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A BIBLIOGRAPHY OF ATOMIC LINE IDENTIFICATION LISTS IV. MARCH 1989 SUPPLEMENT

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Abstract. New references are listed for the bibliography of atomic line identification lists by Adelman and Snijders and its two supplements by Adelman.

Key words: atomic - spectra - line identifications - bibliography

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1. INTRODUCTION

Adelman and Snijders (1974) began a bibliography of line identffication lists to supplement the material contained in the ultraviolet and revised multiplet tables (Moore 1945, 1950, 1952, 1962) and in Kelly and Palumbo (1973) for the wavelength region $\lambda\lambda$911-8250 and the first four spectra of all elements. Adelman (1978, 1983) provided two supplements which also included references to the fifth and sixth spectra of key elements through the iron peak. Table 1 is a list of references found in the literature since the last supplement was completed in August 1983. Each entry indicates the wavelength region covered and the type of reference: A = analysis, CL = classified lines, EA = extension of analysis, NMT = new multiplet table, RA = revised analysis, TC = temperature classffication, and W = wavelength list. The reader is advised to examine each reference to determine its quality.

Although this compilation is shorter than previous supplements, it does contain some extremely useful papers. Moore (1985) published a multiplet table and atomic-energy level compilation for O III. Isberg and Litzen's (1985) study of Ga II solved some problems associated with identifying lines of this atomic species in HgMn stars. Other publications of particular interest include Adelman et al.'s (1985) finding list for Moore's multiplet tables for the spectra of H, C, N, O, and Si; Sugar and Corliss' (1985) revision of energy-level compilations for spectra of K through Ni; and Kelly's (1987) new compilation of atomic lines shortward of 2000 Å which supersedes Kelly and Palumbo (1973). In addition, Adelman (1987) found that many predicted lines of Fe II and Cr II corresponded to features in the spectra of HgMn stars.

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13. Moore, C. E. 1985, *NSRDS-NBS3*, Section 11.
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TABLE 1

Species	Reference	Type
B II	Jannitti, E., Pinzhong, F. and Tondello, G. 1986, *Physica Scripta* **33**, 434.	[CL, 417-1379]
	Dumont, P. D., Garnir, H. P. and Baudinet-Robinet, Y. 1987, *Z. Phys. D* **4**, 335.	[CL, 544-1892]
B III	Dumont, P. D., Garnir, H. P. and Baudinet-Robinet, Y. 1987, *Z. Phys. D* **4**, 335.	[CL, 438-1436]
B IV	Dumont, P. D., Garnir, H. P. and Baudinet-Robinet, Y. 1987, *Z. Phys. D* **4**, 335.	[CL, 596-1654]
C III	Dumont, P. D., Garnir, H. P., Baudinet-Robinet, Y. and Chung, K. T. 1985, *Phys. Rev. A* **32**, 229.	[CL, 1143-1726]
C IV	Dumont, P. D., Garnir, H. P., Baudinet-Robinet, Y. and Chung, K. T. 1985, *Phys. Rev. A* **32**, 229.	[CL, 181-2348]
N I	Eriksson, K. B. S. 1986, *Physica Scripta* **34**, 211.	[EA, 862-1837]
N II	Eriksson, K. B. S. 1983, *Physica Scripta* **28**, 593.	[RA, 345-5699]
O II	Eriksson, K. B. S. and Wenaker, I. 1984, *Physica Scripta* **30**, 321.	[EA, 6457-10445]
	Eriksson, K. B. S. 1987, *J. Opt. Soc. Am. B* **4**, 1369.	[EA, 525-834 and 3945-4677]
O III	Moore, C. E. 1985, *NSRDS - NBS3*, Section 11.	[NMT, 226-88332]
F VI	Engstrom, L. 1985, *Physica Scripta* **31**, 379.	[RA, 83-5289]
Mg II	Gaardsted, J. O., Andersen, T., Sonnek, D., Mannervik, S. and Short, R. T. 1988, *Physica Scripta* **38**, 27.	[EA, 1653-2213]
Si II	Artru, M. -C. 1986, *Astr. Ap.* **168**, L5.	[CL, 1233-1312]
P I	Berkowitz, J., Greene, J. P., Cho, H. and Goodman, G. L. 1987, *J. Phys. B* **26**, 2647.	[W, 771-887; CL, 1177-1182]
S I	Joshi, Y. N., Mazzoni, M., Nencioni, A., Parkinson, W. H. and Cantu, A. 1987, *J. Phys. B* **20**, 1203.	[CL, 928-1474]
S II	Pettersson, J. E. 1983, *Physica Scripta* **28**, 421.	[RA, 558-9564]
Cl I	Cantu, A. M., Parkinson, W. H., Grisendi, T. and Tagliaferri, G. 1985, *Physica Scripta* **31**, 579.	[EA, 951-1397]
	Cantu, A. M. and Parkinson, W. H. 1988, *Physica Scripta* **37**, 336.	[EA, 756-1202]
Sc V	Smitt, R. and Ekberg, J. O. 1985, *Physica Scripta* **31**, 391.	[RA, 166-2207]
Ti I	Forsberg, P., Johansson, S. and Smith, P. L. 1986, *Physica Scripta* **34**, 759.	[EA, 1899-2316]
	Forsberg, P. 1987, Thesis, University of Lund.	[RA, 2036-54807]
Ti I	Brown, C. M., Ginter, M. L., Johansson, S. and Tilford, S. G. 1988, *J. Opt. Soc. Am. B* **5**, 2125.	[W, 2043-3215]
Ti VI	Ekberg, J. O. and Smitt, R. 1988, *Physica Scripta* **38**, 336.	[RA, 125-2316]
V I	Brown, C. M., Ginter, M. L., Johansson, S. and Tilford, S. G. 1988, *J. Opt. Soc. Am. B* **5**, 2125.	[W, 1963-3208]
V II	Iglesias, L., Rico, F. R. and Garcia-Riquelme, O. 1984, *Optica Pura y Aplicada* **17**, 93.	[EA, 1102-1384 & 5453-7370]
	Iglesias, L., Cabeza, M. I., Garcia-Riquelme, O. and Rico, F. R. 1987, *Optica Pura y Aplicada* **20**, 137.	[EA, 2410-3413]
Fe I	Learner, R. C. M. and Thorne, A. P. 1988, *J. Opt. Soc. Am. B* **5**, 2045.	[W, 3824-5762]
	Brown, C. M., Ginter, M. L., Johansson, S. and Tilford, S. G. 1988, *J. Opt. Soc. Am. B* **5**, 2125.	[EA, 1550-3215]
Fe II	Johansson, S. 1983, *M. N. R. A. S.* **205**, 71P.	[CL, 1975-2772]
	Adam, J., Baschek, B., Johansson, S., Nilsson, E. and Brage, T. 1987, *Ap. J.* **312**, 337.	[EA, 1306-2805]
	Johansson, S. 1988, *Ap. J. (Letters)* **327**, L85.	[CL, 1029-1884 -five lines]
Zn IV	Joshi, Y. N. and Van Kleef, Th. A. M. 1987, *Physica Scripta* **36**, 782.	[EA, 832-1329]

Ga II	Isberg, B. and Litzen, U. 1985, *Physica Scripta* **31**, 533.	[RA, 829-9706]
Ga III	Isberg, B. and Litzen, U. 1985, *Physica Scripta* **33**, 420.	[RA, 452-5994]
	Ryabtsev, A. N. and Wyart, J. F. 1987, *Physica Scripta* **36**, 25.	[EA, 434-1925]
Ge IV	Ryabtsev, A. N. and Wyart, J. F. 1987, *Physica Scripta* **36**, 25.	[EA, 301-1230]
As I	Howard, L. E. and Andrew, K. L. 1985, *J. Opt. Soc. Am. B* **2**, 1032.	[RA, 1358-35660]
	Bhatia, K. S., Zaidi, A. A. and Makdisi, Y. 1987, *Spectrochimica Acta* **42B**, 607.	[EA, 1336-1644]
Kr III	Bredice, F., Reyna Almandos, J., Gallardo, M., Di Rocco, H. O. and Triguerios, A. G. 1988, *J. Opt. Soc. Am. B* **5**, 222.	[EA, 516-8179]
Rb IV	Persson, W. and Wahlstrom, C. -G. 1985, *Physica Scripta* **31**, 487.	[A, 291-3944]
Mo III	Iglesias, L., Cabeza, M. I., Rico, F. and Kaufman, V. 1988, *Physica Scripta* **37**, 855.	[A, 1141-3213]
Mo IV	Fernandez, M. T., Cabeza, M. I., Iglesias, L., Garcia-Riqueleme, O., Rico, F. R. and Kaufman, V. 1987, *Physica Scripta* **35**, 819.	[EA, 800-3138]
Nb IV	Shujauddin, Q. and Chaghtai, M. S. Z. 1985, *Physica Scripta* **32**, 69.	[EA, 420-2218]
Pd III	Barakat, M. M., Van Kleef, Th. A. M. and Raassen, A. J. J. 1985, *Physica* **132C**, 111.	[EA, 611-2285]
Pd IV	Barakat, M. M., Van Kleef, Th. A. M. and Raassen, A. J. J. 1985, *Physica* **132C**, 240.	[EA, 489-838]
	Barakat, M. M., Van Kleef, Th. A. M. and Joshi, Y. N. 1985, *Physica* **132C**, 251.	[EA, 1154-2276]
Sb I	Zaidi, A. A., Makdisi, Y. and Bhatia, K. S. 1984, *J. Phys. B* **17**, 355.	[EA, 1424-2529]
Sb II	Arcimowicz, B. and Aufmuth, P. 1987, *J. Opt. Soc. Am. B* **8**, 1291.	[RA, 2054-2568]
I II	Sarma, V. N. and Joshi, Y. N. 1983, *Can. J. Phys.* **61**, 1434.	[EA, 1098-1831]
Xe I	Yoshino, K. and Freeman, D. E. 1985, *J. Opt. Soc. Am. B* **2**, 1268.	[EA, 922-1296]
Xe II	Bertuccelli, G., Reyna Almandos, J., Di Rocco, O. and Gallardo, M. 1983, *Optica Pura y Aplicada* **16**, 163.	[CL, 2108-6745]
	Hansen, J. E. and Persson, W. 1987, *Physica Scripta* **36**, 602.	[RA, 675-10221]
Xe III	Persson, W., Wahlstrom, C. -G., Bertuccelli, G., Di Rocco, O., Reyna Almandos, J. G. and Gallardo, M. 1988, *Physica Scripta* **38**, 347.	[RA, 490-8870]
Xe IV	Reyna Almandos, J., Bredice, F., Di Rocco, O. and Gallardo, M. 1985, *Optica Pura y Aplicada* **18**, 87.	[W, 2284-6095]
W II	Cabeza, M. I., Iglesias, L. and Rico, F. R. 1985, *Optica Pura y Aplicada* **18**, 1.	[W, 1399-2680]
W IV	Iglesias, L., Kaufmann, V., Garcia-Riqueleme, O. and Rico, F. R. 1985, *Physica Scripta* **31**, 173.	[A, 673-2658]
Pt I	Engleman, R., Jr. 1985, *J. Opt. Soc. Am. B* **2**, 1934.	[W, 2150-31000]
Pt II	Reader, J., Acquista, N., Sansonetti, C. J. and Engleman, R., Jr. 1988, *J. Opt. Soc. Am. B* **5**, 2106.	[W, 1032-21878]
Hg I	Baig, M. A. 1983, *J. Phys. B* **16**, 1511.	[EA, 1187-2538]
Bi I	George, S., Munsee, J. H. and Verges, J. 1985, *J. Opt. Soc. Am. B* **2**, 1264.	[EA, 2566-13112]
Ra I	Armstrong, J. A., Wynne, J. J. and Tomkins, F. S. 1980, *J. Phys. B* **13**, L133.	[EA, 2350-2437]
U III	Palmer, B. A. and Engleman, R., Jr. 1984, *J. Opt. Soc. Am. B* **1**, 609.	[A, 2778-8997]
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