

Literaturverzeichnis

- [1] M. Göppert-Mayer, Ann. Phys. (Leipzig) 9, 273 (1931)
- [2] J. Schirmer, D. Habs, R. Kroth, N. Kwong, D. Schwalm, M. Zirnbauer, C. Broude, Phys. Rev. Lett. 53, 1897 (1984)
- [3] J. Kramp, D. Habs, R. Kroth, M. Music, J. Schirmer, D. Schwalm, C. Broude, Nucl. Phys. A 474, 412 (1987)
- [4] S. Klarsfeld, Phys. Lett. 30A, 382 (1969)
- [5] W.R. Johnson, Phys. Rev. Lett. 29, 1123 (1972)
- [6] R. Novick, Physics of One and Two-Electron Atoms, ed. F. Bopp and H. Kleinpoppen, North Holland, Amsterdam, 1969, Seite 296
- [7] M. Lipeles, R. Novick, N. Tolk, Phys. Rev. Lett. 15, 690 (1965)
- [8] R. Marrus, R.W. Schmieder, Phys. Rev. A 5, 1160 (1972)
- [9] R. Ali, I. Ahmad, R.W. Dunford, D.S. Gemmell, M. Jung, E.P. Kanter, P.H. Mokler, H.G. Berry, A.E. Livingston, S. Cheng, L.J. Curtis, Phys. Rev. A 55, 994 (1997)
- [10] P.H. Mokler, S. Reusch, A. Warczak, Z. Stachura, Phys. Rev. Lett. 65, 3108 (1990)
- [11] P.H. Mokler, NATO ASI Series B 296, 259 (1992)
- [12] R. Ali, I. Ahmad, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, P.H. Mokler, A.E. Livingston, S. Cheng, L.J. Curtis, Nucl. Instr. Meth. B 98, 69 (1995)
- [13] A. Derevianko, W.R. Johnson, Phys. Rev. A 56, 1288 (1997)
- [14] Y.B. Bannett, I. Freund, Phys. Rev. A 30, 299 (1984)
- [15] D.-S. Guo, Phys. Rev. A 36, 4267 (1987)
- [16] K. Ilakovac, J. Tudorić-Ghemo, B. Bušić, V. Horvat, Phys. Rev. Lett. 56, 2469 (1986)
- [17] M. Göppert-Mayer, Naturwissenschaften 17, 932 (1929)

- [18] S.P. Goldman, G.W.F. Drake, Phys. Rev. A 24, 183 (1981)
- [19] P.H. Mokler, Th. Stöhlker, C. Kozhuharov, R. Moshhammer, P. Rymuza, F. Bosch, T. Kandler, Phys. Scr. T51, 28 (1994)
- [20] F.A. Parpia, W.R. Johnson, Phys. Rev. A 26, 1142 (1982)
- [21] G. Breit, E. Teller, Astrophys. J. 91, 215 (1940)
- [22] J. Shapiro, G. Breit, Phys. Rev. 113, 179 (1959)
- [23] B.A. Zon, L.P. Rapoport, Pis'ma 7, 70 (1968)
[JETP Lett. 7, 52 (1968)]
- [24] S. Klarsfeld, Lett. Nuovo Cimento 1, 682 (1969)
- [25] V. Florescu, Phys. Rev. A 30, 2441 (1984)
- [26] V. Florescu, S. Pătrascu, O. Stoican, Phys. Rev. A 36, 2155 (1987)
- [27] E.J. Kelsey, J. Macek, J. Math. Phys. 17, 1182 (1976)
- [28] J.H. Tung, X.M. Ye, G.J. Salamo, F.T. Chan, Phys. Rev. A 30, 1175 (1984)
- [29] G.W.F. Drake, Phys. Rev. A 34, 2871 (1986)
- [30] W.R. Johnson, Phys. Rev. Lett. 29, 1123 (1972)
- [31] S.P. Goldman, Phys. Rev. A 40, 1185 (1989)
- [32] A. Dalgarno, Mon. Not. R. Astron. Soc. 131, 311 (1966)
- [33] G.A. Victor, Proc. Phys. Soc. London 91, 825 (1967)
- [34] G.W.F. Drake, private Mitteilung (1995)
- [35] I. Freund, Phys. Rev. A 7, 1849 (1973)
- [36] P.A.M. Dirac, The Principles of Quantum Mechanics, Oxford U.P., London, 1958,
Kapitel 3.2
- [37] J. Eichler, Phys. Rev. A 9, 1762 (1974)
- [38] T. Aberg, in Atomic Inner-Shell Processes, ed. by B. Crasemann, Academic Press,
New York, 1975, Seite 353

- [38] Y.-J. Wu, J.-M. Li, *J. Phys. B.* 21, 1509 (1988)
- [40] X. Mu, B. Crasemann, *Phys. Rev. A* 38, 4585 (1988)
- [41] X.-M. Tong, J.-M. Li, L. Kissel, R.H. Pratt, *Phys. Rev. A* 42, 1442 (1990)
- [42] G.E. Brown, R.E. Peierls, J.B. Woodward, *Proc. R. Soc. London, Ser. A* 227, 51 (1954)
- [43] J.A. Tanis, A.M. Shafroth, J.E. Willis, J.R. Mowat, *Phys. Rev. A* 23, 366 (1981)
- [44] H.W. Schnopper, H.D. Betz, J.P. Delvaille, K. Kalata, A.R. Sohval, K.W. Jones, H.E. Wegner, *Phys. Rev. Lett.* 29, 898 (1972)
- [45] M. Kleber, D.H. Jakubassa, *Nucl. Phys. A* 252, 152 (1974)
- [46] M. Stobbe, *Ann. Phys.* 7, 661 (1930)
- [47] H.A. Bethe, E.E. Salpeter, *Handbuch der Physik* 35, Springer Verlag, 1957, Seite 88
- [48] D. Brandt, *Phys. Rev. A* 27, 1314 (1983)
- [49] P.H. Mokler, S. Reusch, Th. Stöhlker, R. Schuch, M. Schulz, G. Wintermeyer, Z. Stachura, A. Warczak, A. Müller, Y. Awaya, T. Kambara, *Radiation Effects and Defects in Solids*, 1989, Vol. 110, 39
- [50] H.C. Brinkman et al., *Proc. Acad. Sci.* 33, 973 (1930)
- [51] V.S. Nikolaev, *Sov. Phys. JETP* 24, 847 (1967)
- [52] Th. Stöhlker, C. Kozhuharov, P.H. Mokler, A. Warczak, F. Bosch, H. Geissel, R. Moshhammer, C. Scheidenberger, J. Eichler, A. Ichihara, T. Shirai, Z. Stachura, P. Rymuza, *Phys. Rev. A* 51, 2098 (1995)
- [53] H.D. Betz, *Methods in Experimental Physics* Vol. 17, ed.: P. Richard, Academic Press, New York, 1980, Seite 96
- [54] J.H. McGuire, D.J. Land, J.G. Brennan, G. Basbas, *Phys. Rev. A* 19, 2180 (1980)
- [55] P.H. Mokler, Th. Stöhlker, *Adv. At. Mol. Phys.* Vol. 37, ed.: B. Bedersen, H. Walther, Academic Press, San Diego, 1996
- [56] J.A. Tanis, *Nucl. Instr. Meth. A* 262, 52 (1987)

- [57] Th. Stöhlker, D.C. Ionescu, P. Rymuza, F. Bosch, H. Geissel, T. Ludziejewski, P.H. Mokler, C. Scheidenberger, Z. Stachura, A. Warczak, R.W. Dunford, *Phys. Rev. A* 57, 845 (1998)
- [58] P. Zimmerer, Dissertation Universität Gießen, 1992
- [59] T. Kandler, Dissertation, Universität Gießen, 1995
- [60] Th. Stöhlker, private Mitteilung, 1997
- [61] C.M. Lederer, S. Shirley, *Table of Isotopes*, 7. Auflage, Wiley, New York, 1978
- [62] D. O'Connell, K.J. Kollath, A.J. Duncan, H. Kleinpoppen, *J. Phys. B* 8, L214 (1975)
- [63] H. Krüger, *A. Oed*, *Phys. Lett.* 54A, 251 (1975)
- [64] R.S. Van Dyck, C.E. Johnson, H.A. Shugart, *Phys. Rev. A* 4, 1327 (1971)
- [65] A.S. Pearl, *Phys. Rev. Lett.* 24, 703 (1970)
- [66] R. Marrus, R.W. Schmieder, *Phys. Rev. A* 5, 1160 (1972)
- [67] R.W. Dunford, H.G. Berry, S. Cheng, E.P. Kanter, C. Kurtz, B.J. Zabransky, A.E. Livingston, L.J. Curtis, *Phys. Rev. A* 48, 1929 (1993)
- [68] R.W. Dunford, H.G. Berry, D.A. Church, M. Hass, C.J. Liu, M.L.A. Raphaelian, L.J. Curtis, A.E. Livingston, *Phys. Rev. A* 48, 2729 (1993)
- [69] R. Ali, I. Ahmad, H.G. Berry, R.W. Dunford, D.S. Gemmell, E.P. Kanter, P.H. Mokler, A.E. Livingston, S. Cheng, L.J. Curtis, *Nucl. Instr. Meth. B* 98, 69 (1995)
- [70] Tom Moog, *DAPHNE Handbook*, Argonne National Laboratory, 1985
- [71] E.P. Kanter, Quellprogramm der Simulation unter <ftp://anlphy.phy.anl.gov/mc2p> erhältlich
- [72] R.W. Dunford, M. Hass, E. Bakke, H.G. Berry, C.J. Liu, M.L. Raphaelian, L.J. Curtis, *Phys. Rev. Lett.* 62, 2809 (1989)
- [73] J.S. Hansen, J.C. McGeorge, D. Nix, W.D. Schmitt-Ott, I. Unus, R.W. Fink, *Nucl. Instr. Meth.* 106, 365 (1973)
- [74] G.W.F. Drake, *Can. J. Phys.* 66, 586 (1988)

- [75] W.R. Johnson, D.R. Plante, J. Sapirstein, *Adv. At. Mol. Phys.* 35, 255 (1995)
- [76] Th. Stöhlker, private Mitteilung, 1997
- [77] M. Gail, N. Grün, W. Scheid, private Mitteilung (1996)
- [78] C. Scheidenberger, private Mitteilung (1997)
- [79] H.-Th. Prinz, D. Dauvergne, S. Andriamonje, K. Beckert, M. Chevallier, C. Cohen, J. Dural, H. Eickhoff, B. Franzke, H. Geissel, R. Kirsch, A. L'Hoir, P.H. Mokler, R. Moshhammer, F. Nickel, F. Nolden, J.C. Poizat, H. Reich, J. Remillieux, F. Sanuy, C. Scheidenberger, D. Schmaus, M. Steck, Th. Stöhlker, M. Toulemonde, *Hyperf. Inter.* 108, 325 (1997)
- [80] M. Steck, private Mitteilung (1997)
- [81] H.G. Essel, *GOOSY Manual*, GSI, Darmstadt, 1995
- [82] Th. Stöhlker, P.H. Mokler, K. Beckert, F. Bosch, H. Eickhoff, B. Franzke, H. Geissel, M. Jung, T. Kandler, O. Klepper, C. Kozhuharov, R. Moshhammer, F. Nickel, F. Nolden, H. Reich, P. Rymuza, C. Scheidenberger, P. Spädtke, Z. Stachura, M. Steck, A. Warczak, *Nucl. Instr. Meth. B* 87, 64 (1994)
- [83] J.M. Feagin, J.S. Briggs, T.M. Reeves, *J. Phys. B* 17, 1057 (1984)
- [84] J.L. Campbell, P.L. McGhee, *Nucl. Instr. Meth. A* 248, 393 (1986)
- [85] T. Ludziejewski, T. Kandler, private Mitteilungen (1997) bzw. (1995)
- [86] A. Derevianko, W.R. Johnson, private Mitteilung (1997)
- [87] R.W. Dunford, private Mitteilung (1997)
- [88] G.W.F. Drake, *Nucl. Instr. Meth. B* 9, 465 (1985)
- [89] P. Indelicato, F. Parente, R. Marrus, *Phys. Rev. A* 40, 3505 (1989)
- [90] A. Gallus, *Dissertation Universität Heidelberg*, 1997
- [91] C. Scheidenberger, private Mitteilung (1997)
- [92] K. Ilakovac, J. Tudorić-Ghemo, S. Kaučić, *Phys. Rev. A* 44, 7392 (1991)

- [93] K. Ilakovac, V. Horvat, Z. Krečak, G. Jerbić-Zorc, N. Ilakovac, T. Bokulić, Phys. Rev. A 46, 132 (1992)
- [94] C. Foin, A. Gizon, J. Oms, Nucl. Phys. A 113, 241 (1968)
- [95] I.N. Bronstein, K.A Semendjajew, Taschenbuch der Mathematik, Verlag Harri Deutsch, Thun 1989
- [96] Herstellerangabe der Fa. Eurisys Meßtechnik, Mainz (1995)
- [97] W.J. Veigle, Handbook of Spectroscopy Volume 1, ed.: J.W. Robinson, CRC Press, Cleveland, 1974, Seite 28
- [98] K. Ilakovac, J. Tudorić-Ghemo, V. Horvat, N. Ilakovac, S. Kaučić, M. Vesković, Nucl. Instr. Meth. A 245, 467 (1986)
- [99] P. Axel, Rev. Sci. Instr. 25, 391 (1954)
- [100] K. Lidén, N. Starfelt, Ark. Fys. 7, 427 (1954)
- [101] W. Heitler, Quantum Theory of Radiation, Oxford University Press, London, 1954
- [102] K. Ilakovac, M. Uroić, X-96 (17th International Conference X-Ray and Inner-Shell Processes, Hamburg 1996) Book of Abstracts, Seite 177
- [103] W. Paulus, W. Bröchle, private Mitteilung (1996)