

## References

- [1] Isler, R., 1984, Nuc. Fus., **24**, pp 1599-1678.
- [2] Tawara, H., 1995, National Institute of Fusion Science, NIFS-DATA series, NIFS-DATA-25, Nagoya, Japan.
- [3] Wesson, J., 'Tokamaks', 1987, Clarendon Press, Oxford.
- [4] Pitcher, C. S., Stangeby, P. C., 1997, Plasma. Phys. Control. Fusion, **39** pp 779-930.
- [5] Coffey, I., et. al., 1995, Proc. Conf., 11<sup>th</sup> Colloquium on UV and X-ray spectroscopy of astrophysical and laboratory plasmas, pp 431-435.
- [6] Terry, J. L., et. al., 1998, Proc. Conf., 11<sup>th</sup> APS Topical conference, Atomic processes in plasmas, pp 43-57.
- [7] Meigs, A. G., 1998, *private communication*.
- [8] von Hellermann, M.G., et. al., 1994, JET Joint Undertaking preprint, JET-P(94)58.
- [9] Morsi, H. W., et. al., 1995, Plasma. Phys. Control. Fusion, **37**, pp 1407-1431.
- [10] O'Mullane, M., 1996, Ph.D thesis, Univerisity of Cork.
- [11] Andrew, Y., et. al., 1998, JET Joint Undertaking conference proceedings, JET-CP(98)03.
- [12] Schweer, B., et. al., 1992, J. Nuc. Mat., **196-198**, pp 174-178.
- [13] Takiyama, K., et. al., 1995, J. Nuc. Mat., **220-222**, pp 205-211.
- [14] Hintz, E., Schweer, B., 1995, Plasma. Phys. Control. Fusion, **37**, pp A87-A101.
- [15] Kislyakov, A. I., Krupnik, L. I., 1981, Sov. J. Plasma. Phys., **7**, pp 478-498.
- [16] von Hellermann, M. G., Summers, H. P., 1993, Atomic and Plasma-material. Interaction processes in controlled thermonuclear fusion, Janev R. K., Drawin, B. V. ( editors).
- [17] Fonck, F. J., et. al., 1990, Rev. Sci. Instrum., **61**, pp 3496-3500.
- [18] Isler, R. C., 1994, Plasma. Phys. Control. Fusion, **36**, pp 171-208.
- [19] Spence, J., 1987, Ph.D thesis, University of Strathclyde.
- [20] Mandl, W., 1992, Ph.D thesis, JET Joint Undertaking internal report, JET-IR(92)05.

- [21] Wolle, B., 1997, Max-Planck-institute for plasma physics, IPP internal report, IPP III/222, pp 1-94.
- [22] Maas, A., 1995, Ph.D thesis, JET Joint Undertaking.
- [23] Summers, H. P., et. al., 1991, JET Joint Undertaking preprint, JET-P(91)48 .
- [24] Pohlmeier, B. A., et. al., 1996, J. Phys. B., **29**, pp 221-229.
- [25] Bertolini, E., 1998, JET Joint Undertaking preprint, JET-P(98)54.
- [26] Summers, H. P., 1994, JET Joint Undertaking internal report, JET-IR(94)06.
- [27] Summers, H. P., 1995, ADAS FORTRAN library User manual, University of Strathclyde.
- [28] Spitzer, L., 1956, 'Physics of fully ionised gases', Interscience, New York.
- [29] Brooks, D. H., 1997, Ph.D thesis, University of Strathclyde.
- [30] von Hellermann, M. G., Summers, H. P., 1992, Rev. Sci. Instr. **63**, pp 5132-5139.
- [31] Kimura, M., Lane, N. F., 1986, Phys. Rev. A., **34**, pp 4421-4423.
- [32] Bates, D. R., Kingston, A. E., M<sup>c</sup>Whirter, R. W. P., 1962, Proc. Royal. Soc. London, **267 A**, pp 297-312.
- [33] Riviere, A. C., 1971, Nuc. Fus., **11**, pp 363-369.
- [34] Penningsfeld, F. P., 1986, Max-Planck-institute for plasma physics, IPP internal report, IPP 4/229, pp 1-18.
- [35] Boley, C.D., Janev, R.K., Post, D.E., 1984, Phys. Rev. Lett., **52**, pp 534-537.
- [36] Summers, H.P., 1998, *private communication*.
- [37] Burgess, A. Summers, H. P., 1976, Mon. Not. R. astr. Soc., **174**, pp 345-391.
- [38] Korotkov, A. A., Samsonov, 1989, M. S., A.F Ioffe Physico-technical Institute, I351.
- [39] Janev, R. K., Boley, C. D., Post, D. E., 1989, Nucl. Fus., **29**, pp 2125-2140.
- [40] Levinton, F. M., 1986, Rev. Sci. Instr., **57**, pp 1834-1836.
- [41] Korotkov, A. A., 1992, Nuc. Fus., **3**, pp 79-86.
- [42] Korotkov, A. A., Janev, R. K., 1996, Phys. Plasmas, **3**, pp 1512-1523.
- [43] Summers, H. P., 1977, Mon. Not. R. astr. Soc., **178**, pp 101-122.
- [44] Van Regemorter, H., 1962, J. Astrophys., **136**, pp 906-915.
- [45] Percival, I., Richards, D., 1978, Mon. Not. R. astr. Soc., **183**, pp 329-334.

- [46] Burgess, A., 1964, Proc. Symp. Atomic collision processes in plasmas, Culham, A.E.R.E. Rep. 4818, pp 63-71.
- [47] Lodge, J. G., Percival, I. C., Richards, D., 1976, J. Phys. B., **9**, pp 239-254.
- [48] Vainshtein, L., et. al., 1962, Soviet Physics JETP, **16**, pp 370-374.
- [49] Percival, I. C., Richards, D., 1975, Adv. At. Mol. Phys., **11**, pp 1-82.
- [50] Sampson, D. D., Goett, S. J., Clark, R.E.H., 1983, Atomic data and nuclear data tables, **29**, pp 467-534..
- [51] Golden, L. B., et. al., 1981, Astro. J. Supple. Series., **45**, pp 603-612.
- [52] Clark, R.E.H., et. al., 1982, Astro. J. Supple. Series., **49**, pp 545-554.
- [53] Callaway, J., 1994, Atomic data and nuclear data tables, **57**, pp 9-20.
- [54] Summers, H. P., 1996, Atomic data Status, ADAS manual. University of Strathclyde.
- [55] Bell, K. L., et. al., 1982, Culham laboratory internal report, CLM-R216, pp 1-120.
- [56] de Heer, F. J., et. al., 1995, Atomic and Plasma Mater. Inter. Data for Fus., **6**, pp 7-26.
- [57] Fujimoto, T., 1978, Institute of plasma physics, IPPJ internal report, IPPJ-AM-9, Nagoya University, Japan.
- [58] Summers, H. P., Anderson, H., Martin, R., 1998, ADAS users manual, Beam stopping and emission, University of Strathclyde.
- [59] von Hellermann, M. G., 1996, *private communication*.
- [60] Seraydarian, R.P., et. al., 1988, Rev. Sci. Instr., **59**, pp 1530-1532.
- [61] Levinton, F. M., et. al., 1989, Phys. Rev. Lett., **63**, pp 2060-2063.
- [62] Boileau, A., et. al., 1989, J. Phys. B., **22**, L145-L152.
- [63] Wroblewski, D., et. al., 1990, Rev. Sci. Instr., **61**, pp 3552-3556.
- [64] Wroblewski, D., Lao, L. L., 1992, Rev. Sci. Instr., **63**, pp 5140-5147.
- [65] Levinton, F. M., 1992, Rev. Sci. Instr., **63**, pp 5157-5160.
- [66] Wolf R, 1993, Ph.D thesis, JET Joint Undertaking internal report, JET-IR(93)08.
- [67] Fonck, R. J., 1990, Rev. Sci. Instr., **61**, pp 3487-3495.
- [68] Durst, D., et. al., 1992, Sci. Instr., **63**, pp 4907-4912 .

- [69] von Hellermann, M. G., et. al., 1990, Rev. Sci. Instr., **61**, pp 3479-3486.
- [70] von Hellermann, M. G., et. al., 1995, JET Joint Undertaking preprint, JET-P(95)63.
- [71] International Atomic Energy Authority, 1991, ITER Documentation series, No. 25.
- [72] Mandl, W., et. al., 1993, Plasma. Phys. Control. Fusion, **35**, pp 1373-1394.
- [73] Duessing, G., et. al., 1987, Fus. Tech., **11**, pp 163 - 202.
- [74] English, M., 1996, JET Joint Undertaking internal documentation.
- [75] Howman, A., 1997, *private communication*.
- [76] Sobelman, I.I., 1979, 'Atomic Spectra and radiative transitions', Springer Verlag.
- [77] Christiansen, J. P., 1987, Journal of computational physics, **73**, pp 85-104.
- [78] JET data Handbook, 1997, JET Joint Undertaking.
- [79] NAG Documentation, Numerical algorithms group Ltd., Banbury road, Oxford, UK.
- [80] Fiest, J. P., 1996, Diploma thesis, Gernhard-Mercator-University.
- [81] Hemsworth, S. H., 1987, JET Joint Undertaking internal note, RSH-NBP.
- [82] Satzmann, H., et. al., 1989, JET Joint Undertaking internal report, JET-IR(89)07.
- [83] van Rooij, G. J., 1994, Diploma thesis, University of technology, Eindhoven.
- [84] Marcus, F. B., et. al., 1990, JET Joint Undertaking internal report, JET-IR(90)01.
- [85] Hoekstra, R., et. al., 1997, Proc. Conf. ICAMDATA-first international conference, Gaithersburg, Maryland, pp 37-54.
- [86] Burgess, A. Tully, J.A., 1992, Astron. Astrophys, **254**, pp 436-453.
- [87] Shah, M. B., Gilbody, H. B., 1981, J. Phys. B., **4**, pp 2361-2377.
- [88] Shah, M. B., Elliot, D.S., Gilbody, H. B., 1987, J. Phys. B., **20**, pp 3501-3514.
- [89] Ryufuku, H., 1982, Phys. Rev. A., **29**, pp 720-736.
- [90] Janev, R.K., Smith, J.J., 1993, Atomic and Plasma Mater. Inter. Data for Fus., **4**, pp 1-180.
- [91] Toshima, N., Tawara, H., 1995, National Institute of Fusion Science,

NIFS-DATA series, NIFS-DATA-26, Nagoya, Japan.

- [92] Phaneuf, R. A., et. al., 1987, Atomic data for fusion, **5**, ORNL-6090, Oak ridge national laboratory, Hunter, H.T. (editor).
- [93] M<sup>c</sup> Clure, G. W., 1966, Phys. Rev. A, **148**, pp 47-54.
- [94] Greenland, P. T., 1984, Culham laboratory internal report, AERE - R11281, pp 1-65.
- [95] Frieling, G.J., 1992, J. Phys. B., **25**, pp 1245-1255.
- [96] Ryufuku, H., 1982, Japan Atomic Energy Research Institute, JAERI internal report, JAERI-M-82-031, pp 1- 127.
- [97] Busnengo, H.F., et. al., 1996, Physica Scripta, **T62**, pp 88-94.
- [98] Park, J.J., et. al., 1976, Phys. Rev. A., **14**, pp 608-614.
- [99] Fritsch, W., Lin, C.D., 1982, Phys. Rev A., **26**, pp 762-769.
- [100] Fritsch, W., Lin, C.D., 1983, Phys. Rev A., **27**, pp 3361-3364.
- [101] Shakeshaft, R., 1978, Phys. Rev. A., **18**, pp 1930-1934.
- [102] Ludde, H. J., Driezler, R. M., 1982, J. Phys. B., **15**, 2703-2711 .
- [103] Theodosian, C. E., 1980, Phys. Rev. A., **22**, pp 2556-2571.
- [104] Janev, R. K., Krstic, P. S., 1992, Phys. Rev. A., **46**, pp 5554-5573.
- [105] Ermolaev, A. M., 1990, J. Phys. B., **23**, pp L45-L50.
- [106] Fritsch, W., 1989, *private communication to Summers*.
- [107] Fritsch, W., Lin, C.D., 1991, Physics Reports, **202**, pp 1 - 97.