

References

Chapter 2

- 2.1 E.A. Power: *Introductory Quantum Electrodynamics* (Longmans, London 1964)
- 2.2 R.J. Glauber: *Phys. Rev. B* **1**, 2766 (1963)
- 2.3 W.H. Louisell: *Statistical Properties of Radiation* (Wiley, New York 1973)
- 2.4 D.F. Walls: *Nature* **324**, 210 (1986)
- 2.5 C.M. Caves: *Phys. Rev. D* **23**, 1693 (1981)
- 2.6 H.P. Yuen: *Phys. Rev. A* **13**, 2226 (1976)
- 2.7 R. Loudon: *Quantum Theory of Light* (Oxford Univ. Press, Oxford 1973)
- 2.8 W. Schleich, J.A. Wheeler: *Nature* **326**, 574 (1987)
- 2.9 C.M. Caves, B.L. Schumaker: *Phys. Rev. A* **31**, 3068 (1985)
- 2.10 L. Susskind, J. Glogower: *Physics* **1**, 49 (1964).
- 2.11 D.T. Pegg, S.M. Barnett: *Phys. Rev. A* **39**, 1665 (1989)
- 2.12 J.H. Shapiro, S.R. Shepard: *Phys. Rev. A* **43**, 3795 (1990)
- 2.13 M.J.W. Hall: *Quantum Optics* **3**, 7 (1991)

Further Reading

- Glauber, R.J.: In *Quantum Optics and Electronics*, ed. by C. de Witt, C. Blandin, C. Cohen Tannoudji (Gordon and Breach, New York 1965)
- Klauder, J.R., Sudarshan, E.C.G.: *Fundamentals of Quantum Optics* (Benjamin, New York 1968)
- Loudon, R.: *Quantum Theory of Light* (Oxford Univ. Press, Oxford 1973)
- Louisell, W.H.: *Quantum Statistical Properties of Radiation* (Wiley, New York 1973)
- Meystre, P., M. Sargent, III: *Elements of Quantum Optics*, 2nd edn. (Springer, Berlin, Heidelberg 1991)
- Nussenneig, H.M.: *Introduction to Quantum Optics* (Gordon and Breach, New York 1974)

Chapter 3

- 3.1 R.J. Glauber: *Phys. Rev.* **130**, 2529 (1963)
- 3.2 M. Born, E. Wolf: *Principles of Optics*, 3rd edn. (Pergamon, London 1965)
- 3.3 P.A.M. Dirac: *The Principles of Quantum Mechanics*, 3rd edn. (Clarendon, London 1947)
- 3.4 G.I. Taylor: *Proc. Cam. Phil. Soc. Math. Phys. Sci.* **15**, 114 (1909)
- 3.5 P. Grangier, G. Roger, A. Aspect: *Europhys. Lett.* **1**, 173 (1986)
- 3.6 R.F. Pfleeger, L. Mandel: *Phys. Rev.* **159**, 1084 (1967)
- 3.7 R. Hanbury-Brown, R.W. Twiss: *Nature* **177**, 27 (1956)
- 3.8 F.T. Arecchi, E. Gatti, A. Sona: *Phys. Rev. Lett.* **20**, 27 (1966); F.T. Arecchi, *Phys. Lett.* **16**, 32 (1966)
- 3.9 E.R. Pike: In *Quantum Optics*, ed. by R.J. Glauber (Academic, New York 1970)
- 3.10 W. Demtroeder: *Laser Spectroscopy*, 2nd edn. (Springer, Berlin, Heidelberg 1993)
- 3.11 D. Mettzer, L. Mandel: *IEEE J. QE-6*, 661 (1970)
- 3.12 H.P. Yuen, J.H. Shapiro: *IEEE Trans. IT* **26**, 78 (1980)

- 3.13 L. Mandel: *Progress in Optics* **2**, 183 (North-Holland, Amsterdam 1963)
 3.14 L. Mandel: *Phys. Rev. Lett.* **49**, 136 (1982)
 3.15 P.L. Kelley, W.H. Kleiner: *Phys. Rev.* **136**, 316 (1964)
 3.16 M.O. Scully, W.E. Lamb: *Phys. Rev.* **179**, 368 (1969)
 3.17 H.J. Carmichael: *J. Opt. Soc. Am. B* **4**, 1588 (1987)

Further Reading

- Meystre, P., M. Sargent III: *Elements of Quantum Optics*, 2nd edn. (Springer, Berlin, Heidelberg 1991)
 Perina, J.: *Coherence of Light* (van Nostrand Reinhold, London 1972).

Chapter 4

- 4.1 R.J. Glauber: *Phys. Rev.* **131**, 2766 (1963)
 4.2 E.C.G. Sudarshan: *Phys. Rev. Lett.* **10**, 277 (1963)
 4.3 J.R. Klauder, E.C.G. Sudarshan: *Fundamentals of Quantum Optics* (Benjamin, New York 1968)
 4.4 E.P. Wigner: *Phys. Rev.* **40**, 749 (1932)
 4.5 P.D. Drummond, C.W. Gardiner: *J. Phys.* **A13**, 2353 (1980)
 4.6 S.L. Braunstein, C.M. Caves and G.J. Milburn: *Phys. Rev. A* **43**, 1153 (1991)

Chapter 5

- 5.1 B.R. Mollow, R.J. Glauber: *Phys. Rev.* **160**, 1097 (1967); *ibid.* **162**, 1256 (1967)
 5.2 B.L. Schumaker, C.M. Caves: *Phys. Rev. A* **31**, 3093 (1985)
 5.3 M.D. Reid, P.D. Drummond: *Phys. Rev. Lett. A* **41**, 3930 (1990)
 5.4 Z.Y. Ou, L. Mandel: *Phys. Rev. Lett.* **61**, 50 (1988)
 5.5 M.J. Collett: *Phys. Rev. A* **38**, 2233 (1988)
 5.6 C.A. Holmes, G.J. Milburn, D.F. Walls: *Phys. Rev. A* **39**, 2493 (1989)
 5.7 C.M. Caves: *Phys. Rev. D* **26**, 1817 (1982)
 5.8 G.J. Milburn: *Phys. Rev. A* **33**, 674 (1985)
 5.9 B. Yurke, D. Stoler: *Phys. Rev. Lett.* **57**, 13 (1985)
 5.10 M. Kitagawa, Y. Yamamoto: *Phys. Rev. A* **34**, 345 (1986)

Chapter 6

- 6.1 F. Haake: (private communication)
 6.2 W.H. Louisell: *Quantum Statistical Properties of Radiation* (Wiley, New York 1973)
 6.3 M.C. Wang, G.E. Uhlenbeck: *Rev. Mod. Phys.* **17**, 323 (1945)
 6.4 M. Lax: In *Brandeis University Summer Institute Lectures*, ed. by M. Chretien, E.P. Gross, S. Deser (Gordon and Breach, New York 1966) Vol. 2

Further Reading

- Agarwal, G.S.: *Quantum Statistical Theories of Spontaneous Emission and their Relation to Other Approaches*, Springer Tracts Mod. Phys., Vol. 70 (Springer, Berlin, Heidelberg 1974).
 Gardiner, C.W.: *Handbook of Stochastic Processes* (Springer, Berlin, Heidelberg 1985).
 Gardiner, C.W.: *Quantum Noise* (Springer, Berlin, Heidelberg 1991).
 Risken, H.: *The Fokker Planck Equation* (Springer, Berlin, Heidelberg 1984).

Chapter 7

- 7.1 M.J. Collett, C.W. Gardiner: *Phys. Rev. A* **30**, 1386 (1984)
 7.2 M.J. Collett, D.F. Walls: *Phys. Rev. A* **32** 2887 (1985)
 7.3 G.J. Milburn, D.F. Walls: *Optics Commun.* **39**, 401 (1981)

Further Reading

- Gardiner, C.W.: *Quantum Noise* (Springer, Berlin, Heidelberg 1991)
 Reynaud, S.: A. Heidman: *Optics Comm.* **71**, 209 (1989)
 Yurke, B.: *Phys. Rev. A* **32**, 300 (1985)

Chapter 8

- 8.1 P.D. Drummond, K.J. McNeil, D.F. Walls: *Optica Acta* **28**, 211 (1981)
 8.2 M.J. Collett, C.W. Gardiner: *Phys. Rev.* **30**, 1386 (1984)
 8.3 M.J. Collett, D.F. Walls: *Phys. Rev. A* **32**, 2887 (1985)
 8.4 L.A. Wu, M. Xiao, H.J. Kimble: *J. Opt. Soc. Am. B* **4**, 1465 (1987)
 8.5 A.S. Lane, M.D. Reid, D.F. Walls: *Phys. Rev. A* **38**, 788 (1988)
 8.6 S. Reynaud, C. Fabre, E. Giacobino: *J. Opt. Soc. Am. B* **4**, 1520 (1987)
 8.7 A.S. Labne, M.O. Reid, D.F. Walls: *Phys. Rev. Lett.* **60**, 1940 (1988)
 8.8 A. Heidmann, R.J. Horowicz, S. Reynaud, E. Giacobino, C. Fabre: *Phys. Rev. Lett.* **59**, 2555 (1987)
 8.9 T. Debuisschert, S. Reynaud, A. Heidman, E. Giacobino, C. Fabre: *Quantum Optics* **1**, 3 (1989)
 8.10 O. Aytür, P. Kumar: *Phys. Rev. Lett.* **65**, 1551 (1990)
 8.11 S.F. Pereira, M. Xiao, H.J. Kimble, J.L. Hall: *Phys. Rev. A* **38**, 4931 (1989)
 8.12 A. Sizman, R.J. Horowicz, G. Wagner, G. Leuchs: *Opt. Commun.* **80**, 138 (1990)
 8.13 P.D. Drummond, D.F. Walls: *J. Phys. A* **13**, 725 (1980)
 8.14 C.M. Caves: *Phys. Rev. Lett.* **45**, 75 (1980)
 8.15 W.G. Unruh: In *Quantum Optics, Experimental Gravitation and Measurement Theory*, ed. by P. Meystre, M.O. Scully (Plenum, New York 1983) p. 647
 8.16 R.S. Bondurant, J.H. Shapiro: *Phys. Rev. D* **30**, 2548 (1984)
 8.17 M.T. Jaekel, S. Reynaud: *Europhys. Lett.* **13**, 301 (1990)
 8.18 A.F. Pace, M.J. Collett, D.F. Walls: *Phys. Rev. A* **47**, 3173 (1993)
 8.20 C.W. Misner, K.S. Thorne, J.A. Wheeler: *Gravitation* (Freeman, San Francisco 1973)
 8.21 M. Xiao, L.A. Wu, H.J. Kimble: *Phys. Rev. Lett.* **59**, 278 (1987)
 8.22 P. Grangier, R.E. Slusher, B. Yurke, A. La Porta: *Phys. Rev. Lett.* **59**, 2153 (1987)

Further Reading

- Giacobino, E., C. Fabre (guest eds.): *Quantum Noise Reduction in Optical Systems – Experiments.* *Appl. Phys. B* **55**, No. 3 (1992).
 Kimble, H.J., D.F. Walls (guest eds.): *Special Issue on Squeezed States of the Electromagnetic Field.* *J. Opt. Soc. Am. B* **4**, No. 10 (1987).
 Loudon, R., P.L. Knight (guest eds.): *Speical Issue on Squeezed Light.* *J. Mod. Opt.* **34**, No. 6/7 (1987).

Chapter 9

- 9.1 P.D. Drummond, K.J. McNeil, D.F. Walls: *Optica Acta* **28**, 211 (1981)
 9.2 G.J. Milburn, D.F. Walls: *Optics Commun.* **39**, 401 (1981)

- 9.3 M. Wolinsky, H.J. Carmichael: *Phys. Rev. Lett.* **60**, 1836 (1988)
- 9.4 P. Kinsler, P.D. Drummond: *Phys. Rev. A* **43**, 6194 (1991)
- 9.5 R. Landauer, S. Swanson: *Phys. Rev.* **121**, 1668 (1961)
- 9.6 P.D. Drummond, D.F. Walls: *J. Phys. A* **13** 725 (1980)
- 9.7 R. Graham: *Quantum Statistics in Optics and Solid State Physics*, Springer Tracts Mod. Phys., Vol. 66 (Springer, Berlin, Heidelberg 1973)
- 9.8 T.M. MacRobert: *Function of a Complex Variable* (Macmillan, London 1938)
- 9.9 M. Abramowitz, I.A. Stegun: *Handbook of Mathematical Function* (Dover, New York 1965)
- 9.10 I.S. Gradshteyn, I.M. Ryzhik: *Tables of Series, Products and Integrals*, (Deutsch, Frankfurt/M 1981).

Further Reading

- Gibbs, H.: *Optical Bistability*, Academic Press (1985).
- Lugiato, L.A. in *Progress in Optics*, p. 69, Ed. E. Wolf, North-Holland (1984).

Chapter 10

- 10.1 H. Haken: *Waves, Photons and Atoms* (North-Holland, Amsterdam 1981) Vols. 1 and 2
- 10.2 E.A. Power: *Introductory Quantum Electrodynamics* (Longmans, London 1964)
- 10.3 E.T. Jaynes, F.W. Cummings: *Proc IEEE* **51**, 89 (1963)
- 10.4 S. Haroche: In *New Trends in Atomic Physics*, ed. by G. Grynberg, R. Stora, Les Houches Session XXXVIII (Elsevier, Amsterdam 1984)
- 10.5 G. Rempe, H. Walther, N. Klein: *Phys. Rev. Lett.* **58**, 353 (1987)
- 10.6 R.J. Glauber: *Phys. Rev.* **131**, 2766 (1963)
- 10.7 G.S. Agarwal: *Quantum Statistical Theories of Spontaneous Emission and their Relation to Other Approaches*, Springer Tracts Mod. Phys., Vol. 70 (Springer, Berlin, Heidelberg 1974)
- 10.8 C.W. Gardiner: *Phys. Rev. Lett.* **56**, 1917 (1986)

Further Reading

- Allen, L., J.H. Eberly: *Optical Resonance and Two-Level Atoms* (Wiley, New York 1975).
- Cohen Tannoudji, C., J. Dupont Roc, G. Grynberg: *Photon and Atoms, Introduction to Quantum Electrodynamics*, (Wiley, New York 1989).

Chapter 11

- 11.1 B.R. Mollow: *Phys. Rev.* **188**, 1969 (1969)
- 11.2 R.E. Grove, F.Y. Wu, S. Ezekiel: *Phys. Rev. Lett.* **35**, 1426 (1975)
- 11.3 W. Hartig, W. Rasmussen, R. Schieder, H. Walther: *Z. Physik. A* **278** 205 (1976)
- 11.4 H.J. Carmichael, D.F. Walls: *J. Phys. B* **9**, L43 (1976), *J. Phys. B* **9**, 1199 (1976)
- 11.5 H.J. Kimble, M. Dagenais, L. Mandel: *Phys. Rev. Lett.* **39**, 691 (1977); *Phys. Rev. A* **18**, 201 (1978)
- 11.6 F.M. Rateike, G. Leuchs, H. Walther: See results in J.D. Cresser, J. Häger, G. Leuchs, F.M. Rateike and H. Walther in *Dissipative Systems in Quantum Optics*, edited by R. Bonifacio, Springer 1982
- 11.7 H.J. Carmichael, P. Drummond, P. Meystre, D.F. Walls: *J. Phys. A* **11**, L121 (1978)
- 11.8 F. Diedrich, H. Walther: *Phys. Rev. Lett.* **58**, 203 (1987)
- 11.9 M.J. Collett, D.F. Walls, P. Zoller: *Optics Commun.* **52**, 145 (1984)

Further Reading

- Cohen-Tannoudji, C: In *Frontiers in Laser Spectroscopy*, ed. by R. Balcan, S. Haroche, S. Liberman (North-Holland, Amsterdam 1977)
- Mollow, B.R.: *Progress in Optics* **19**, (North-Holland, Amsterdam 1987)

Chapter 12

- 12.1 H. Haken: *Laser Theory*, Reproduction from *Handbuch der Physik* (Springer, Berlin, Heidelberg 1984)
- 12.2 M. Sargent III, M.O. Scully, W.E. Lamb: *Laser Physics* (Addison Wesley 1974)
- 12.3 M.O. Scully, W.E. Lamb: *Phys. Rev.* **159**, 208 (1967)
- 12.4 M. Lax, W.H. Louisell: *Phys. Rev.* **185**, 568 (1969)
- 12.5 F.T. Arecchi: *Phys. Rev. Lett.* **15**, 912 (1965)
- 12.6 E.A. Johnson, R. Jones, T.P. McLean, E.R. Pike: *Phys. Rev. Lett.* **16**, 589 (1966)
- 12.7 B.L. Morgan, L. Mandel: *Phys. Rev. Lett.* **16**, 1012 (1966)
- 12.8 S. Machida, Y. Yamamoto, Y. Itaya: *Phys. Rev. Lett.* **58**, 1000 (1987)
- 12.9 W. Richardson, R.E. Shelby: *Phys. Rev. Lett.* **64**, 400 (1990)
- 12.10 Y.M. Golubov, I.V. Sokolov: *Sov. Phys. JETP* **60**, 234 (1984)
- 12.11 Y. Yamamoto, S. Machida, O. Nilsson: *Phys. Rev. A* **34**, 4025 (1986)
- 12.12 F. Haake, S.M. Tan, D.F. Walls: *Phys. Rev. A* **40**, 7121 (1989)
- 12.13 J. Bergou, L. Davidovich, M. Orszag, C. Berkert, M. Hillery, M.O. Scully: *Opt. Commun.* **72**, 82 (1989)
- 12.14 M. Marte, P. Zoller: *Quantum Optics* **2**, 229 (1990)

Chapter 13

- 13.1 P.D. Drummond, D.F. Walls: *Phys. Rev. A* **23**, 2563 (1981)
- 13.2 H. Haken: *Encyclopedia of Physics*, Vol. XXV/2c (Springer, Berlin, Heidelberg 1970); and *Laser Theory* (Springer, Berlin, Heidelberg 1984)
- 13.3 M.D. Reid, D.F. Walls: *Phys. Rev. A* **34**, 4929 (1986)
- 13.4 R.E. Slusher, L.W. Hollberg, B. Yurke, J.C. Mertz, J.F. Valley: *Phys. Rev. Lett.* **55**, 2409 (1985)
- 13.5 R.E. Slusher, B. Yurke, P. Grangier, A. LaPorta, D.F. Walls, M. Reid: *J. Opt. Soc. Am. B* **4**, 1453 (1987)

Chapter 14

- 14.1 A. Einstein, B. Podolsky, N. Rosen: *Phys. Rev.* **47**, 777 (1935)
- 14.2 N. Bohr: *Phys. Rev.* **48**, 696 (1935)
- 14.3 J.S. Bell: *Physics* **1**, 105 (1964); *Rev. Mod. Phys.* **38**, 447 (1966)
- 14.4 M.D. Reid, D.F. Walls: *Phys. Rev. A* **34**, 1260 (1986)
- 14.5 A. Aspect, P. Grangier, G. Roger: *Phys. Rev. Lett.* **49**, 91 (1982). A. Aspect, J. Dalibard, G. Roger: *Phys. Rev. Lett.* **49**, 1804 (1982)
- 14.6 Z.Y. Ou, L. Mandel: *Phys. Rev. Lett.* **61**, 50 (1988)
- 14.7 Y.H. Shih, C. Alley: *Phys. Rev. Lett.* **61**, 2921 (1988)
- 14.8 P.G. Kwiat, W.A. Vareka, C.K. Hong, H. Nathel, R.Y. Chiao: *Phys. Rev. A* **41**, 2910 (1990)
- 14.9 S.M. Tan, D.F. Walls: *Optics Commun.* **71**, 235 (1989)
- 14.10 S.M. Tan, D.F. Walls, M.J. Collet: *Phys. Rev. Lett.* **66**, 252 (1991)
- 14.11 C.A. Holmes, G.J. Milburn, D.F. Walls: *Phys. Rev. Lett. A* **39**, 2493 (1989)
- 14.12 C.K. Hong, L. Mandel: *Phys. Rev. Lett.* **56**, 58 (1986)
- 14.13 S.M. Tan, M.J. Holland, D.F. Walls: *Opt. Commun.* **77**, 285 (1990)

Chapter 15

- 15.1 C.M. Caves, K.S. Thorne, R.W.P. Drever, V.P. Sandberg, M. Zimmerman: *Rev. Mod. Phys.* **52**, 341 (1980)
- 15.2 M.J. Holland, M.J. Collett, D.F. Walls, M.D. Levenson: *Phys. Rev. A* **42**, 2995 (1990)
- 15.3 A. La Porta, R.E. Slusher, B. Yurke: *Phys. Rev. Lett.* **62**, 28 (1989)
- 15.4 G.J. Milburn, D.F. Walls: *Phys. Rev. A* **28**, 2065 (1983)
- 15.5 J. Ph. Poizat, P. Grangier: *Phys. Rev. Lett.* (1992)

Chapter 16

- 16.1 E. Joos, H.D. Zeh: *Z. Physik B* **59**, 223 (1985)
- 16.2 A. Caldeira, A.J. Leggett: *Physica A* **121**, 587 (1983)
- 16.3 D.F. Walls, G.J. Milburn: *Phys. Rev. A* **31**, 2403 (1985)
- 16.4 W.H. Zurek: *Phys. Rev. D* **24**, 1516 (1981); *ibid D* **26**, 1862 (1982); *Physics Today* **44**, 36 (October 1 1991)
- 16.5 D.F. Walls, M.J. Collett, G.J. Milburn: *Phys. Rev. D* **32**, 3208 (1985)

Chapter 17

- 17.1 P.L. Gould, G.A. Ruff, D.E. Pritchard: *Phys. Rev. Lett.* **56**, 827 (1986)
- 17.2 O. Carnal, J. Mlynek: *Phys. Rev. Lett.* **66**, 2689 (1991)
- 17.3 D.W. Keith, C.R. Ekstrom, Q.A. Turchette, D.E. Pritchard: *Phys. Rev. Lett.* **66**, 2693 (1991)
- 17.4 M. Kasevich, S. Chu: *Phys. Rev. Lett.* **67**, 181 (1991)
- 17.5 F. Riehle, Th. Kisters, A. Witte, J. Helmcke, Ch. J. Borde: *Phys. Rev. Lett.* **67**, 177 (1991)
- 17.6 Ch. Miniatura, F. Perales, G. Vassilev, J. Reinhardt, J. Robert, J. Baudon: *J. Physique* **1**, 425 (1991)
- 17.7 F. Shimizu, K. Shimizu, H. Takuma: *Phys. Rev. A* **46**, 17 (1992)
- 17.8 C. Cohen Tannoudji, F. Bardou, A. Aspect: In *Laser Spectroscopy*, ed. by M. Ducloy et al. (World Scientific, Singapore 1992)
- 17.9 T. Sleator, O. Carnal, A. Faulstich, J. Mlynek: In *Quantum Measurement in Optics*, ed. by P. Tombesi, D.F. Walls (Plenum, New York 1992)
- 17.10 E.M. Wright, P. Meystre: *Optics. Commun.* **75**, 388 (1990)
- 17.11 P.L. Gould, P.J. Martin, G.A. Ruff, R.E. Stoner, J.L. Picque, D.E. Pritchard: *Phys. Rev. A* **43**, 585 (1991)
- 17.12 S.M. Tan, D.F. Walls: *Appl. Phys B* **54**, 434 (1992)
- 17.13 T. Sleator, T. Pfau, V. Balykin, O. Carnal, J. Mlynek: *Phys. Rev. Lett.* **68**, 1996 (1992)
- 17.14 S.M. Tan, D.F. Walls: *Phys. Rev. A*
- 17.15 M. Brune, S. Haroche, V. Lefevre, J.M. Raimond, N. Zagury: *Phys. Rev. Lett.* **65**, 976 (1990)
- 17.16 M.J. Holland, D.F. Walls, P. Zoller: *Phys. Rev. Lett.* **67**, 1716 (1991)
- 17.17 E.P. Storey, M.J. Collett, D.F. Walls: *Phys. Rev. Lett.* **68**, 472 (1992)