2951.84	Rh I	17	2968.952	Ru I	37	2985.835	Mo I	56
2951.90	Ta II	24	2969.04	Ta II	34	2986.147	Mo II	145

## FINDING LIST—CONTINUED

I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.	I A	Spectrum	Multiplet No.
Air			Air			Air		
2986.202	Rh I	13	3001.634	Ru I	76	3067.398	Re I	1
2986.81	Ta II	3	3002.197	Mo I	1	3067.426	Hf I	1
2986.897	Mo II	119	3002.26	Pt I	6	3067.732†	Bi I	1
2986.989	Rh I	18	3003.21	Po I	2	3069.181	Ru I	37
2987.294	W II	11	3004.45	Mo II	111	3071.027	Rh I	14
2987.347	Mo II		3006.588	Ru I	1	3071.69	Sn IV	7
2987.449	Rh I	31	3007.124	Mo I	40	3074.789	Hf I	21
2987.904	Mo I	39	3008.08	In III	10	3077.660	Mo II	157
2987.960	Mo II	134	3008.82	In III	10	3078.754	I II	59
*2988.225	Mo I	41	3009.136	Sn I	1	3080.842	Hf I	5
2988.57	Ta I	38	3010.258	Mo I	10	*3082.224	Mo II	118
2988.676	Mo I	42	3011.948	Mo II	99	3087.415	Rh I	13
2989.03	Bi I	5	3016.4	Pb II	15	3096.764	Hf I	3
2989.49	Ta I	28	3016.80	Hf I	1	3099.249	Mo II	123
2989.78	Mo I	40	3017.235	Ru I	1	3101.39	Hf II	10
2989.855	Mo II	98	3019.78	Rh II	33	3108.808	Re I	22
2990.617	Ir I	8	3020.530	Hf I	3	3109.11	Hf II	7
2990.714	W I	14	3020.871	Ru I	1	3116.95	Hf II	26
2991.453	Ru II	139	3021.498	Hg I	8	3119.980	Hf I	1
2991.621	Ru II	76	3022.748	Mo II	110	3124.402	Rh I	26
2992.083	Ru II	139	3023.303	Mo II	158	3127.817	Mo II	122
2992.120	Ru I	184	3023.475	Hg I	8	3134.72	Hf II	1
2992.250	Mo II	110	3023.911	Rh I	17	3139.34	Pt I	3
2992.363	Re I	1	3024.08	Ta I	41	3152.603	Rh I	14
*2992.840	Mo II	33, 118	3024.62	Bi I	5	3156.688	Hf I	8
2993.273	Ru I	34	3025.29	Hf II	10	3159.84	Hf I	3
2993.33	Bi I	6	3025.606	Hg I	8	3164.385	Hf I	2
2993.501	Mo II	33	3025.88	La II	18	3172.949	Hf I	2
2993.614	W I	14	3027.487	Hg I	7	3175.046†	Sn I	1
2993.866	I II	59	3027.49	Ta I	41	3191.187	Rh I	13
2994.700	W II		3027.780	Ru II	76	3194.20	Hf II	7
2994.820	Au II	13	3027.92	Pd I	4	3206.108	Hf I	2
2994.967	Ru I	1	3028.406	Rh I	16	3227.991	Au III	57
2995.258	W I	10	3030.315	Mo II	98	3229.75	Tl I	2
*2995.528	Mo II	158	3031.16	Hf II	8	3236.76	Hf I	3
2996.078	Ir I	4	3032.442	Ru II	184	3251.97	Pt I	11
2996.891	Ru I	77	3033.24	Mo II	33	3258.80	Pd I	4
2997.192	Ir I	8	3033.44	Ra II	6	3291.043	Hf I	12
2997.326	Mo II	134	3034.120	Sn I	1	3306.110	Hf I	5
2997.402	Mo I	38	3034.922	Mo II	99	3309.856	Au III	57
2997.408	Ir I	11	3035.792	Ru II	182	3328.21	Hf II	7
2997.613	Ru I	34	*3036.463§	Ru I	77	3402.512	Hf I	2
2997.647	Os I	20	*3036.463§	Ru II	156	3495.75	Hf II	7
2997.793	W I	7	3042.480	Ru I	1	3519.24	Tl I	1
2997.97	Pt I	3	3043.438	Mo II	33	3529.43	Tl I	1
2998.693	W II	7	*3045.715	Ru I	76			
2998.886	Ru II	76	3046.03	Hf II	25			
2999.38	Ta II	23	3046.132	Ru II	76			
2999.599	Re I	19	3047.702	Ru II	76			
2999.789	Ru II	157	3048.888	Mo II	157			
*3000.290	Mo II	119	3049.217	Rh I	28			
3000.624	W II	16	3051.142	In I	1			
3000.854	Mo I	40	3057.010	Hf I	10			
3001.137	Re I	25	3059.91	La II	30			
3001.425	Mo I	39	3064.69	Pt I	1			

## Selected Publications of the National Bureau of Standards

### Atomic Energy Levels, C. E. Moore:

Circular 467, Volume I. H to V (Z=1 to 23) 206 spectra. 309 p. (1949)	\$5. 50
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Circular 467, Volume III. $\left. \begin{array}{l} \text{Mo to La (Z=42 to 57)} \\ \text{Hf to Au (Z=72 to 89)} \end{array} \right\}$ 124 spectra. 245 p. (1958)	\$2. 50

### An Ultraviolet Multiplet Table, C. E. Moore:

Circular 488, Section 1. H to V (Z=1 to 23); Selected Multiplets of 79 Spectra. 78 p. (1950).	\$0. 55
Circular 488, Section 2. Cr to Nb (Z=24 to 41); Selected Multiplets of 46 Spectra. 116 p. (1952).	\$0. 70
Circular 488, Section 3. $\left. \begin{array}{l} \text{Mo to La (Z=42 to 57)} \\ \text{Hf to Ra (Z=72 to 88)} \end{array} \right\}$ Selected Multiplets of 78 Spectra. 94 p. (1961).	\$0. 60
Circular 488, Section 4. H to Nb (Z=1 to 41); Finding List for Sections 1 and 2 of the Table. 65 p. (1961).	\$0. 45
Circular 488, Section 5. $\left. \begin{array}{l} \text{Mo to La (Z=42 to 57)} \\ \text{Hf to Ra (Z=72 to 88)} \end{array} \right\}$ Finding List for Section 3 of the Table. 30 p. (1961).	\$0. 30

### Table of Wavenumbers, C. D. Coleman, W. R. Bozman, and W. F. Meggers:

Monograph 3, Volume I. 2000 Å to 7000 Å. 508 p. (1960)	\$0. 60
Monograph 3, Volume II. 7000 Å to 1000 μ. 542 p. (1960)	\$6. 00

### New Description of Thorium Spectra, Romuald Zalubas:

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### Tables of Spectral-Line Intensities, W. F. Meggers, C. H. Corliss, and B. F. Scribner:

Monograph 32, Part I. Arranged by Elements. 474 p. (1961)	\$4. 00
Monograph 32, Part II. Arranged by Wavelengths. 272 p. (1961)	\$3. 00

The above publications may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

### A Multiplet Table of Astrophysical Interest, C. E. Moore. A Reprinting of the 1945 Multiplet Table (Princeton Univ., Obs. Contr. No. 20):

Technical Note 35 (PB151895), Part I Table of Multiplets, and Part II Finding List, 112951Å-13154Å. 242 p. (1959).	\$4. 00
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The above Technical Note may be purchased by the PE number from the Department of Commerce, Office of Technical Services, Washington 25, D.C.