

Bibliography

- [1] J. A. Sidles, *et al.*, *Reviews of Modern Physics* **67**, 249 (1995).
- [2] L. A. Madsen, G. M. Leskowitz, D. P. Weitekamp, *Proceedings of the National Academy of Sciences of the United States of America* **101**, 12804 (2004).
- [3] D. Rugar, R. Budakian, H. J. Mamin, B. W. Chui, *Nature* **430**, 329 (2004).
- [4] B. W. Shore, P. L. Knight, *Journal of Modern Optics* **40**, 1195 (1993).
- [5] S. Haroche, *Les Houches, Session XXXVIII, 1982 – New Trends in Atomic Physics*, G. Grynberg, R. Stora, eds. (Elsevier Science Publishers, Amsterdam, 1984), pp. 195–309.
- [6] R. Bonifacio, P. Schwendiman, F. Haake, *Physical Review A* **4**, 302 (1971).
- [7] C. Cohen-Tannoudji, J. Dupont-Roc, G. Grynberg, *Atom-Photon Interactions: Basic Process and Applications* (John Wiley, New York, 1992).
- [8] G. W. Ford, R. F. O'Connell, *Optics Communications* **179**, 451 (2000).
- [9] U. Haeberlen, *High Resolution NMR in Solids: Selective Averaging*, vol. 1 of *Advances in Magnetic Resonance Supplement* (Academic Press, New York, 1976).
- [10] G. S. Agarwal, *Quantum Statistical Theories of Spontaneous Emission and their Relation to other Approaches*, vol. 70 of *Springer Tracts in Modern Physics* (Springer-Verlag, Berlin, 1974).
- [11] C. M. Caves, *Physical Review D* **26**, 1817 (1982).
- [12] A. Abragam, *Principles of Nuclear Magnetism* (Clarendon Press, Oxford, 1961).

- [13] G. M. Leskowitz, Force-detected magnetic resonance independent of field gradients, Ph.D. thesis, California Institute of Technology (2003).
- [14] C. Kittel, *Introduction to Solid State Physics* (John Wiley, New York, 1996), 7th edn.
- [15] V. A. Norton, D. P. Weitekamp, personal communication.
- [16] R. H. Dicke, *Physical Review* **93**, 99 (1954).
- [17] M. Gross, S. Haroche, *Physics Reports-Review Section of Physics Letters* **93**, 301 (1982).
- [18] L. A. Wainstein, V. D. Zubakov, *Extraction of Signals from Noise* (Dover, New York, 1962).
- [19] W. Davenport, W. Root, *An Introduction to the Theory of Random Signals and Noise* (McGraw-Hill, New York, 1958).
- [20] R. R. Ernst, *Advances in Magnetic Resonance* **2**, 1 (1966).
- [21] G. M. Leskowitz, L. A. Madsen, D. P. Weitekamp, *Solid State Nuclear Magnetic Resonance* **11**, 73 (1998).
- [22] L. A. Madsen, Force-detected NMR in a homogeneous field: Experiment design, apparatus, and observations, Ph.D. thesis, California Institute of Technology (2002).
- [23] G. W. Ford, J. T. Lewis, R. F. O'Connell, *Physical Review A* **37**, 4419 (1988).
- [24] A. A. Clerk, *Physical Review B* **70**, Art. No. 245306 (2004).
- [25] M. D. LaHaye, O. Buu, B. Camarota, K. C. Schwab, *Science* **304**, 74 (2004).
- [26] W. K. Rhim, D. P. Burum, D. D. Elleman, *Physical Review Letters* **37**, 1764 (1976).

- [27] B. D. Cullity, *Introduction to Magnetic Materials* (Addison-Wesley Publishing Company, Reading, Massachusetts, 1972).
- [28] C. Kittel, *Reviews of Modern Physics* **21**, 541 (1949).
- [29] J. L. Dormann, D. Fiorani, E. Tronc, *Advances in Chemical Physics* **98**, 283 (1997).
- [30] D. L. Mills, S. M. Rezende, *Topics in Applied Physics* **87**, 27 (2003).
- [31] H. Chang, *British Journal of Applied Physics* **12**, 160 (1961).
- [32] D. P. Weitekamp, *Advances in Magnetic Resonance* **11**, 111 (1983).
- [33] B. T. Matthias, R. M. Bozorth, *Physical Review Letters* **7**, 160 (1961).
- [34] J. Lettieri, *et al.*, *Applied Physics Letters* **83**, 975 (2003).
- [35] S. Thongchant, Y. Hasegawa, Y. Wada, S. Yanagida, *Chemistry Letters* **30**, 1274 (2001).
- [36] Y. Hasegawa, *et al.*, *Angewandte Chemie-International Edition* **41**, 2073 (2002).
- [37] M. R. Oliver, McWhorter.Al, J. O. Dimmock, T. B. Reed, *Physical Review B* **5**, 1078 (1972).
- [38] Y. Shapira, S. Foner, T. B. Reed, *Physical Review B* **8**, 2299 (1973).
- [39] S. A. Smith, T. O. Levante, B. H. Meier, R. R. Ernst, *Journal of Magnetic Resonance Series A* **106**, 75 (1994).
- [40] X. J. Zhou, Q. Li, Z. H. He, X. Yang, K. T. Leung, *Surface Science* **543**, L668 (2003).
- [41] T. Koerner, R. S. Brown, J. L. Gainsforth, M. Klobukowski, *Journal of the American Chemical Society* **120**, 5628 (1998).
- [42] M. Poggio, C. L. Degen, H. J. Mamin, D. Rugar, *Physical Review Letters* **99** (2007).

- [43] K. Halbach, *Nuclear Instruments & Methods* **169**, 1 (1980).
- [44] U. Ruth, T. Hof, J. Schmidt, D. Fick, H. J. Jansch, *Applied Physics B-Lasers and Optics* **68**, 93 (1999).
- [45] R. T. Jacobsen, S. G. Penoncello, E. W. Lemmon, *Thermodynamic Properties of Cryogenic Fluids* (Plenum Press, 1997).
- [46] M. V. Romalis, M. P. Ledbetter, *Physical Review Letters* **87****06** (2001).
- [47] C. W. McCombie, *Reports on Progress in Physics* **16**, 266 (1953).
- [48] G. W. Ford, R. F. O'Connell, *Physical Review Letters* **77**, 798 (1996).
- [49] J. D. Jackson, *Classical Electrodynamics* (Wiley, New York, 1999), third edn.
- [50] D. J. Griffiths, *Introduction to Electrodynamics* (Prentice Hall, Upper Saddle River, New Jersey, 1999), third edn.
- [51] C. Cohen-Tannoudji, J. Dupont-Roc, G. Grynberg, *Photons and Atoms: Introduction to Quantum Electrodynamics* (John Wiley, New York, 1989).
- [52] L. D. Landau, E. M. Lifshitz, A. M. Kosevich, L. P. Pitaevskii, *Theory of Elasticity*, vol. 7 of *Theoretical Physics* (Pergamon Press, Oxford, 1986), third edn.
- [53] A. E. H. Love, *A Treatise on the Mathematical Theory of Elasticity* (Dover Publications, New Yord, 1944), fourth edn.
- [54] R. J. Roark, W. C. Young, *Roark's Formulas for Stress and Strain* (McGraw-Hill, New York, 1989), 6th edn.
- [55] W. D. Pilkey, *Formulas for Stress, Strain, and Structural Matrices* (John Wiley and Sons, New York, 1994).
- [56] N. W. Ashcroft, N. D. Mermin, *Solid State Physics* (Saunders College, Philadelphia, 1976).

- [57] W. R. Smythe, *Static and Dynamic Electricity*, International Series in Pure and Applied Physics (McGraw-Hill, New York, 1967), third edn.
- [58] P. Kebelinski, D. G. Cahill, A. Bodapati, C. R. Sullivan, T. A. Taton, *Journal of Applied Physics* **100**, Art. No. 054305 (2006).
- [59] D. I. Hoult, P. C. Lauterbur, *Journal of Magnetic Resonance* **34**, 425 (1979).
- [60] O. Bourgeois, T. Fournier, J. Chaussy, *Journal of Applied Physics* **101**, Art. No. 016104 (2007).
- [61] J. M. Ziman, *Electrons and Phonons* (Clarendon, Oxford, 2001).
- [62] D. Y. Li, *et al.*, *Applied Physics Letters* **83**, 2934 (2003).
- [63] E. T. Swartz, R. O. Pohl, *Reviews of Modern Physics* **61**, 605 (1989).