

# Bibliography

1. Alder, K., Huus, T., Mottleson, B., Winter, A., 1956, *Reviews of Modern Physics* **28** : 432.
2. Allen, C.W., 1991, 'Astrophysical quantities', Athlone
3. N. R. Badnell, 1986, *Journal of Physics B*, **19** : 3827
4. Bates, D.R., Kingston, A.E., McWhirter, R.W.P., 1962, *Proc. Royal Soc. London*, **267** : 297
5. Bates, D. R. (ed.), 1964, 'Atomic and molecular processes', Academic Press
6. Behringer, K., 1997, 'The Influence of Opacity on Hydrogen Line Emission and Ionisation Balance in High Density Divertor Plasmas', Max-Planck-Institute for Plasma Physics Report, IPP 10/5
7. Behringer, K., 1998, 'Escape Factors for Line Emission and Population Calculations', IPP-Report, Max Planck Institut fur Plasmaphysik, **90** : 439
8. Bergeron, P., Wesemael, F., Fontaine, G., 1991., *Astrophysical Journal*, **367** : 253
9. Bethe, H.A. & Salpeter, E.E., 1977, 'Quantum Mechanics of One- and Two-Electron Atoms', Plenum Pub. Co., New York
10. Bhatia, A. K. & Kastner, S. O., 1992, *Astrophysical Journal Supplement Series*, **79** : 139
11. Breger, P., 1998, Private Communication

12. Brink, D.M.S. & Satchler, G.R., 1968, 'Angular momentum', Oxford University Press
13. Brooks, D.H. et al., 1999, *Astronomy and Astrophysics*, **347** : 277
14. Brooks, D.H. et al., 2000, *Astronomy and Astrophysics*, **357** : 697
15. Burgess, A. & Summers, H.P., 1976, *Mon. Not. R. Astr. Soc.*, **174** : 345
16. Burgess, A. & Summers, H.P., 1987, *Mon. Not. R. Astr. Soc.*, **226** : 257
17. Carlsson, M., 1986, 'A Computer Program for Solving Multi-level Non-LTE Radiative Transfer Problems in Moving or Static Atmospheres', Uppsala Report N°33, Uppsala Astronomical Observatory
18. Condon, E.U. & Shortley, G.H., 1935, 'The theory of atomic spectra', Cambridge University Press
19. Cowan, R.D., 1981, 'The theory of atomic structure and spectra', University of California Press, Berkley
20. Dappen, W., Anderson, L., Mihalas, D., 1987, *Astrophysical Journal*, **319** : 195
21. Drake, G.W.F. & Dalgarno, A., 1969, *Astrophysical Journal*, **157** : 459
22. Drawin, H.W., 1970, *J. Quant. Spectrosc. Radiat. Transfer*, **10** : 33
23. Doyle J.G. & McWhirter, R.W.P. 1980, *Mon. Not. R. Astr. Soc.*, **193** : 947
24. Edmonds, A. R., 1975, 'Angular momentum in quantum mechanics', Princeton University Press
25. Eissner, W., Jones, M., Nussbaumer, H., 1974, *Computer Physics Communications paper CPC8*, 270
26. Fenstermacher, M. E. et al., 1999, *Plasma Phys. Control. Fusion*, 1999, **41** : A345
27. Fischbacher, G.A., Loch S.D. & Summers H.P., 2000, *Astronomy and Astrophysics*, **357** : 767

28. Fischbacher, G.A., 2001, 'Diagnosis and modelling of optically thick structures in the lower solar atmosphere', PhD thesis, University of Strathclyde
29. Gouttebroze, P., Heinzel, P. & Vial J.-C., 1993, *Astronomy and Astrophysics Sup. Ser.*, **99** : 513
30. Griem, H. R., 1960, *Astrophysical Journal*, **132** : 883
31. Griem, H. R., 1964, 'Plasma Spectroscopy', McGraw -Hill
32. Griem, H. R. , 1974, 'Spectral Line Broadening by Plasmas', Academic Press
33. Griem, H. R. , 1997, 'Principles of Plasma Spectroscopy', Cambridge University Press
34. Gurovich, V. T. & Engel'sht, V. S., 1977, *Sov. Phys. JETP*, **45** : 232
35. Heasley, J.N. & Mihalas, D., 1976, *Astrophysical Journal*, **205** : 273
36. Hirayama, T., 1963, *Proceedings of the Astronomical Society of Japan*, **15** : 122
37. Hirayama, T., 1985, *Solar Physics*, **100** : 415
38. Holtzmark, J., 1919, *Ann. Phys. (Leipzig)*, **58** : 577
39. Hooper, C.F., 1966, *Physical Review*, **149** : 77
40. Hooper, C.F., 1968, *Physical Review*, **165** : 215
41. Horton, L., 2001, Private communication
42. Hubney, I., Hummer, D.G., Lanz, T., 1994, *Astronomy and Astrophysics*, **282** : 151
43. Hummer, D.G. & Mihalas, D., 1988, *Astrophysical Journal*, **331** : 794
44. Iglesias, C.A., Lebowitz, J. & McGowan, D., 1983, *Phys. Rev. A*, **28** : 1667
45. Inglis, D.R. & Teller, E., 1939, *Astrophysical Journal*, **90** : 439

46. Irons, F.E. , 1979, J. Quant. Spectrosc. Radiat. Transfer, **22** : 1
47. Jordan C., 1967, Solar Physics, **2**: 441
48. H. Jentschke, Spektroskopische Untersuchung eines luftähnlichen Plasmafreistrahls, Thesis, Institut für Plasmaforschung, Universität Stuttgart, 1995
49. Kastner, S. O.& Bhatia, A. K., 1992, Astrophysical Journal, **401** : 416
50. Kastner, S. O. & Bhatia, A. K., 1998, Mon. Not. R. Astr. Soc., **298** : 763
51. Kastner S.O., 1999, Physica Scripta, **60** : 381
52. Keenan R.P. & Kingston A.B., 1986, Mon. Not. R. Astr. Soc., **220** : 493
53. Krasheninnikov et al., 1997, Phys. Plasmas, **4** : 1638
54. Lachin, T., 1997, 'The investigation of opacity in the JET tokamak divertor region', PhD thesis, University College London
55. Lang J., Mason H.E. & McWhirter R.W.P., 1990, Solar Physics, **129** : 31
56. Levinson, C. & Ford, K.W., 1955, Phys. Rev., **99** : 792
57. Loch, S.D. & Summers, H.P., 1999, Proc. from the 8th SOHO workshop, Paris, p447
58. Lorentz H. A., Proc. R. Acad. Sci. (Amsterdam), **8** : 591
59. McCracken, G.M. et al., 1998, JET-P(98)21
60. Meigs, A. et al., 1998, JET-CP(98)28
61. Meigs, A., Fundamenski, W., Jupen, C, Larsen, A., Loch, S., O'Mullane, M., Summers, H. , 2000 , 27th EPS conference on controlled fusion and plasma physics, Budapest, 12-16th June 2000
62. Meigs, A., 2001, Private communication

63. Menzel, D.H., 1937, *Astrophysical Journal*, **85** : 330
64. Menzel, D.H. & Baker, J.G., 1937, *Astrophysical Journal*, **86** : 70
65. Menzel, D.H. & Pekeris, C.L., 1935, *Mon. Not. R. Astr. Soc.*, **96** : 77
66. Mitchell, A.C.G. & Zemansky, M.W., 1961, 'Resonance Radiation and Excited Atoms', Cambridge University Press
67. Namba, S., Goto, M., Tsuboi, H., Oda, T. & Sato, K., 2000, *Journal of applied physics*, **88** : 3182
68. O'Mullane, M.G. & Summers, H.P., 1999, 'PFC doping with trace impurities - spectroscopic studies of sensitivities of survey instruments', UKAEA Fusion /EU Task No. DV7A-T438 Report
69. Ohno, N., Ezumi, N., Krasheninnikov, S.I., & Pigarov, A. Yu., 1998, *Physical Review Letters*, **81** : 818
70. Pengelly, R.M. & Seaton, M.J., 1964, *Mon. Not. R. Astr. Soc.*, **127** : 165
71. Pigarov, A. Yu. et al., 1998, *Plasmas Physics and Controlled Fusion* , **40** : 2055
72. Poland, A. & Anzer, U., 1971, *Solar physics*, **19** : 401
73. Preist, E.R., 1989, 'Dynamics and structure of Quiescent Solar Prominences', Kluwer Acad. Publ., Dordrecht
74. Rose, M. E., 1957, 'Elementary Theory of Angular Momentum', New York: Wiley  
London: Chapman and Hall
75. Scharmer, G.B., & Carlsson, M., 1985, *J. Comput. Phys.*, **59** : 56
76. Schmieder, B., Heinzl, P., Kucera, T. & Vial, J.C., 1998, *Solar Physics*, **181** : 309
77. Schmieder, B., Heinzl, P., Vial, J.C. & Rudawy, P., 1999, *Solar Physics*, **189** : 109

78. Schmieder, B., Kucera, T.A., Heinzl, P., Vial, J.C., Poland, A., 1999b, Proc. from the 8th SOHO workshop, Paris, p605
79. Schmieder, B., Delanee, C., Yong, D. Y., Vial, J.C. & Madjarska, M., 2000, *Astronomy and Astrophysics*, **358** : 728
80. Seaton, M.J., 1990, *J. Phys. B: At. Mol. Opt. Phys.*, **23** : 3255
81. Sobelman, I.I., Vainshtein, L.A. and Yukov, E.A., 1981, 'Excitation of Atoms and Broadening of Spectral Lines', Springer-Verlag
82. Spadaro, D. et al., 2000, *Astronomy and Astrophysics*, **359** : 716
83. Stamm, R. et al., 23-27th March 1998, Proceedings of the American Physical Society: Atomic Processes in Plasmas, Auburn ,USA
84. Stellmacher, G. & Wiehr, E., *Astronomy and Astrophysics*, **290** : 655
85. Summers, H.P., 1977, *Mon. Not. R. Astr. Soc.*, **178** : 101
86. Summers, H.P., 1994, JET Joint Undertaking internal report, JET-IR(94)06
87. Summers, H.P., 2001, The ADAS User Manual, version 2.2, <http://adas.phys.strath.ac.uk/adas/>.
88. Summers, H.P. & Hooper, M.B., 1983, *Plasma Phys. Control. Fusion.*, **25** : 1311
89. Tandberg-Hanssen, E., 1995, 'The Nature of Solar Prominences', Kluwer Acad. Publ., Dordrecht
90. Talin, B. et al., 1995, *Phys. Rev. A*, **51** : 1918
91. Talin, B. et al., 1997, *J. Quant. Spectrosc. Radiat. Transfer*, **58** : 953
92. Vernazza, J.E., Avret, E.H., Loeser, R., 1981, *Astrophysical Journal Supplement series*, **45** : 635
93. Wan, A.S. et al., 1995, *J. Nucl. Mater.*, **1102** : 220

94. Wenzel, U. et al. , 1999, Plasma Phys. Control. Fusion, **162** : 189
95. Whyte, D.G., Humphreys, D.A. & Taylor, P.L., 2000, Physics of plamsas, **7** : 4052
96. Wilhelm, K. et al. , 1995, Solar Physics, **41** : 801
97. Zarro, D.M. & Zirin, H., 1985, Astronomy and Astrophysics, **148** : 240
98. Zirker, J.B., 1988, Solar Physics, **119** : 341