

APPENDIX A

This appendix contains the bibliographic references list arranged on the atomic processes and on the elements. It is strongly extended and updated version of bibliographic list presented by K. Butler (1993). We have paid a special attention to the review papers and recent catalogue. References to the papers issued since 1991 are presented more detaily. Limited space of whole catalogue does not allow for presentation of data for all elements of periodical system and their ions, so we restricted our consideration mostly with elements are presented in the gaseous nebulae plasma conditions, those are the elements up to Fe and their ions up to Xth ionization stage. The gzipped .dvi file (appa-n.dvi.gz) of the APPENDIX can be found at A.F.Kholtygin's WWW home page: <http://www.aispbu.spb.su/staff/afk/afk.html>) via hypertext reference AtDatCent/Contents.html.

Energy Levels and Wavelengths

- Review** Wiese, W.L., 1991, in *J. de Phys.*, **Vol. 1 Coll. 1 Suppl. JP II, 3**, 287, Ed. Zeippen, C.J. and Le Dourneuf, M.
- Review** Martin, W.C., 1992, in *Lecture Notes in Physics*, in press
- Forb. lines**, ns^2np^k **Be – Mo ions** Kaufman, V. and Sugar, J., 1986, *J. Phys. Chem. Ref. Data*, **15**, 321
- Li Seq** ($8 \leq Z \leq 92$) Zhang, H.L., Sampson, D.H. and Fontes, C.J., 1990, *At. Dat. Nucl. Data Tables*, **44**, 31
- C I - IV** Jannitti, E., Nikolosi, P. and Tondello, G., 1990, *Phys. Scr.*, **41**, 458
- C I** Yamamoto, S. and Saito, S., 1991, *Astrophys. J.*, **370**, L103
- N I - IV** Rieger, G., Bukow, H.H. and Vilkas, M., 1994, *J. Phys. B*, **27**, 2123
- N IV** Laughlin, C., 1990, *Phys. Scr.*, **42**, 551
- N V** Laughlin, C., 1990, *Z. Phys. D*, **16**, 9
- O II** Pettersson, S.G. and Wenaker, I., 1990, *Phys. Scr.*, **42**, 187
- O II** Wenaker, I., 1990, *Phys. Scr.*, **42**, 667
- O II** Martin, W.C., Kaufman, V. and Musgrove, A., 1993, *J. Phys. Chem. Ref. Data*, **22**, 1179
- Na ions** Martin, W.C. and Zalubas, R., 1981, *J. Phys. Chem. Ref. Data*, **10**, 153
- Na Seq** ($Z=22, 92$) Sampson, D.H., Zhang, H.L., Fontes, C.J., 1990, *At. Dat. Nucl. Data Tables*, **44**, 209
- Na Seq** (Cl VII, Ar VIII) Kuplyauskene, A.V. and Zhukauskas, G., 1991, *Opt. i Spectr.*, **67**, 15
- Mg ions** Martin, W.C. and Zalubas, R., 1980, *J. Phys. Chem. Ref. Data*, **9**, 1
- Ng Seq** Levashov, V.E., 1991, *Opt. i Spectr.*, **71**, 732
- Mg ions** Kaufman, V. and Martin, W.C., 1991, *J. Phys. Chem. Ref. Data*, **20**, 83
- Mg I** Clark, R.E.H., Czanak, G. and Abdallah Jr., J., 1991, *Phys. Rev. A*, **44**, 2874
- Al ions** Martin, W.C. and Zalubas, R., 1979, *J. Phys. Chem. Ref. Data*, **8**, 817
- Al ions** Chang, E.S., 1990, *J. Phys. Chem. Ref. Data*, **19**, 118
- Al I** Buurman, E.P., Koning, O.J. and Donszelmann, A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2673
- Al Seq** ($Z=14, 19$) Hjorth-Jensen, M. and Aashamar, K., 1990, *Phys. Scr.*, **42**, 309
- Al ions** Kaufman, V. and Martin, W.C., 1991, *J. Phys. Chem. Ref. Data*, **20**, 775
- Si ions** Martin, W.C. and Zalubas, R., 1983, *J. Phys. Chem. Ref. Data*, **12**, 323
- Si I** Dembczynski, J. and Stachowska, E., 1991, *Phys. Scr.*, **43**, 248
- P ions** Martin, W.C., Zalubas, R. and Musgrove, A., 1985, *J. Phys. Chem. Ref. Data*, **14**, 751
- S ions** Martin, W.C., Zalubas, R. and Musgrove, A., 1990, *J. Phys. Chem. Ref. Data*, **19**, 821
- S ions** Martin, W.C., Zalubas, R. and Musgrove, A., 1991, *J. Phys. Chem. Ref. Data*, **20**, 205

S I – S XVI Kaufman, V. and Martin, W.C., 1993, *J. Phys. Chem. Ref. Data*, **22**, 279
CHIII-VI Raaseen A.J.J., Snoek L.C., Volten H., Uylings P.H.M., Meijer F.G., Joshi Y.N., 1992, *Astron. Astrophys. Suppl. Ser.*, **95**, 223
ArIII-V Raaseen A.J.J., Snoek L.C., Volten H., Uylings P.H.M., Meijer F.G., Joshi Y.N., 1992, *Astron. Astrophys. Suppl. Ser.*, **95**, 223
K – Ni Sugar, J. and Corliss, C., 1985, *J. Phys. Chem. Ref. Data*, **14**, Suppl. 2
V VI – V XXIII Shirai, T., Nakagaki, T., Sugar, J., Wiese, W.L., 1992, *J. Phys. Chem. Ref. Data*, **21**, 273
Cr V – Cr XXIV Shirai, T., Nakai, Y., Nakagaki, T., Sugar, J., Wiese, W.L., 1993, *J. Phys. Chem. Ref. Data*, **22**, 1279
Fe I – Fe XXVI Corliss, C. and Sugar, J., 1982, *J. Phys. Chem. Ref. Data*, **11**, 135
Fe I – Fe VI Huang, K.N., 1990, *Report Inst. At. Mol. Sci., Acad. Sinica, Dept. of Phys., Taiwan*
Fe I O'Brian, T.R., Wickliffe, M.E., Lawler, J.E., Whaling, W. and Brault, J.W., 1991, *J. Opt. Soc. Am. B*, **8**, 2028
Fe VII – Fe XXVI Shirai, T., Funatake, Y., Mori, K., Sugar, J. and Wiese, W.L., 1990, *J. Phys. Chem. Ref. Data*, **19**, 127
Co VIII – Co XXVII Shirai, T., Mengoni, A., Nakai, Y., Sugar, J., Wiese, W.L., Mori, K., Sakai, H., 1992, *J. Phys. Chem. Ref. Data*, **21**, 23
Cu I – Cu XXIX Sugar, J. and Musgrove, A., 1990, *J. Phys. Chem. Ref. Data*, **19**, 527
Cu X – Cu XXIX Shirai, T., Nakagaki, T., Nakai, Y., Sugar, J., Ishii, K., Mori, K., 1991, *J. Phys. Chem. Ref. Data*, **20**, 1
Ge I – Ge XXXII Sugar, J. and Musgrove, A., 1993, *J. Phys. Chem. Ref. Data*, **22**, 1213
Kr I – Kr XXXVI Sugar, J. and Musgrove, A., 1991, *J. Phys. Chem. Ref. Data*, **20**, 859
Mo I – Mo XLII Sugar, J. and Musgrove, A., 1988, *J. Phys. Chem. Ref. Data*, **17**, 135
Mo VI – Mo XLII Shirai, T., Nakai, Y., Ozano, K., Ishii, K., Sugar, J., Mori, K., 1987, *J. Phys. Chem. Ref. Data*, **16**, 327
 $\lambda \leq 2000\text{\AA}$, **H – Kr** Kelly, R.L., 1987, *J. Phys. Chem. Ref. Data*, **16**, Suppl 1
 $\lambda \geq 912\text{\AA}$, **All Elements** Morton D.C., 1991, *Astrophys. J. Suppl. Ser.*, **77**, 119
 $\lambda > 228\text{\AA}$, **All Elements** Verner, D.A., Barthel, P.D., Tytler, D., 1994, *Astrophys. J. Suppl. Ser.*, **108**, 287

Transition Probabilities

Bibliography Biémont, E. and Zeippen, C.L., 1991, in *J. de Phys.*, **Vol. 1 Coll. 1 Suppl. JP II**, **3**, 209, Ed. Zeippen, C.J. and Le Dourneuf, M.
Review Wiese, W.L., 1991, in *J. de Phys.*, **Vol. 1 Coll. 1 Suppl. JP II**, **3**, 287, Ed. Zeippen, C.J. and Le Dourneuf, M.
Review Wiese, W.L., 1991, in *Reports on Astronomy Tras. IAU*, **Report 21A**, 111, Ed. McNally, D., Kluwer, Dordrecht, Holland
Review Martin, W.C., 1992, in *Lecture Notes in Physics*, in press
M1-Tables Kaufman, V. and Sugar, J., 1986, *J. Phys. Chem. Ref. Data*, **20**, 321

- Critical Evaluation** Mendoza, C., 1983, in *IAU Symposium No. 103*, Ed. Flower, D.R., p. 143
- Critical Evaluation** Martin, W.C., Fuhr, J.R. and Wiese, W.L., 1988, *J. Phys. Chem. Ref. Data*, **16**,
Suppl. 3
- Critical Evaluation** Fuhr, J.R., Martin, W.C. and Wiese, W.L., 1988, *J. Phys. Chem. Ref. Data*, **17**,
Suppl. 4
- Critical Evaluation** Fuhr, J.R. and Wiese, W.L., 1990, in *CRC Handbook of Chemistry and Physics, 71st Edition*, Ed. Lide, D.R.
- Critical Evaluation** Morton, D.C., 1991, *Astrophys. J. Suppl. Ser.*, **77**, 119
- Forbidden lines** Biémont, E., Hansen, J.E., Quinet, P. and Zeippen, C.J., 1995, *Astron. Astrophys. Suppl. Ser.*, **111**, 333
- H ions** Storey, P.J. and Hummer, D.G., 1991, *Comput. Phys. Commun.*, **66**, 129
- H** Omidvar, K. and Guimaraes, T.P., 1990, *Astrophys. J. Suppl. Ser.*, **73**, 555
- H** Malik, G.P., Malik, U. and Varma, V.S., 1991, *Astrophys. J.*, **371**, 418
- H - Bi** Verner, D.A., Barthel, P.D. and Tytler, D., 1994, *Astron. Astrophys. Suppl. Ser.*, **108**, 287
- He I** Kono A., Hottori S., *Phys. Rev. A*, **29**, 2981
- He I** Theodosiou C.E., 1987, *At. Dat. Nucl. Data Tables*, **36**, 97
- Li Seq** ($\leq 8Z \leq 92$) Zhang, H.L., Sampson, D.H. and Fontes, C.J., 1990, *At. Dat. Nucl. Data Tables*, **44**,
31
- Be Seq** Trabert, E., 1990, *Phys. Scr.*, **41**, 675
- Be Seq** Tully, J.A., Seaton, M.J. and Berrington, K.A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3811
- Be Seq** Eissner, W.B. and Tully, J., 1992, *Astron. Astrophys.*, **253**, 625
- Be Seq** (Z=4, 16) Chou, H.-S., Chi, H.-C. and Huang, K.-N., 1994, *Chin. J. Phys.*, **32**, 261
- Be Seq** (Z=11, 14) Granzow, J., Heckmann, P.H. and Traebert, E., 1994, *Phys. Scr.*, **49**,
148
- Be Seq** (Z=7, 36) Fritzsche, S. and Grant, I.P., 1994, *Phys. Scr.*, **50**, 473
- B Seq** (Z=14, 64) Zhang, H.L. and Sampson D.H., 1994, *At. Dat. Nucl. Data Tables*, **58**,
255
- B Seq** (Z=8, 26) Merkelis, G., Vilkas, M.J., Gaigalas, G. and Kisieličius, R., 1995, *Phys. Scr.*,
bf 51, 233
- Be I** Chang, T.N., 1990, *Phys. Rev. A*, **41**, 4922
- Be I** Chang, T.N. and Tang, X., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **43**, 45
- C Seq** Luo, D. and Pradhan, A.K., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3377
- C Seq** (Z=8, 20) Gupta, A. and Baluja, K.L., 1993, *Indian J. Pure Appl. Phys.*, **31**, 297
- C Seq** (Z=10, 22) Ray, D. and Mukherjee, P.K., 1995, *Phys. Scr.*, bf 51, 81
- C I** Goldbach, C., Martin, M. and Nollez, G., 1989, *Astron. Astrophys.*, **221**, 115
- C I** Haar, R.R., Curtis, L.J., Kvale, T.J. et al. , 1991, *Astron. Astrophys.*, **241**, 321
- C II - C III** Fischer, C.F., 1994, *Phys. Scr.*, bf 49, 316
- C III - C VI** Baudinet-Robinet, Y., Dumont, P.D., Garnir, H.P. and Himdy, A.E., 1989, *Phys. Rev. A*,
40, 6361
- C III** Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1990, *Astron. Astrophys. Suppl. Ser.*, **84**,
563
- C III** Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1991, *Astron. Astrophys. Suppl. Ser.*, **91**,
399
- C III** Fleming, J., Hibbert, A. and Stafford, R.P., 1994, *Phys. Scr.*, bf 49, 316

- C VI Tayal, S.S. and Henry, R.J.W., 1990, *Phys. Rev. A*, bf 42, 1831
- N Seq Becker, S.R., Butler, K. and Zeippen, C.J., 1989, *Astron. Astrophys.*, **221**, 375
- N Seq Curtis, L.J., Rudzikas, Z.B. and Ellis, D.G., 1991, *Phys. Rev. A*, **44**, 776
- N I Zhu, Q., Bridges, J.M., Hahn, T. and Wiese, W.L., 1989, *Phys. Rev. A*, **40**, 3721
- N I Hibbert, A., Biémont, E., Godefroid, M. and Vaeck, N., 1990, *Astron. Astrophys. Suppl. Ser.*, **88**, 505
- N I Dumont, P.-D., Garnir, H.-P. and Baudinet-Robinet, Y., 1991, *Z. Phys. D*, **21**, 209
- N I Vaeck, N. and Hansen, J.E., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L469
- N I Bell, K.L. and Berrington, K.A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 933
- N I - IV Rieger, G., Bukow, H.H. and Vilkas, M., 1994, *J. Phys. B*, **27**, 2123
- N II Baudinet-Robinet, Y., Garnir, H.-P., Dumont, P.-D. and Resimont, J., 1990, *Phys. Rev. A*, bf 42, 1080
- N II Tripp, T.M., Shemansky, D.E., James, G.K. and Ajello, J.M., 1991, *Astrophys. J.*, **368**, 641
- N II Bell, K.L., Ramsbottom, C.A. and Hibbert, A., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1735
- N II Bastin, T., Baudinet-Robinet, Y., Dumont, P.-D. and Garnir, H.-P., 1993, *J. Phys. (Orsay)*, **3**, 1479
- N II Kay, L. and Sadler, D.A., 1994, *J. Phys. B*, **27**, 2877
- N IV Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1990, *Astron. Astrophys. Suppl. Ser.*, **84**, 563
- N IV Chang, T.N. and Mu Yi, 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **44**, 413
- N IV Laughlin, C., 1990, *Phys. Scr.*, **42**, 551
- N IV Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1991, *Astron. Astrophys. Suppl. Ser.*, **91**, 399
- N V Laughlin, C., 1990, *Z. Phys. D*, **16**, 9
- N VI Ramsbottom, C.A., Berrington, K.A., Hibbert, A. and Bell, K.L., 1994, *Phys. Scr.*, **50**, 246
- O Seq Chen, M.H., 1989, *Phys. Rev. A*, **40**, 4330
- O Seq (Z=8, 36) Gupta, A. and Baluja, K.L., 1993, *Indian J. Pure Appl. Phys.*, **31**, 297
- O Seq (Z=20, 26) Gaigalas, G., Kaniauskas, J., Kisielius, R., Merkelis, G. and Vilkas, M.J., 1994, *Phys. Scr.*, **49**, 135
- O Seq (Z=10, 26) Vilkas, M.J., Merkelis, G., Kisielius, R., Gaigalas, G., Bernozas, A., Rudzikas, Z. B., 1994, *Phys. Scr.*, **49**, 592
- O I Tayal, S.S. and Henry, R.J.W., 1989, *Phys. Rev. A*, **39**, 4531
- O I Bell, K.L. and Hibbert, A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2673
- O I Butler, K. and Zeippen, C.J., 1991, *J. Phys. (Paris) Colloq.*, **1**, 141
- O I Bell, K.L., Hibbert, A., McLaughlin, B.M. and Higgins, K., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2665
- O I Hibbert, A., Biémont, E., Godefroid, M. and Vaeck, N., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3943
- O I Biémont, E., Hibbert, A., Godefroid, M., Vaeck, N. and Fawcett, B.C., 1991, *Astrophys. J.*, **375**, 818
- O II Bell, K.L., Hibbert, A., McLaughlin, B.M. and Higgins, K., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2665
- O II Bell, K.L., Hibbert, A., Stafford R.P. and McLaughlin, B.M., 1994, *Phys. Scr.*, **50**, 343
- O III Kotze, T.C. and van der Westhuizen, P., 1990, *Spectrochimica Acta B*, **45**, 421

- O III Baudinet-Robinet, Y., Dumont, P.-D. and Garnir, H.-P., 1991, *Phys. Rev. A*, **43**, 4022
- O III Aggarwal, K.M. and Hibbert, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4685
- O III Aggarwal, K.M. and Hibbert, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3445
- O III Marketos, P., 1994, *Z. Phys. D*, **29**, 247
- O III Thong, X., Zou, Y., Li, J. and Liu, X., 1994, *Chin. Phys. Lett.*, **11**, 69
- O V Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1990, *Astron. Astrophys. Suppl. Ser.*, **84**, 563
- O V Allard, N., Artru, M.-C., Lanz, T. and Le Dourneuf, M., 1991, *Astron. Astrophys. Suppl. Ser.*, **91**, 399
- O V Hart van der, H.W. and Hansen, J.E., 1993, *J. Phys. B*, **26**, 3297
- F Seq ($10 \leq z \leq 33$) Blackford, H.M.S. and Hibbert, A., 1994, *At. Dat. Nucl. Data Tables*, **58**, 101
- Ne Seq ($Z=26, 47$) Cornille, M., Dubau, J. and Jacquemot S., 1994, *At. Dat. Nucl. Data Tables*, **58**, 1
- Ne Seq ($Z=10, 14$) Hibbert, A. and Scott, M.P., 1994, *J. Phys. B*, **27**, 1315
- Ne II Burshtein, M.L. and Vujnović, V., 1991, *Astron. Astrophys.*, **247**, 252
- Na Seq ($Z=11, 29$) Guet, C., Blundell, S.A. and Johnson, W.R., 1990, *Phys. Lett. A*, **143**, 384
- Na Seq ($Z=22, 92$) Sampson, D.H., Zhang, H.L. and Fontes, C.J., 1990, *At. Dat. Nucl. Data Tables*, **44**, 209
- Mg Seq Trabert, E., 1990, *Phys. Scr.*, **41**, 675
- Mg Seq Butler, K., Mendoza, C. and Zeippen, C.J., 1991, *J. Phys. (Paris) Colloq.*, **1**, 135
- Mg Seq Chang, T.N. and Rong-qi Wang, 1991, *Phys. Rev. A*, **44**, 80
- Mg I Beck, D.R. and Ziyong Cai, 1989, *Phys. Lett. A*, **142**, 378
- Mg I Chang, T.N. and Tang, X., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **43**, 45
- Mg I Chang, T.N., 1990, *Phys. Rev. A*, **41**, 4922
- Mg IV Mohan, M. and Baluja, K.L., 1989, *Z. Phys. D: At. Mol. Clusters*, **14**, 135
- Mg IV Mohan, M. and Hibbert, A., 1991, *Phys. Scr.*, **44**, 158
- Al Seq ($Z=14, 19$) Hjorth-Jensen, M. and Aashamar, K., 1990, *Phys. Scr.*, **42**, 309
- Al Ions Oddershede, J. and Sabin, J.R., 1990, *Nucl. Instrum. Methods Phys. Res. B*, **48**, 34
- Al I Davidson, M.D., Volten, H. and Dönszelmann, A., 1990, *Astron. Astrophys.*, **238**, 452
- Al II Hibbert, A., 1989, *Phys. Scr.*, **39**, 574
- Al II Serrão, J.M.P., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **45**, 121
- Al V – Al VII Biémont, E., 1991, *At. Dat. Nucl. Data Tables*, **48**, 1
- Si III Hibbert, A., 1989, *Phys. Scr.*, **39**, 574
- Si III Serrão, J.M.P., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **45**, 349
- Si VI Mohan, M. and Le Dourneuf, M., 1990, *Phys. Rev. A*, **41**, 2862
- P Seq Curtis, L.J., Rudzikas, Z.B. and Ellis, D.G., 1991, *Phys. Rev. A*, **44**, 776
- S Seq ($Z=26, 29$) Traebert, E., Brandt, M., Doerfert, J. et al., 1993 *Phys. Scr.* **48**, 580
- S I Doering, J.P., 1990, *J. Geophys. Res.*, **95**, 213
- S I Delalic, Z., Erman, P. and Kallne, E., 1990, *Phys. Scr.*, **42**, 540
- S VII Hibbert, A., Mohan, M. and Le Dourneuf, M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1107
- S VIII Mohan, M. and Hibbert, A., 1991, *Phys. Scr.*, **44**, 158
- Cl Seq ($Z=26, 29$) Traebert, E., Brandt, M., Doerfert, J. et al., 1993 *Phys. Scr.* **48**, 580
- Cl I Delalic, Z., Erman, P., Kallne, E. and Zastrow, K.-D., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2727
- Cl I Ojha, P.C. and Hibbert, A., 1990, *Phys. Scr.*, **42**, 424
- Cl VIII Hibbert, A., Mohan, M. and Le Dourneuf, M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1107
- Ar Seq ($Z=18, 25$) Ghosh, T.K., Das, A.K., Castro, M., Canuto, S. and Mukherjee, P.K., 1993, *Phys. Rev.*

- A, **48**, 2686
- Ar II** Lüdtke, T. and Helbig, V., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **44**, 261
- Ar II** Das, M.B. and Bhattacharya, R., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 423
- Ar II** Vujnović, V. and Wiese, W.L., 1992, *J. Phys. Chem. Ref. Data*, **21**
- Ar IX** Hibbert, A., Mohan, M. and Le Dourneuf, M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1107
- K Seq** Zilitis, V.A., 1989, *Opt. Spectrosc.*, **67**, 595
- K Seq** Zeippen, C.J., 1990, *Astron. Astrophys.*, **229**, 248
- Ca I** Vaeck, N., Godefroid, M. and Hansen, J.E., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 361
- Ca II** Guet, C. and Johnson, W.R., 1991, *Phys. Rev. A.*, **44**, 1531
- Ti I** Salih, S. and Lawler, J.E., 1990, *Astron. Astrophys.*, **239**, 407
- Ti I** Lawler, J.E., 1991, *Astron. Astrophys.*, **252**, 853
- Ti II** Savanov, I.S., Huovelin, J. and Tuominen, I., 1990, *Astron. Astrophys. Suppl. Ser.*, **86**, 531
- Iron Group** Kurucz, R.L., 1992, in *Rev. Mex. Astron. Astrofisica*, **23**, Ed. Lynas-Gray, A.E., Mendoza, C. and Zeippen, C.J.
- Fe I** Bard, A., Kock, A. and Kock, M., 1991, *Astron. Astrophys.*, **248**, 315
- Fe I** O'Brian, T.R., Wickliffe, M.E., Lawler, J.E., Whaling, W. and Brault, J.W., 1991, *J. Opt. Soc. Am. B*, **8**, 1165
- Fe I – Fe II** Sigut, T.A.A. and Landstreet, 1990, *Mon. Not. R. Astr. Soc.*, **247**, 611
- Fe I – Fe IV** Sawey, P.M.J. and Berrington, K.A., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1451
- Fe II** Fawcett, B.C., 1987, *At. Dat. Nucl. Data Tables*, **37**, 333
- Fe II** Pauls, U., Grevesse, N. and Huber, M.C.E., 1990, *Astron. Astrophys.*, **231**, 536
- Fe II** Heise, C. and Kock, M., 1990, *Astron. Astrophys.*, **230**, 244
- Fe II** Bergeson, S.D., Mullman, K.L. and Lawler J.E., 1994, *Astrophys. J.*, **435**, L157
- Fe II** Nahar, S.N., 1995, *Astron. Astrophys.*, **293**, 967
- Fe VII** Saraph, H.E., 1991, *J. Phys. (Paris) Colloq.*, **1**, 157
- Fe IX** Fawcett, B.C. and Mason, H., 1991, *At. Dat. Nucl. Data Tables*, **47**, 17
- Fe XVII** Hummer, D.G., Berrington, K.A., Eissner, W., Pradhan, A.K., Saraph, H.E. and Tully, J.A., 1993, *Astron. Astrophys.*, **279**, 298
- Ni Seq** (Z=29, 42) Loginov, A.V., 1993, *Phys. Scr.*, **47**, 38
- Lanthanide atoms and first ions** Blagoev K.A., Komarovskii V.A., *At. Dat. Nucl. Data Tables*, **56**, 1

Radiative and Dielectronic Recombination

- Review** Pindzola, M.S., Badnell, N.R. and Griffin, D.C., 1990, *AIP Conf.Proc.*, **215**, 659
- Scaling** McLaughlin, D.J. and Hahn, Y., 1991, *Phys. Rev. A*, **43**, 1313
- H Seq** Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
- H Seq with dust** Hummer, D.G. and Storey, P.J., 1992, *Mon. Not. R. astr. Soc.*, **254**, 277
- He Seq** Romanik, C.J., 1988, *Astrophys. J.*, **330**, 1022
- He Seq** Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
- Li Seq** Dittner, P.F., Dutz, S., Miller, P.D. and Pepmiller, P.L., 1987, *Phys. Rev. A*, **35**, 3668
- Li Seq** Romanik, C.J., 1988, *Astrophys. J.*, **330**, 1022
- Li Seq** Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
- Be Seq** McLaughlin, D.J., LaGattuta, K.J. and Hahn, Y., 1987, *J. Quant. Spectrosc. Radiat. Transfer*, **37**, 47

- Be Seq** Badnell, N.R., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 2081
Be Seq Romanik, C.J., 1988, *Astrophys. J.*, **330**, 1022
Be Seq Badnell, N.R., Pindzola, M.S., Andersen, L.H., Bolko, J. and Schmidt, H.T., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4441
B Seq Badnell, N.R., Pindzola, M.S., Andersen, L.H., Bolko, J. and Schmidt, H.T., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4441
B Seq Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
B III Pradhan, A.K., 1984, *Phys. Rev. A*, **30**, 2141
B III Griffin, D.C., Pindzola, M.S. and Bottcher, C., 1985, *Phys. Rev. A*, **31**, 568
B III Geltman, S., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 1425
C & O ions Griffin, D.C., 1989, *Phys. Scr.*, **T28**, 17
C & O ions Hahn, Y., 1989, *Phys. Scr.*, **T28**, 25
C & O ions Badnell, N.R., 1989, *Phys. Scr.*, **T28**, 33
C I Escalante, V. and Victor, C.A., 1990, *Astrophys. J. Suppl. Ser.*, **73**, 513
C IV Pradhan, A.K., 1984, *Phys. Rev. A*, **30**, 2141
C IV Griffin, D.C., Pindzola, M.S. and Bottcher, C., 1985, *Phys. Rev. A*, **31**, 568
C IV Geltman, S., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 1425
C V Hahn, Y. and Bellantone, R., 1989, *Phys. Rev. A*, **40**, 6117
C V Bellantone, R. and Hahn, Y. 1989, *Phys. Rev. A*, **40**, 6913
C V Bellantone, R. and Hahn, Y. 1990, *Phys. Scr.*, **42**, 650
C V Badnell, N.R., Pindzola, M.S. and Griffin, D.C., 1990, *Phys. Rev. A*, **41**, 2422
C V Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
C VI Bellantone, R. and Hahn, Y. 1989, *Phys. Rev. A*, **40**, 6913
N II Escalante, V. and Victor, C.A., 1990, *Astrophys. J. Suppl. Ser.*, **73**, 513
N III Nasser, I. and Hahn, Y. 1989, *Phys. Rev. A*, **39**, 401
N V Andersen, L.H., Pan, G.-Y., Schmidt, H.T., Pindzola, M.S. and Badnell, N.R., 1992, *Phys. Rev. A*, **45**, 6332
O I Chung Sunggi and Lin, C.C., 1991, *Phys. Rev. A*, **43**, 3433
O II Terao, M., Bell, K.L., Burke, P.G. and Hibbert, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L321
O IV Nasser, I. and Hahn, Y. 1989, *Phys. Rev. A*, **39**, 401
O IV Janjusevic, M. and Hahn, Y. 1989, *Phys. Rev. A*, **40**, 5641
O VI Pradhan, A.K., 1984, *Phys. Rev. A*, **30**, 2141
O VI Griffin, D.C., Pindzola, M.S. and Bottcher, C., 1985, *Phys. Rev. A*, **31**, 568
O VI Roszman, L.J., 1989, *Phys. Scr.*, **T28**, 36
O VII Hahn, Y. and Bellantone, R., 1989, *Phys. Rev. A*, **40**, 6117
O VII Bellantone, R. and Hahn, Y. 1989, *Phys. Rev. A*, **40**, 6913
O VII Bellantone, R. and Hahn, Y. 1990, *Phys. Scr.*, **42**, 650
O VII Badnell, N.R., Pindzola, M.S. and Griffin, D.C., 1990, *Phys. Rev. A*, **41**, 2422
O VIII Bellantone, R. and Hahn, Y. 1989, *Phys. Rev. A*, **40**, 6913
F ions Ballantone, R., Hahn, Y. and McLaughlin, D.J., 1991, *Phys. Scr.*, **43**, 379
F V Nasser, I. and Hahn, Y. 1989, *Phys. Rev. A*, **39**, 401
F V Andersen, L.H., 1994, *Comments At. Mol. Phys.*, **27**, 25
F VII Andersen, L.H., Pan, G.-Y., Schmidt, H.T., Pindzola, M.S. and Badnell, N.R., 1992, *Phys. Rev. A*, **45**, 6332
Ne Seq Dalhed, S., Nilsen, J. and Hagelstein, P., 1986, *Phys. Rev. A*, **33**, 264
Ne Seq Chen, M.H., 1986, *Phys. Rev. A*, **34**, 1073
Ne Seq Romanik, C.J., 1988, *Astrophys. J.*, **330**, 1022
Ne ions Nussbaumer, H. and Storey, P.J., 1987, *Astron. Astrophys. Suppl. Ser.*, **69**, 123
Ng Seq Dube, M.P., Rasoanaivo, R. and Hahn, Y., 1985, *J. Quant. Spectrosc. Radiat. Transfer*, **33**, 13

- Ng Seq** Dube, M.P. and LaGattuta, K.J., 1987, *J. Quant. Spectrosc. Radiat. Transfer*, **38**, 311
- Ng ions** Nussbaumer, H. and Storey, P.J., 1986, *Astron. Astrophys. Suppl. Ser.*, **64**, 545
- Mg II** Pradhan, A.K., 1984, *Phys. Rev. A*, **30**, 2141
- Mg II** Geltman, S., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 1425
- Al ions** Nussbaumer, H. and Storey, P.J., 1986, *Astron. Astrophys. Suppl. Ser.*, **64**, 545
- Si ions** Nussbaumer, H. and Storey, P.J., 1986, *Astron. Astrophys. Suppl. Ser.*, **64**, 545
- Cl VII** Pradhan, A.K., 1984, *Phys. Rev. A*, **30**, 2141
- Ar ions** Moussa, A.H. and Hahn, Y., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **43**, 45
- Ca II** Geltman, S., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 1425

Radiative Recombination

- H ions** Pequignot, D., Petitjean, D. and Boisson, C., 1991, *Astron. Astrophys.*, **251**, 680
- H II** McLaughlin, D.J. and Hahn, Y., 1990, *Phys. Rev. A*, **43**, 1313
- C III - C V** McLaughlin, D.J. and Hahn, Y., 1990, *Phys. Rev. A*, **43**, 1313
- C VII** Andersen, L. H., Bolko, J. and Kvistgaard, P., 1990, *Phys. Rev. Lett.*, **64**, 729
- O II** Chung, S., Lin, C.C. and Lee, E.T.P., 1990, *Phys. Rev. A*, **43**, 3433
- O VII** McLaughlin, D.J. and Hahn, Y., 1990, *Phys. Rev. A*, **43**, 1313

Dielectronic Recombination

- H Seq** Pindzola, M.S. and Badnell, N.R. and Griffin, D.C., 1990, *Phys. Rev. A*, **42**, 282
- He Seq** Andersen, L.H., Bolko, J. and Kvistgaard, P., 1990, *Phys. Rev. A*, **41**, 1293
- He Seq** Teng, H., Xu, Z., Sheng, B. and Zhang, W., 1994, *Phys. Scr.*, **49**, 696
- He II** Tanis, J.A., Bernstein, E.M., Chantrenne, S. et al., *Nucl. Instrum. Methods Phys. Res. B*, **56-57**, 337
- Li Seq** Andersen, L.H., Bolko, J. and Kvistgaard, P., 1990, *Phys. Rev. A*, **41**, 1293
- Li Seq** Chen, M.H., 1991, *Phys. Rev. A*, **44**, 4215
- Li Seq** Teng, H., Sheng, B., Zhang, W. and Xu, Z., 1994, *Phys. Scr.*, **49**, 463
- O II** Terao, M., Bell, K.L., Burke, P.G. and Hibbert, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L327
- O VII** Badnell, N.R., Pindzola, M.S. and Griffin, D.C., 1990, *Phys. Rev. A*, **41**, 2422
- Ne Seq** Teng, H., Sheng, B., Zhang, W. and Xu, Z., 1994, *Phys. Scr.*, **49**, 468
- Fe Seq** Teng, H., Xu, Z., Zhang, W. and Sheng, B., 1994, *Phys. Scr.*, **50**, 55

Photoionization

- Bibliography** Le Dourneuf, M., 1991 in ZMLD, 227
- Critical Evaluation** Verner, D.A. and Yakovlev, D.G., 1995, *Astron. Astrophys. Suppl. Ser.*, **109**, 125
- H⁻** Quick Jr., C.R., Donahue, J.B., Cohen, S. et al., 1991, *Nucl. Instrum. Methods Phys. Res. B*, **56-57**, 205
- H** Norwood, K., Ng, C.Y. and Vary, J.P., 1990, *J. Chem. Phys.*, **93**, 1480
- H** Shafer, N. and Bersohn, R., 1990, *Phys. Rev. A*, **42**, 1313
- H** Karule, E., 1990, *J. Opt. Soc. Am. B*, **7**, 631
- H** Shafer, N. and Bersohn, R., 1991, *Phys. Rev. A*, **44**, 7855
- H ions** Storey, P.J. and Hummer, D.G., 1991, *Comput. Phys. Commun.*, **66**, 129
- He - Fe** Band, I.M., Trzhaskovskaya, M.B., Verner, D.A. and Yakovlev, D.G., 1990, *Astron. Astrophys.*,

237, 267

He - Zn Verner, D.A., Yakovlev, D.G., Band, I.M. and Trzhaskovskaya, M.B., 1993, *At. Dat. Nucl. Data Tables*, **55**, 233

He Rahal, H., Gombert, M.M. and Valance, A., 1993, *Phys. Lett. A*, **176**, 443

He Andersson, L.R. and Burgdorfer, J., 1993, *Phys. Rev. Lett.*, **71**, 50

He Decleva, P., Lisini, A. and Venuti, M., 1994, *J. Phys. B*, **27**, 4867

He Samson, J.A.E., He, Z.X., Yin, L. and Haddad, G.N., 1994, *J. Phys. B*, **27**, 887

He Hino, K.-I., Bergstrom Jr., P.M. and Macek, J.H., 1994, *Phys. Rev. Lett.*, **72**, 1620

C Seq Nahar, S.N. and Pradhan, A.K., 1991, *Phys. Rev. A*, **44**, 2935

CI Escalante V., Victor G.A., 1992 *At. Dat. Nucl. Data Tables*, **51**, 1

N Andersen, J.O. and Veseth, L., 1994, *Phys. Scr.*, **50**, 13

N I Samson, J.A.R. and Angel, G.C., 1990, *Phys. Rev. A*, **42**, 1307

N I Bell, K.L. and Berrington, K.A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 933

O I Bell, K.L., Berrington, K.A., Burke, P.G., Hibbert, A. and Kingston, A.E., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2259S

O I Butler, K. and Zeippen, C.J., 1990, *Astron. Astrophys.*, **234**, 569

Na Msezane, A.Z., Armstrong-Menzah, W. and Niles, J., 1990, *Phys. Rev. A*, **42**, 1286

Na Liu, J.C. and Liu, Z.W., 1994, *J. Phys. B*, **27**, 4531

Na D'yachkov, L.G. and Pankratov, P.M., 1994, *J. Phys. B*, **27**, 461

Mg II Ivanov, V.K., West, J.B., Gribakin, G.F. and Gribakina, A.A., 1994, *Z. Phys. D*, **29**, 109

S II- S VI Badnell, N.R., 1991, *Astrophys. J.*, **379**, 356

S VII Mohan, M., Kumar, A. and Baliyan, K.S., 1993, *Phys. Scr.*, **47**, 674

Ar Cvejanovic, S., Bagley, G.W. and Reddish, T.J., 1994, *J. Phys. B*, **27**, 5661

Ar, Kr Sukhorukov, V.L., Lagutin, B.M., Ktorov, I.D. et al., 1994, *J. Electron. Spectrosc. Relat. Phenom.*, **68**, 255

K Kupliauskiene, A., 1994, *J. Phys. B*, **27**, 5647

Ca II Miecznik, G., Berrington, K.A., Burke, P.G. and Hibbert, A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3305

Fe II Nahar, S.N. and Pradhan, A.K., 1994, *J. Phys. B*, **27**, 429

Kr Ehresmann, B.M., Vollweiler, F., Schmoranz, H. et al., 1994, *J. Phys. B*, **27**, 1489

Collisional Ionization

Critical Evaluation Itikawa, Y., 1992, *At. Dat. Nucl. Data Tables*, **49**, 209

Critical Evaluation Bell, K.L., Gilbody, H.B., Hughes, J.G., Kingston, A.E. and Smith, F.J., 1983, *J. Phys. Chem. Ref. Data*, **12**, 891

Critical Evaluation Lennon, M.A., Bell, K.L., Gilbody, H.B., Hughes, J.G., Kingston, A.E., Murray, M.J.,

Smith, F.J., 1986, UKAEA Report CLM-R, 270

Semi-empir. formulas Dertsch, H., Margreiter D. and Mark, T.D., 1994, *Z. Phys. D*, **29**, 31

General Arnaud, M. and Rothenflug, R., 1990, *Astron. Astrophys. Suppl. Ser.*, **60**, 425

General Freund, R.S., Wetzel, R.C., Shul, R.J. and Hayes, T.R., 1990, *Phys. Rev. A*, **41**, 3575

Excited States Golden, L.B. and Sampson, D.H., 1980, *J. Phys. B: Atom. Molec. Phys.*, **13**, 2645

Neutral Atoms Padma, R. and Deshmukh, P.C., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 943

- H Seq** Muller, A. 1991, *Comments At. Mol. Phys.*, **27**, 1
H - He Mayol, R. and Salvat, F., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 217
H Lebedev, V.S., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1977
H Scholz, T.T. and Walters, H.R.J., 1991, *Astrophys. J.*, **380**, 302
H Clark, R.E.H., Abdallah Jr., J. and Mann, J.B., 1991, *Astrophys. J.*, **381**, 597
H Jones, S., Madison, D.H. and Srivastava, M.K., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1899
H Bray L. and Stelbovich, A.T., 1993, *Phys. Rev. Lett.*, **70**, 746
He Seq Muller, A. 1991, *Comments At. Mol. Phys.*, **27**, 1
He Pan, C. and Kelly, H.P., 1990, *Phys. Rev. A*, **41**, 3624
He Jones, S., Madison, D.H. and Srivastava, M.K., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1899
He I Raeker, A., Burtschat, K. and Reid, R.H.G., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 3129
C VI Tayal, S.S. and Henry, R.J.W., 1990, *Phys. Rev. A*, **42**, 1831
N V - Ne VIII Defrance, P., Chantrenne, S., Rachafi, S. et al., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2333
N V Muller, A. 1991, *Comments At. Mol. Phys.*, **27**, 1
F II, Ne II, Cl II, Ar II Yamada, I., Danjo, A., Hirayama, T. et al., 1989, *J. Phys. Soc. Jpn.*, **58**, 3151
Na Bray I., 1994, *Phys. Rev. Lett.*, **73**, 1088
Al II Hayton, S.J.T. and Peart, B., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 5331
Ar VIII Rachafi, S., Belic, D.S., Duponchelle, M. et al., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1037
Ca II Badnell, N.R., Griffin, D.C. and Pindzola, M.S., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L275
Fe Baluja, K.L. and Gupta, A., 1994, *Z. Phys. D*, **31**, 5

Collisional Excitation

- Theory** Eichler, J., 1990, *Phys. Rep.*, **193**, 165
Review Henry, R.J.W., 1993, *Rep. Prog. Phys.*, **56**, 3271
Critical Evaluation Itikawa, Y., 1992, *At. Dat. Nucl. Data Tables*, **49**, 209
Critical Evaluation Pradhan, A.K. and Gallagher, J.W., 1992, *At. Dat. Nucl. Data Tables*, in press
Critical Evaluation Gallagher, J.W. and Pradhan, A.K., 1985, *JILA Report No 30*
Critical Evaluation Mendoza, C., 1983, in *IAU Symposium No. 103*, Ed. Flower, D.R., p. 143
General Percival, I.C. and Richards, D., 1977, *J. Phys. B: Atom. Molec. Phys.*, **8**, 1497
General van Regemorter H, Sampson, D.H. and Zhang, H.L., 1992, *Phys. Rev. A*, **45**, 1556
Semiempir. formulae (H I, O VII, Ne I, Ca II) Shevelko, V.P., 1991, *Phys. Scr.*, **43**, 266
H Seq Clark, R.E.H., 1990, *Astrophys. J.*, **354**, 382
H Seq Collaway, J., 1994, *At. Dat. Nucl. Data Tables*, **57**, 9
H I King, G.C., Trajmar, S. and McConkey, J.W., 1989, *Comments At. Mol. Phys.*, **23**, 229
H I Scholz, T.T., Walters, H.R.J. and Burke, P.G., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, L467
H I Chang, E.S., Avrett, E.H. and Loeser, R., 1991, *Astron. Astrophys.*, **247**, 580
H I Aggarwal, K.M., Berrington, K.A., Burke, P.G., Kingston, A.E. and Pathak, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1411
H I Aggarwal, K.M., Berrington, K.A., Burke, P.G., Kingston, A.E. and Pathak, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1385

- H I** Fon, W.C., Aggarwal, K.M. and Ratnavelu, K., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 2625
- H I** Odgers, B.R., Scott, M.P. and Burke, P.G., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 2577
- He Seq** Duban, J., 1994, *At. Dat. Nucl. Data Tables*, **57**, 21
- He I** Sawey, P.M.J., Berrington, K.A., Burke, P.G. and Kingston, A.E., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 4321
- He I** Scholz, T.T., Walters, H.R.J., Burke, P.G. and Scott, M.P., 1990, *Mon. Not. R. astr. Soc.*, **242**, 692
- He I** Nakazaki, S., Berrington, K.A., Sakimoto, K. and Itikawa, Y., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L27
- He I** McCarthy, I.E., Ratnavelu, K. and Zhou, Y., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4431
- He I** Fon, W.C., Berrington, K.A. and Kingston, A.E., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2161
- He I** Cartwright, D.C., Csanak, G., Trajmar, S. and Register, D.F., 1992, *Phys. Rev. A*, **45**, 1602
- He I** Gerasimov, G.N., 1992, *Opt. Spectr.*, **72**, 735
- He I** Matyureva, A.A. and Smirnov, V.V., 1993, *Opt. Spectr.*, **74**, 2
- He I** Sawey, P.M.J. and Berrington, K.A., 1993, *At. Data Nucl. Data Tables*, **55**, 81
- He I** Bruch, R. et al., 1993, *Nucl. Instrum. Methods Phys. Res. B*, **79**, 120
- He I** Raeker, A., Burtschat, K. and Reid, R.H.G., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 3129
- He I** Franca, A. and da Paixao, F.J., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 1577
- He II** Wen-Jia, Q., Yun-Bo, D., Rong-Long, W. and Narumi, H., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L443
- He II** Aggarwal, K.M., Berrington, K.A., Kingston, A.E. and Pathak, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1757
- He II** Aggarwal, K.M., Callaway, J., Kingston, A.E. and Unnikrishnan, K., 1992, *Astrophys. J. Suppl. Ser.*, **80**, 473
- Li Seq** Zhang, H.L., Sampson, D.H. and Fontes, C.J., 1990, *At. Dat. Nucl. Data Tables*, **44**, 31
- Li Seq** ($z \leq 28$) McWhirter, R.W.P., 1994, *At. Dat. Nucl. Data Tables*, **57**, 39
- Li I** Tayal, S.S. and Tripath, A.N., 1984, *Can. J. Phys.*, **62**, 198
- Li I** Gien, T.T., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 1337
- Li II** Berrington, K.A. and Nakazaki, S., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1411
- Be Seq** (Be I - Ni XXV) Berrington, K.A., 1994, *At. Dat. Nucl. Data Tables*, **57**, 71
- Be I** Fon, W.C., Berrington, K.A., Burke, P.G., Burke, V.M. and Hibbert, A., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 507
- Be II** Lengyel, V.I., Navrotsky, V.T. and Sabad, E.P., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2847
- B Seq** ($z = 5 - 28$) Sampson, D.H., Zhang, H.L. and Fontes, C.J., 1994, *At. Dat. Nucl. Data Tables*, **57**, 97
- B Seq** (Ne VI - Fe XXII) Zhang, H.L., Graziani, M. and Pradhan, A.K., 1994, *Astron. Astrophys.*, **283**, 319
- B I** Nakazaki, S. and Berrington, K.A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4263
- C Seq** (O III - Fe XXI) Monsignori Fossi, B.L. and Landini, M., 1994, *At. Dat. Nucl. Data Tables*, **57**,

- C I** Johnson, C.T., Burke, P.G. and Kingston, A.E., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 2553
- C I** Doering, J.P. and Dagdigian, P.J., 1989, *Chem. Phys. Lett.* **154**, 234
- C II** Luo, D. and Pradhan, A.K., 1990, *Phys. Rev. A*, **41**, 165
- C II** Blum, R.D. and Pradhan, A.K., 1991, *Phys. Rev. A*, **44**, 6123
- C II** Blum, R.D. and Pradhan, A.K., 1992, *Astrophys. J. Suppl. Ser.*, **80**, 425
- C IV** Petrini, D. and Tully, J.A., 1991, *Astron. Astrophys.*, **241**, 327
- C IV** Burke, V.M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, in press
- C VI** Aggarwal, K.M. and Kingston, A.E., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4583
- N Seq** (N I - Fe XX) Kato, T., 1994, *At. Dat. Nucl. Data Tables*, **57**, 181
- N I** Doering, J.P. and Goembel, L., 1991, *J. Geophys. Res.*, **96**, 16021
- N II** Tripp, T.M., Shemansky, D.E., James, G.K. and Ajello, J.M., 1991, *Astrophys. J.*, **368**, 641
- N III** Luo, D. and Pradhan, A.K., 1990, *Phys. Rev. A*, **41**, 165
- N III** Blum, R.D. and Pradhan, A.K., 1992, *Astrophys. J. Suppl. Ser.*, **80**, 425
- O I - Review** Itikawa, Y. and Ichimura, A., 1990, *J. Phys. Chem. Ref. Data*, **19**, 637
- O Seq** Butler, K. and Zeipen, C.J., 1994, *Astron. Astrophys. Suppl. Ser.*, **108**, 1
- O Seq** (F II - Kr XXIX) Lang, J. and Summers, H.P., 1994, *At. Dat. Nucl. Data Tables*, **57**, 215
- O I** Jain, R., Baluja, K.L., Setty, C.S.G.K., 1983, *Indian J. Radio & Space Phys.*, **12**, 177
- O I** Zipf, E.C. and Erdman, P.W., 1985, *J. Geophys. Res.*, **90**, 11087
- O I** Gulcicek, E.E. and Doering, J.P., 1987, *J. Geophys. Res.*, **92**, 3445
- O I** Vaughn, S.O. and Doering, J.P., 1988, *J. Geophys. Res.*, **93**, 289
- O I** Berrington, K.A., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 1083
- O I** Gulcicek, E.E. and Doering, J.P., 1988, *J. Geophys. Res.*, **93**, 5879
- O I** Gulcicek, E.E., Doering, J.P. and Vaughn, S.O., 1988, *J. Geophys. Res.*, **93**, 5885
- O I** Germany, G.A., Anderson, R.J. and Salamo, G.J., 1988, *J. Chem. Phys.*, **88**, 1999
- O I** Tayal, S.S. and Henry, R.J.W., 1988, *Phys. Rev. A*, **38**, 5945
- O I** Williams, J.F. and Allen, L.J., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3529
- O I** Tayal, S.S. and Henry, R.J.W., 1989, *Phys. Rev. A*, **39**, 4531
- O I** Doering, J.P. and Gulcicek, E.E., 1989, *J. Geophys. Res.*, **94**, 2733
- O I** Laher, R.R. and Gilmore, F.R., 1990, *J. Phys. Chem. Ref. Data*, **19**, 227
- O I** Mantas, G.P. and Carlson, H.C., 1991, *Geophys. Res. Lett.*, **18**, 159
- O I** Tayal, S.S., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 2639
- O II** Zuo, M., Smith, S.J., Chutjian, A. et al., 1995, *Astrophys. J.*, **440**, 421
- O III** Aggarwal, K.M. and Hibbert, A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3445
- O IV** Luo, D. and Pradhan, A.K., 1990, *Phys. Rev. A*, **41**, 165
- O IV** Blum, R.D. and Pradhan, A.K., 1992, *Astrophys. J. Suppl. Ser.*, **80**, 425
- O V** Kato, T., Lang, J. and Berrington, K.A., 1990, *At. Dat. Nucl. Data Tables*, **44**, 133
- O VI** Petrini, D. and Tully, J.A., 1991, *Astron. Astrophys.*, **241**, 327
- O VIII** Cornille, M., Dubau, J., Faucher, P. et al., 1994, *Astron. Astrophys. Suppl. Ser.*, **105**, 77
- F Seq** Saraph, H.E. and Tully, J.A., 1994, *Astron. Astrophys. Suppl. Ser.*, **107**, 29
- F Seq** (Ne II - Ni XX) Bhatia, A.K., 1994, *At. Dat. Nucl. Data Tables*, **57**, 253
- F IV** Conlon, E.S., Keenan, F.P. and Aggarwal, K.M., 1992, *Phys. Scr.*, **45**, 309
- Ne Seq** Chen, M.H. and Reed, K.J., 1989, *Phys. Rev. A*, **40**, 2292
- Ne I** Taylor, K.T., Clark, C.W. and Fon, W.C., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 2967
- Ne I** Pilsof, N. and Blagoev, A., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 639
- Ne I** Bubelev, V.E. and Grum-Grzhimailo, A.N., 1990, *Opt. Spectrosc.* **69**, 178
- Ne V** Keenan, F.P., Burke, V.M. and Aggarwal, K.M., 1991, *Astrophys. J.*, **371**, 636
- Ne V** Lennon, D.J. and Burke, V.M., 1991, *Mon. Not. R. astr. Soc.*, **251**, 628
- Ne VI** Hayes, M.A., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 2649
- Na I** Ganas, P.S., 1985, *J. Appl. Phys.*, **57**, 154

- Na I** Msezane, A.Z., 1988, *Phys. Rev. A*, **37**, 1787
Na I Msezane, A.Z., Handy, C.R., Mantica, G. and Lee, J., 1988, *Phys. Rev. A*, **38**, 1604
Na I Bielschowsky, C.E., Lucas, C.A., de Souza, G.G.B. and Noqueria, J.C., 1991, *Phys. Rev. A*, **43**, 5975
Na I Fleck, L., Grosser, J., Schnecke, A., Steen, W. and Voigt, H., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4017
Na I Stacewicz, T., 1993, *Z. Phys. D*, **27**, 149
Na VI Conlon, E.S., Keenan, F.P. and Aggarwal, K.M., 1992, *Phys. Scr.*, **45**, 309
Mg I Brunger, M.J., Riley, J.L., Scholten, R.E. and Teubner, P.J.O., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 1639
Mg I Brunger, M.J., Riley, J.L., Scholten, R.E. and Teubner, P.J.O., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 1431
Mg I McCarthy, I.E., Ratnavelu, K. and Zhou, Y., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 2597
Mg I Meneses, G.D., Pagan, C.B. and Machado, L.E., 1990, *Phys. Rev. A*, **41**, 4759
Mg I Meneses, G.D., Pagan, C.B. and Machado, L.E., 1990, *Phys. Rev. A*, **41**, 4740
Mg I Clark, R.E.H., Csanak, G. and Abdallah Jr., J., 1991, *Phys. Rev. A*, **44**, 2874
Mg I Melnikov, V.V., Petrov, E.V. and Shapockin, M.B., 1992, *Opt. Spectr.*, **72**, 731
Mg I Houghton, R.K., Brunger, M.J., Shen, G., and Teubner, P.J.O., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 3573
Mg I Shafran'osh, I.I., Shegurskaya, T.A. and Aleksakhin I.S., 1994, *Opt. Spectr.*, **76**, 20
Mg II Lengyel, V.I., Navrotsky, V.T. and Sabad, E.P., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2847
Mg IV Mohan, M. and Baluja, K.L., 1989, *Z. Phys. D: At. Mol. Clusters*, **14**, 135
Mg VII Burgess, A., Mason, H.E. and Tully, J.A., 1991, *Astrophys. J.* **376**, 803
Al II Aggarwal, K.M. and Keenan, F.P., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 2309, 5327
Al VIII Conlon, E.S., Keenan, F.P. and Aggarwal, K.M., 1992, *Phys. Scr.*, **45**, 309
Si Seq Galavís, M.E., Mendoza, C. and Zeippen, C.J., 1995, *Astron. Astrophys. Suppl. Ser.*, **111**, 347
Si II Dufton, P. and Kingston, A.E., 1990, *Mon. Not. R. astr. Soc.*, **248**, 827
Si II – Si IV, S II – S IV Duffon, P.L. and Kingston, A.F., 1994, *At. Dat. Nucl. Data Tables*, **57**, 273
Si III Dufton, P. and Kingston, A.E., 1989, *Mon. Not. R. astr. Soc.*, **241**, 209
Si IV Whalin, E.K., Thompson, J.S., Dunn, G.H., Phaneuf, R.A., Gregory, D.C. and Smith, A.C.H., 1991, *Phys. Rev. Lett.*, **66**, 157
Si VI Mohan, M. and Le Dourneuf, M., 1990, *Phys. Rev. A*, **41**, 2862
Si VI Mohan, M. and Le Dourneuf, M., 1990, *Astron. Astrophys.*, **227**, 285
S Seq Galavís, M.E., Mendoza, C. and Zeippen, C.J., 1995, *Astron. Astrophys. Suppl. Ser.*, **111**, 347
S I Ganas, P.S., 1990, *J. Chem. Phys.*, **92**, 2374
S II Ho, Y.K. and Henry, R.J.W., 1990, *Astrophys. J.* **351**, 701
S VII Mohan, M., Hibbert, A., Berrington, K.A. and Burke, P.G., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 989
Cl I Ganas, P.S., 1988, *J. Appl. Phys.*, **63**, 277
Ar I Subramanian, K.P. and Kumar, V., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 5505
Ar I Bielschowsky, C.E., de Souza, G.G.B., Lucas, C.A. and Boechat-Roberty, H.M., 1988, *Phys. Rev. A*, **38**, 3405

- Ar I** Bubelev, V.E. and Grum-Grzhimailo, A.N., 1990, *Opt. Spectrosc.* **69**, 178
Ar I Bubelev, V.E. and Grum-Grzhimailo, A.N., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2183
Ar I Mityureva, A.A. and Smirnov, V.V., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 1869
Ar II - Ni XII Pelan, J. and Berrington, K.A., 1995, *Astron. Astrophys. Suppl. Ser.*, **110**, 209
Ar III Johnson, C.T. and Kingston, A.E., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3393
Ca II Zatsarinny, O.I., Lendel, V.I. and Masalovich, E.A., 1989, *Opt. Spectrosc.*, **67**, 10
Ti Seq Berrington, K.A., 1995, *Astron. Astrophys. Suppl. Ser.*, **109**, 193
Mn III - Ni VI Berrington, K.A. and Pelan, J.C., 1995, *Astron. Astrophys. Suppl. Ser.*, **114**, 367
Fe Baluja, K.L. and Gupta, A., 1994, *Z. Phys. D*, **31**, 5
Fe I - Fe VIII Pradhan, A.K., 1994, *At. Dat. Nucl. Data Tables*, **57**, 297
Fe II Zhang, H.L. and Pradhan, A.K., 1995, *Astron. Astrophys.*, **293**, 953
Fe III Berrington, K.A., Zeippen, C.J., Le Dourneuf, M., Eissner, W.B. and Burke, P.G., 1990, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3467
Fe III Burke, P.G., Burke, V.M. and Dunseath, K.M., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 5341
Fe VII Keenan, F.P. and Norrington, P.H., 1991, *Astrophys. J.* **368**, 486
Fe IX - Fe XIV Mason, H.E., 1994, *At. Dat. Nucl. Data Tables*, **57**, 305
Fe XV - Fe XVIII Badnell, N.R. and Moaes, P.L., 1994, *At. Dat. Nucl. Data Tables*, **57**, 329
Kr VII Banister, M.E., Guo, X., Q., Kojima, T.M. and Dunn, G.H., 1994, *Phys. Rev. Lett.*, **72**, 3336
Ba Petrov, E.V. and Shapockin, M.B., 1993, *Phys. Scr.*, **48**, 440

Heavy Particle Collisions

- p + H I** Rodriguez, V.D. and Miraglia, J.E., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3629
p + H I Chen, Z., Esry, B.D., Lin, C.D. and Piasentini, R.D., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 2511
p + He I Amusia, M.Y., Rauscher, E.A., Bruch, R. and Fulling, S., 1993, *Nucl. Instrum. Methods Phys. Res. B*, **79**, 117
p + He I Bruch, R., Rauscher, E.A., Fulling, S. et al. 1993, *Nucl. Instrum. Methods Phys. Res. B*, **79**, 20
p + C I Roueff, E. and Le Bourlot, J., 1990, *Astron. Astrophys.*, **236**, 515
C + He Lavendy, H., Robbe, J.M. and Roueff, E., 1991, *Astron. Astrophys.*, **241**, 317
H + Si II Roueff, E., 1990, *Astron. Astrophys.*, **234**, 567

Charge Exchange

- Review** Dalgarno, A., 1985, *Nucl. Instrum. Methods Phys. Res. B*, **B9**, 662
General Butler, S.E. and Dalgarno, A., 1980, *Astrophys. J.*, **241**, 838
LZRATE Bienstock, S., 1983, *Comput. Phys. Commun.*, **29**, 333
H I Barrachina, R.O., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2321
H I Jouin, H. and Harel, C., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3219
H I Hoekstra, H.R., de Heer, F.J. and Morgenstern, R., 1991 *J. Phys. B: Atom. Molec. Phys.*, **24**, 4025

- H I** Jackson, D., Slim, H.A., Bransden, B.H. and Flower, D.R., 1992 *J. Phys. B: Atom. Molec. Phys.*, **25**, L127
- H I** Errea, L.F., López, A., Méndez, L. and Riera, S., 1992 *J. Phys. B: Atom. Molec. Phys.*, **25**, 811
- He I** Valiron, P., Gayet, R., McCarroll, R., Masnou-Seeuws, F. and Philippe, M., 1979, *J. Phys. B: Atom. Molec. Phys.*, **12**, 53
- He I** Kovach, A.P., Lazur, V.Y. and Mashika, Y.Y., 1988, *Sov. Phys.-Tech. Phys.*, **33**, 1159
- He I** Barrachina, R.O., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2321
- He I** Slim, H.A., Heck, E.L., Bransden, B.H. and Flower, D.R., 1991 *J. Phys. B: Atom. Molec. Phys.*, **24**, 1683
- He II** Errea, L.F., Méndez, L. and Riera, A., 1991 *Phys. Rev. A*, **43**, 3578
- He II** Jackson, D., Slim, H.A., Bransden, B.H. and Flower, D.R., 1992 *J. Phys. B: Atom. Molec. Phys.*, **25**, L127
- He III** Jouin, H. and Harel, C., 1991 *J. Phys. B: Atom. Molec. Phys.*, **24**, 3219
- C II** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- C III** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- C IV** Watson, W.D. and Christensen, R.B., 1979, *Astrophys. J.* **231**, 627
- C IV** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- C IV** Gargaud, M., Hanssen, J., McCarroll, R. and Valiron, P., 1981, *J. Phys. B: Atom. Molec. Phys.*, **14**, 2259
- C IV** Opradolce, L., Benmeuraim, L., McCarroll, R. and Piacentini, R.D., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 503
- C IV** Errea, L.F., Herrero, B., Méndez, L., Mó. O. and Riera, S., 1991 *J. Phys. B: Atom. Molec. Phys.*, **24**, 4049
- C IV** Errea, L.F., Herrero, B., Méndez, L. and Riera, A., 1991 *J. Phys. B: Atom. Molec. Phys.*, **24**, 4061
- C V** Gargaud, M. and McCarroll, R., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 463
- C V** Gargaud, M., McCarroll, R. and Valiron, P., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 1555
- C V** Barat, M., Roncin, P., Guillemot, L., Gaboriaud, M.N. and Laurent, H., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 2811
- C VI** Suraud, M.G., Hoekstra, R., de Heer, F.J., Bonnet, J.J. and Morgenstern, R., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2543
- C VII** Harel, C., Jouin, H. and Pons, B., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, L425
- C VII** Janev, R.K., Phaneuf, R.A., Tawara, H. and Shirai, T., 1993, *At. Dat. Nucl. Data Tables*, **55**, 201
- N III** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- N IV** Watson, W.D. and Christensen, R.B., 1979, *Astrophys. J.* **231**, 627
- N IV** McCarroll, R. and Valiron, P., 1979, *Astron. Astrophys.* **78**, 177
- N IV** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- N IV** Gargaud, M., Hanssen, J., McCarroll, R. and Valiron, P., 1981, *J. Phys. B: Atom. Molec. Phys.*, **14**, 2259
- N IV** Gargaud, M. and McCarroll, R., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 463
- N VI** Gargaud, M. and McCarroll, R., 1985, *J. Phys. B: Atom. Molec. Phys.*, **18**, 463

- N VII** Suraud, M.G., Hoekstra, R., de Heer, F.J., Bonnet, J.J. and Morgenstern, R., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2543
- O III** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- O III** Gargaud, M., McCarroll, R. and Opradolce, L., 1989, *Astron. Astrophys.*, **208**, 251
- O III** Bacchus-Montabonel, M.C., Courbin, C. and McCarroll, R., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4409
- O III** Gargaud, M., Bacchus-Montabonel, M.C. and McCarroll, R., 1993, *J. Chem. Phys.*, **99**, 4495
- O III** Kwang, V.H.S. and Fang, Z., 1993, *Phys. Rev. Lett.*, **71**, 4127
- O III** Honvault, P., Bacchus-Montabonel, M.C. and McCarroll, R., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 3115
- O III** Honvault, P., Gargaud, M., Bacchus-Montabonel, M.C. and McCarroll, R., 1995, *Astron. Astrophys.*, **302**, 931
- O IV** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- O VI** Andersson, L.R., Gargaud and M., McCarroll, R., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 2073
- O VII** Zhukov, S.P., Korukhov, V.V., Nikulin, N.G., Troshin, B.I. and Chernenko, A.A., 1988, *Sov. J. Quantum Electron*, **18**, 399
- Ne III** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- Ne III** Forster, H.C., Cooper, I.L., Dickinson, A.S., Flower, D.R. and Méndez, L., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 3433
- Ne IV** Butler, S.E., Heil, T.G. and Dalgarno, A., 1980, *Astrophys. J.* **241**, 442
- Na I** Mo, O. and Riera, A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, L373
- Na I** Tiwari, Y.N. and Roy, D.N., 1990, *Indian J. Pure Appl. Phys.*, **28**, 721
- Al III** Gargaud, M. et al., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 505
- Si II** Gargaud, M., McCarroll, R. and Valiron, P., 1982, *Astron. Astrophys.*, **106**, 197
- Si III** McCarroll, R. and Valiron, P., 1976, *Astron. Astrophys.*, **53**, 83
- Si V** Opradolce, L., McCarroll, R. and Valiron, P., 1985, *Astron. Astrophys.*, **148**, 229
- Ar I** Phelps, A.V., 1992, *J. Phys. Chem. Ref. Data*, **21**, 883
- Ar VII** Opradolce, L., Valiron, P. and McCarroll, R., 1983, *J. Phys. B: Atom. Molec. Phys.*, **16**, 2017
- Ar VII** Andersson, L.R., Cederquist, H., Barany, A. et al., 1991, *Phys. Rev. A*, **43**, 4075

Line Broadening

- Critical Evaluation** Konjević, N., Dimitrijević, M.S. and Wiese, W.L., 1984, *J. Phys. Chem. Ref. Data*, **13**, 619
- Critical Evaluation** Konjević, N., Dimitrijević, M.S. and Wiese, W.L., 1984, *J. Phys. Chem. Ref. Data*, **13**, 649
- Review** Dimitrijević, M.S. and Sahal-Bréchet, S., 1991, in *J. de Phys.*, **Vol. 1, Coll. 1, Suppl. JP II**, **3**, 209, Eds. Zeippen, C.J. and Le Dourneuf M.
- General** Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6431
- General** Seaton, M.J., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 3033
- General** Dimitrijević, M.S. and Konjević, N., 1987, *Astron. Astrophys.*, **172**, 345

- simple formula (collisions with HI)** Irwin A.W., 1979, *Mon. Not. R. astr. Soc.*, **188**, 707
- Neutrals** Seaton, M.J., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3603
- Shifts** Wiese, W.L. and Konjević, N., 1992, *J. Quant. Spectrosc. Radiat. Transfer*, **47**, 185
- H** Seaton, M.J., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3255
- H I** Unnikrishnan, K. and Callaway, J., 1991, *Phys. Rev. A*, **43**, 3619
- H II** Schöning, T., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 4501
- He I** Dimitrijević, M.S. and Sahal-Bréchet, S., 1990, *Astron. Astrophys. Suppl. Ser.*, **82**, 519
- He II** Unnikrishnan, K., Callaway, J. and Oza, D.H., 1990, *Phys. Rev. A*, **42**, 6602
- Li Seq** (C IV - O V) Glenzer, S. et al., 1994, *J. Phys. B: Atom. Molec. Phys.*, **27**, 5507
- Li I** Dimitrijević, M.S. and Sahal-Bréchet, S., 1991, *J. Quant. Spectrosc. Radiat. Transfer*, **46**, 41
- Be Seq** Dimitrijević, M.S., 1984, *Astron. Astrophys.*, **131**, 327
- C IV** Dimitrijević, M.S., Sahal-Bréchet, S. and Bommier, V., 1991, *Astron. Astrophys. Suppl. Ser.*, **89**, 581
- C IV** Schöning, T., 1992, *Astron. Astrophys.* in press
- C IV** Schöning, T., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, submitted
- C IV** Dimitrijević, M.S. and Sahal-Bréchet, S., 1992, *Astron. Astrophys. Suppl. Ser.*, **96**, 613
- C IV** Burke, V.M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, in press
- N II** Djeniže, Srećković A., Labat J. 1992, *Astron. Astrophys.*, **253**, 632
- NV** Dimitrijević, M.S. and Sahal-Bréchet, S., 1992, *Astron. Astrophys. Suppl. Ser.*, **95**, 109
- N V** Schöning, T., 1995, *Astron. Astrophys. Suppl. Ser.*, **113**, 579
- OIV - OV** Dimitrijević, M.S. and Sahal-Bréchet, S., 1995, *Astron. Astrophys. Suppl. Ser.*, **109**, 551
- O VI** Dimitrijević, M.S. and Sahal-Bréchet, S., 1992, *Astron. Astrophys. Suppl. Ser.*, **93**, 359
- Na I** Dimitrijević, M.S. and Sahal-Bréchet, S., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **44**, 421
- Mg I-II** Djeniže, S., Srećković, A., Platiša, M., Labat, J., Konjević, R. and Purić, J., 1990, *J. Quant. Spectrosc. Radiat. Transfer*, **44**, 405
- SiIII-III** Dimitrijević, M.S., 1983, *Astron. Astrophys.*, **127**, 568
- Si III** Bakshi, V., 1990, *Aip Conf. Proc.*, **216**, 71
- Si III** Djeniže, S., Srećković, A., Labat, J., Purić, J. and Platiša, M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 785
- Si IV** Dimitrijević, M.S., Sahal-Bréchet, S. and Bommier, V., 1991, *Astron. Astrophys. Suppl. Ser.*, **89**, 591
- Si IV** Djeniže, S., Srećković, A., Labat, J., Purić, J. and Platiša, M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 785
- Ca I** Spielfiedel, A., Feautrier, N., Chambaud, G. and Lévy, B., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4711
- Fe II** Dimitrijević, M.S., 1995, *Astron. Astrophys. Suppl. Ser.*, **111**, 565
- Ni II** Dimitrijević, M.S., 1995, *Astron. Astrophys. Suppl. Ser.*, **114**, 171

Opacities

- Workshop** Ed. Lynas-Gray, A.E., Mendoza, C. and Zeippen, C.J., 1992, *Rev. Mex. Astron. y Astrofisica*, **23**
Tables Rogers, F.J. and Iglesias, C.A., 1992, *Astron. Astrophys. Suppl. Ser.*, **79**, 507

Atomic Data for Opacity Calculations

- Summary** Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6363
Programs Berrington, K.A. et al., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6379
Lines Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6431
Lines Seaton, M.J., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 3033
Lines Seaton, M.J., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3603
Lines Burke, V.M., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, in press
H Lines Seaton, M.J., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3255
He target Thornbury, J.F. and Hibbert, A., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6447
He II Seq Fernley, J.A., Taylor, K.T. and Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6457
Li Seq Peach, G., Saraph, H.E. and Seaton, M.J., 1988, *J. Phys. B: Atom. Molec. Phys.*, **21**, 3669
Be Seq Tully, J.A., Seaton, M.J. and Berrington, K.A., 1990, *J. Phys. B: Atom. Molec. Phys.*, **23**, 3811
C Seq Luo, D. and Pradhan, A.K., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3377
C II f-values Yu Yan, Taylor, K.T. and Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6399
C II photo Yu Yan and Seaton, M.J., 1987, *J. Phys. B: Atom. Molec. Phys.*, **20**, 6409
O III Luo, D., Pradhan, A.K., Saraph, H.E., Storey, P.J. and Yu Yan, 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 389
Fe I-IV Sawey, P.M.J. and Berrington, K.A., 1992, *J. Phys. B: Atom. Molec. Phys.*, **25**, 1451

Others

- Bibliography** Le Dourneuf, M., 1991, in *J. de Phys.*, **Vol. 1 Coll. 1 Suppl. JP II**, **3**, 209, Eds. Zeippen, C.J. and Le Dourneuf, M.
H ions Storey, P.J. and Hummer, D.G., 1991, *Comput. Phys. Commun.*, **66**, 129
Heavy systems Kelly, H.P., 1990, *AIP Conf. Proc.*, **215**, 292
Positive Ions Manson, S.T., 1990, *AIP Conf. Proc.*, **215**, 189
Li I Hollauer, E. and Nascimento, M.A.C., 1990, *Phys. Rev. A*, **42**, 6608
Li II Hollauer, E. and Nascimento, M.A.C., 1990, *Phys. Rev. A*, **42**, 6608
C Seq Luo, D. and Pradhan, A.K., 1989, *J. Phys. B: Atom. Molec. Phys.*, **22**, 3377
N I Bell, K.L., Berrington, K.A. and Ramsbottom, C.A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 1209
N I Bell, K.L. and Berrington, K.A., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 933
O I Butler, K. and Zeippen, C.J., 1990, *Astron. Astrophys.*, **234**, 569
Al VII Baliyan, K.S. and Kingston, A.E., 1991, *J. Phys. B: Atom. Molec. Phys.*, **24**, 4743