

REFERENCES

- Allpress, J.G., Elizabeth Hewat, A.F. Moodie and J.V. Sanders, 1972, *Acta Cryst.* A28, 528. [Ch. 13].
- Allpress, J.G. and J.V. Sanders, 1973, *J. Appl. Crystallogr.* 6, 105. [Ch. 13].
- Amelinckx, S., 1964, *Solid state physics*, Supplement 6 (Academic Press, New York). [Ch. 13].
- Anderson, J.S., 1969, *Bull. Soc. Chim. France*, 2203. [Ch.17].
- Anderson, J.S., 1978–1979, *Chem. Scripta* 14, 287. [Ch. 13].
- Andersson, B., J.K. Gjønnes and J. Taftø, 1974, *Acta Cryst.* A30, 216. [Ch. 12].
- Anstis, G.R., D.F. Lynch, A.F. Moodie and M.A. O'Keefe, 1973, *Acta Cryst.* A29, 138. [Ch. 13].
- Anstis, G.R. and M.A. O'Keefe, 1976, In: *Proc. 34th annual meet. electron microscopy*, Ed. G.W. Bailey (Claitors, Baton Rouge) p. 480. [Ch. 13].
- Anstis, G.R. and D.J.H. Cockayne, 1979, *Acta Cryst.* A35, 511. [Ch. 18].
- Arsac, J., 1966, *Fourier transforms and the theory of distributions* (Prentice Hall, Englewood-Cliffs, N.J.). [Ch. 2].
- Authier, A., 1970, in: *Modern diffraction and imaging techniques in materials science*, Eds. S. Amelinckx et al. (North-Holland, Amsterdam). [Ch. 15].
- Authier, A., 1970, in: *Advances in structural research by diffraction methods*, Eds. R. Brill and R. Mason, Vol. 3 (pergamon, Oxford) p. 1.
- Avilov, A.S., R.M. Imamov, R.K. Karakhanyan and Z.G. Pinsker, 1973, *Kristallografiya* 18, 49. [Ch. 6].
- Bacon, G.E., 1962, *Neutron diffraction*, 2nd edition (Clarendon Press, Oxford). [Ch. 4, 6, 12].
- Balter, S., R. Feldman and B. Post, 1971, *Phys. Rev. Letters* 27, 307. [Ch. 14].
- Bardhan, P. and J.B. Cohen, 1976, *Acta Cryst.* A32, 597. [Ch. 17].
- Bartell, L.S., 1975, *J. Chem. Phys.* 63, 3750. [Ch. 4].
- Batterman, B.W., 1957, *J. Appl. Phys.* 28, 556. [Ch. 17].
- Batterman, B.W., 1962, *Appl. Phys. Letters* 1, 68. [Ch. 9].
- Batterman, B.W., 1964, *Phys. Rev.* 133, A759. [Ch. 9].
- Batterman, B.W. and H. Cole, 1964, *Rev. Mod. Phys.* 36, 681. [Ch. 8, 9].
- Beauvillain, J., 1970, *J. de Microscopie* 9, 455. [Ch. 14].
- Becker, P.J. and P. Coppens, 1974, *Acta Cryst.* A30, 129. [Ch. 16].
- Bell, W., 1971, *Proc. 29th Annual EMSA Meeting*, p. 184. [Ch. 15].
- Benedek, R. and P.S. Ho, 1973, *J. Phys. F: Metal Physics* 3, 1285. [Ch. 12].
- Berry, M.V., 1971, *J. Phys. C* 4, 697. [Ch. 13].
- Berry, M.V. and K.E. Mount, 1972, *Rep. Progr. Phys.* 35, 315. [Ch. 13, 14].
- Bethe, H.A., 1928, *Ann. Physik* 87, 55. [Ch. 1, 8, 16].

- Biscoe, J. and B.E. Warren, 1942, *J. Appl. Phys.* 13, 364. [Ch. 7].
- Blackman, M., 1939, *Proc. Roy. Soc. Lond.* A173, 68. [Ch. 16].
- Bless, P.W., R.B. vonDreele, E. Kostiner and R.E. Hughes, 1972, *J. Solid State Chem.* 4, 262. [Ch. 18].
- Bonse, U. and M. Hart, 1965, *Appl. Phys. Letters* 6, 155. [Ch. 15].
- Bonse, U. and M. Hart, 1970, *Physics Today*, August, p. 26. [Ch. 15].
- Booker, G.R., A.M.B. Shaw, M.J. Whelan and P.B. Hirsch, 1967, *Phil. Mag.* 16, 1185. [Ch. 14].
- Booker, G.R., 1970, in: *Modern diffraction and imaging techniques in materials science*, Eds. S. Amelinckx et al. (North-Holland, Amsterdam). [Ch. 14].
- Booker, G.R., D.C. Joy, J.P. Spencer, H. Graf von Harrach and M.N. Thompson, 1974, in: *Scanning electron microscopy, 1974*, Proc. 7th annual scanning electron microscopy symposium, Eds. Om Johari and Irene Corvin (I.I.T. Research Institute, Chicago) p. 225. [Ch. 18].
- Borie, B., 1957, *Acta Cryst.* 10, 89. [Ch. 12, 17].
- Borie, B., 1959, *Acta Cryst.* 12, 280. [Ch. 12].
- Borie, B., 1961, *Acta Cryst.* 14, 472. [Ch. 12].
- Borie, B., 1966, *Acta Cryst.* 21, 470. [Ch. 8].
- Borie, B., 1970, *Acta Cryst.* A26, 533. [Ch. 12].
- Borie, B. and C.J. Sparks, 1971, *Acta Cryst.* A27, 198. [Ch. 17].
- Born, M. and R.D. Misra, 1940, *Proc. Camb. Phil. Soc.* 36, 466. [Ch. 12].
- Born, M. and E. Wolf, 1975, *Principles of optics*, 5th edition (Pergamon Press, London). [Ch. 3].
- Borrmann, G., 1936, *Ann. d. Phys.* 27, 669. [Ch. 14].
- Borrmann, G., 1941, *Phys. Zeit.* 43, 157. [Ch. 9].
- Borrmann, G., 1950, *Zeit. f. Phys.* 127, 297. [Ch. 9].
- Borrmann, G., 1964, *Z. f. Kristallogr.* 120, 143. [Ch. 14].
- Borrmann, G. and W. Hartwig, 1965, *Z. f. Kristallogr.* 121, 6 and 401. [Ch. 10, 14].
- Brout, R., 1965, *Phase transitions* (Benjamin, New York). [Ch. 17].
- Bourret, A., A. Renault and G.R. Anstis, 1978-1977, *Chem. Scripta* 14, 207. [Ch. 18].
- Bourret, A. and Desseaux, J., 1979, *Philos. Mag.* 39, 405. [Ch. 18].
- Buerger, M.J., 1959, *Vector space* (Wiley, New York). [Ch. 6].
- Bunyan, P., 1963, *Proc. Phys. Soc.* 82, 1051. [Ch. 4].
- Buseck, P.R. and S. Iijima, 1974, *Amer. Mineral.* 59, 1. [Ch. 13].
- Buseck, P.R., 1980, in: *Electron microscopy and analysis 1979*, Ed. T. Mulvey (Institute of Physics, Bristol) p. 93. [Ch. 13].
- Buxton, B.F., J.A. Eades, J.W. Steeds and G.M. Rackham, 1976, *Phil. Trans. R. Soc. London* 281, 171. [Ch. 15].
- Cairns, J.A. and R.S. Nelson, 1968, *Phys. Letters* 27A, 15. [Ch. 14].
- Castaing, R. and A. Guinier, 1951, *C.R. Acad. Sci., Paris* 232, 1948. [Ch. 14].
- Castaing, R., 1966, in: *Electron microscopy 1966*, Sixth Internat. Conf. on Electron Microscopy, Kyoto, Vol. 1 (Maruzen Co., Tokyo) p. 63. [Ch. 12].
- Chadderton, L.T., 1970, *J. Appl. Cryst.* 3, 429. [Ch. 14].
- Chadderton, L.T., 1973, in: *Channelling: theory, observation and application*, Ed. D.V. Morgan (Wiley, London) p. 287. [Ch. 14].
- Chen, H., R.J. Comstock and J.B. Cohen, 1979, *Ann. Rev. Mater. Sci.* 9, 51. [Ch. 17].

- Cherns, D., 1974, *Phil. Mag.* 30, 549. [Ch. 15].
- Chipman, D.R. and C.B. Walker, 1972, *Phys. Rev.* B5, 3823. [Ch. 17].
- Clapp, P.C. and S.C. Moss, 1968, *Phys. Rev.* 171, 754. [Ch. 17].
- Clarke, G.L. and W. Duane, 1922, *Proc. Nat. Acad. Sci.* 8, 90. [Ch. 14].
- Coates, D.G., 1967, *Phil. Mag.* 16, 1179. [Ch. 14].
- Cockayne, D.J.H., P. Goodman, J.C. Mills and A.F. Moodie, 1967, *Rev. Sci. Inst.* 38, 1093. [Ch. 9, 18].
- Cockayne, D.J.H., I.L.F. Ray and M.J. Whelan, 1969, *Phil. Mag.* 20, 1265. [Ch. 18].
- Cockayne, D.J.H., J.R. Parsons and C.W. Hoelke, 1971, *Phil. Mag.* 24, 139. [Ch. 13].
- Cohen, J.B., 1968, *Recent developments concerning the order-disorder transformation, 1968 Seminar on phase transformations*, Detroit, Mich. [Ch. 17].
- Cohen, J.B. and L.H. Schwarz, 1978, *Diffraction from materials* (Academic Press, New York) pp. 403–423; 520–530. [Ch. 17].
- Colella, R., 1972, *Acta Cryst.* A28, 11. [Ch. 8, 10].
- Colella, R. and J.F. Menadue, 1972, *Acta Cryst.* A28, 16. [Ch. 8, 15].
- Colella, R., 1974, *Acta Cryst.* A30, 413. [Ch. 15].
- Cooper, M.J. and K.D. Rouse, 1970, *Acta Cryst.* A26, 213. [Ch. 16].
- Cowley, J.M. and A.L.G. Rees, 1946, *Nature* 158, 550. [Ch. 9].
- Cowley, J.M. and A.L.G. Rees, 1947, *Proc. Phys. Soc.* 59, 283. [Ch. 9].
- Cowley, J.M., 1950a, *Phys. Rev.* 77, 669. [Ch. 17].
- Cowley, J.M., 1950b, *J. Appl. Phys.* 21, 24. [Ch. 17].
- Cowley, J.M., A.L.G. Rees and J.A. Spink, 1951, *Proc. Phys. Soc.* 64, 609. [Ch. 16].
- Cowley, J.M., 1954, *J. Electrochem. Soc.* 101, 277. [Ch. 18].
- Cowley, J.M. and A.F. Moodie, 1957, *Acta Cryst.* 10, 609. [Ch. 8, 11].
- Cowley, J.M. and A.F. Moodie, 1957a, *Proc. Phys. Soc.* B70, 486. [Ch. 1].
- Cowley, J.M. and A.F. Moodie, 1957b, *Proc. Phys. Soc.* B70, 497. [Ch. 1].
- Cowley, J.M. and A.F. Moodie, 1957c, *Proc. Phys. Soc.* B70, 505. [Ch. 1].
- Cowley, J.M., P. Goodman and A.L.G. Rees, 1957, *Acta Cryst.* 10, 19. [Ch. 9].
- Cowley, J.M. and A.F. Moodie, 1958, *Proc. Phys. Soc.* 71, 533. [Ch. 11].
- Cowley, J.M., 1959, *Acta Cryst.* 12, 367. [Ch. 13].
- Cowley, J.M. and A.F. Moodie, 1959, *Acta Cryst.* 12, 423. [Ch. 13].
- Cowley, J.M. and A.F. Moodie, 1959, *Acta Cryst.* 12, 360. [Ch. 15].
- Cowley, J.M., 1960, *Phys. Rev.* 120, 1648. [Ch. 17].
- Cowley, J.M. and A.F. Moodie, 1960, *Proc. Phys. Soc.* 76, 378. [Ch. 1].
- Cowley, J.M., A.F. Moodie, S. Miyake, S. Takagi and F. Fujimoto, 1961, *Acta Cryst.* 14, 87. [Ch. 15].
- Cowley, J.M. and A.F. Moodie, 1962, *J. Phys. Soc. Japan.* 17, B-II, 86. [Ch. 11].
- Cowley, J.M., 1964, *Acta Cryst.* 17, 33. [Ch. 14].
- Cowley, J.M., 1965a, *Phys. Rev.* 138, A1384. [Ch. 17].
- Cowley, J.M., 1965b, *Proc. Int. Conf. on Electron diffraction and the nature of defects in crystals*, Melbourne (Australian Acad. of Science) Paper J-5. [Ch. 12, 17].
- Cowley, J.M., 1967, *Crystal structure determination by electron diffraction*, in: *Progress in materials science*, Vol. 13, No. 6 (Pergamon Press, Oxford). [Ch. 6].
- Cowley, J.M., 1968, *Phys. Letters* 26A, 623. [Ch. 14].
- Cowley, J.M., 1968, *Acta Cryst.* A24, 557. [Ch. 17].
- Cowley, J.M. and R.J. Murray, 1968, *Acta Cryst.* A24, 329. [Ch. 12, 17].
- Cowley, J.M. and A.P. Pogany, 1968, *Acta Cryst.* A24, 109. [Ch. 12, 13, 17].

- Cowley, J.M. and A. Strojnik, 1968, in: *Electron microscopy, 1968*, Proc. Fourth European Regional Conf. on Electron Microscopy, Rome, Vol. 1, 71. [Ch. 13].
- Cowley, J.M., 1969, *Acta Cryst.* A25, 129. [Ch. 15].
- Cowley, J.M., 1969, *Appl. Phys. Letters* 15, 58. [Ch. 13].
- Cowley, J.M., 1969, *Z. f. Angew. Phys.* 27, 149. [Ch. 16].
- Cowley, J.M., 1969, *Appl. Phys. Letters* 15, 58. [Ch. 18].
- Cowley, J.M., 1970, *J. Appl. Cryst.* 3, 49. [Ch. 13, 18].
- Cowley, J.M., 1971, in: *Advances in high-temperature chemistry*, Vol. 3 (Academic Press, New York). [Ch. 17].
- Cowley, J.M. and S. Kuwabara, 1971, *Phys. Letters* 34A, 135. [Ch. 12].
- Cowley, J.M. and Sumio Iijima, 1972, *Z. f. Naturforsch.* 27a, 445. [Ch. 13].
- Cowley, J.M. and S.W. Wilkins, 1972, in: *Interatomic potentials and simulation of lattice defects*, Eds. P.C. Gehlen, J.R. Beeler and R.I. Jaffee (Plenum Press, New York) p. 265. [Ch. 17].
- Cowley, J.M., 1973, *Acta Cryst.* A29, 529. [Ch. 13].
- Cowley, J.M., 1973, *Acta Cryst.* A29, 537. [Ch. 17].
- Cowley, J.M., 1974, in: *Principles and techniques of electron microscopy*, Ed. M.A. Hayat, in press. [Ch. 13].
- Cowley, J.M., 1975, in: *Microscopie electronique à haute tension*, Eds. B. Jouffrey and P. Favard (Société Française de Microscopie Electronique, Paris) p. 129. [Ch. 13].
- Cowley, J.M., 1976a, *Acta Cryst.* A32, 83. [Ch. 18].
- Cowley, J.M., 1976b, *Acta Cryst.* A32, 88. [Ch. 18].
- Cowley, J.M., 1978a, in: *Electron microscopy 1978 Vol. III*, Ed. J.M. Sturgess (Microscopical Soc. Canada, Toronto) p. 207. [Ch. 13].
- Cowley, J.M., 1978b, in: *High voltage electron microscopy 1977*, Eds. T. Imura and H. Hashimoto (Japanese Soc. Electron Microscopy, Tokyo) p. 9. [Ch. 13].
- Cowley, J.M. and A.Y. Au, 1978, *Acta Cryst.* A34, 738. [Ch. 18].
- Cowley, J.M., 1978-1979, *Chemica Scripta* 14, 279. [Ch. 13].
- Cowley, J.M. and R.E. Bridges, 1979, *Ultramicroscopy* 4, 419. [Ch. 13].
- Cowley, J.M., J.B. Cohen, M.B. Salamon and B.J. Wuensch, Eds., 1979, *Modulated structures-1979 (Kailua Kona, Hawaii)* (American Inst. Physics, New York). [Ch. 18].
- Cowley, J.M. and P.M. Fields, 1979, *Acta Cryst.* A35, 28. [Ch. 12].
- Cowley, J.M., 1980, in: *Scanning electron microscopy/1980*, Ed., O. Johari (SEM Inc., Illinois). [Ch. 13].
- Craven, A.J., J.M. Gibson, A. Howie and D.R. Spalding, 1978, *Philos. Mag.* A38, 519. [Ch. 12].
- Crewe, A.V. and J. Wall, 1970, *Optik.* 30, 461. [Ch. 13].
- Cundy, S.L., A.J.F. Metherell and M.J. Whelan, 1966, in: *Electron Microscopy 1966*, Sixth Internat. Conf. on Electron Microscopy, Kyoto, Vol. 1 (Maruzen Co., Tokyo) p. 87. [Ch. 12].
- Cundy, S.L., A. Howie and U. Valdre, 1969, *Phil. Mag.* 20, 147. [Ch. 12].
- Darwin, C.G., 1914, *Phil. Mag.* 27, 315, 675. [Ch. 1, 8, 10, 16].
- Datz, S., C. Erginsoy, G. Liefried and H.O. Lutz, 1967, *Ann. Rev. Nucl. Sci.* 17, 129.
- Dawson, B., 1967, *Proc. Roy. Soc.* A298, 255, 379. [Ch. 15].
- Dawson, B., P. Goodman, A.W.S. Johnson, D.F. Lynch and A.F. Moodie, 1974, *Acta Cryst.* A30, 297. [Ch. 4].

- De Marco, J.J. and P. Suortti, 1971, *Phys. Rev.* B4, 1028. [Ch. 12].
- de Rosier, D.J. and A. Klug, 1968, *Nature* 217, 130. [Ch. 13].
- Ditchburn, R.W., 1976, *Light*, Vol. 1, 3rd edition (Blackie & Sons, London). [Ch. 1].
- Doyle, P.A. and P.S. Turner, 1968, *Acta Cryst.* A24, 390. [Ch. 4].
- Doyle, P.A., 1969, Ph.D. Thesis, University of Melbourne. [Ch. 4].
- Doyle, P.A., 1969, *Acta Cryst.* A25, 569. [Ch. 12, 14].
- Doyle, P.A., 1970, *Acta Cryst.* A26, 133. [Ch. 12].
- Doyle, P.A., 1971, *Acta Cryst.* A27, 109. [Ch. 12, 14].
- Duffieux, P.M., 1946, *L'integral de Fourier et ses applications à l'optique* (Privately printed, Besançon). [Ch. 1, 3].
- Duncumb, P., 1962, *Phil. Mag.* 7, 2101. [Ch. 9].
- Dupuoy, G. and J. Beauvillain, 1970, in: *Microscopie electronique, 1970*, Vol. II, 207. [Ch. 14].
- Ehrhart, P., 1978, *J. Nucl. Mater.* 69-70, 200. [Ch. 12].
- Eisenhandler, Clare B. and B.M. Siegel, 1965, *J. Appl. Phys.* 37, 1613. [Ch. 13].
- Erdeyli, A., 1954, *Tables of integral transforms*, Vol. 1, Bateman Mathematical Project (McGraw-Hill, New York). [Ch. 2].
- Erickson, H.P. and A. Klug, 1971, *Phil. Trans. Roy. Soc.* B261, 105 [Ch. 13].
- Ewald, P.P., 1916, *Ann. Physik* 49, 1, 117. [Ch. 1, 8].
- Ewald, P.P., 1917, *Ann. Physik.* 54, 519. [Ch. 8].
- Ewald, P.P. and Y. Heno, 1968, *Acta Cryst.* A24, 5. [Ch. 10].
- Ewald, P.P. and Y. Heno, 1968, *Acta Cryst.* A24, 16. [Ch. 14].
- Fejes, P.L., 1970, M. Sc. Thesis, University of Melbourne. [Ch. 15].
- Fejes, P., 1973, Ph.D. Thesis, Arizona State University. [Ch. 11].
- Fejes, P.L., Sumio Iijima and J.M. Cowley, 1973, *Acta Cryst.* A29, 710. [Ch. 10, 15].
- Fellgett, P.B. and E.H. Linfoot, 1955, *Phil. Trans. Roy. Soc.* A247, 369. [Ch. 3].
- Ferrell, R.A., 1956, *Phys. Rev.* 101, 554. [Ch. 12].
- Fields, P.M. and J.M. Cowley, 1978, *Acta Cryst.* A34, 103. [Chs. 12, 17].
- Fisher, P.M.J., 1965, *Proc. Int. Conf. on Electron diffraction and the nature of defects in crystals* (Australian Acad. of Science, Melbourne) paper IH-4. [Ch. 12].
- Fisher, P.M.J., 1965, M.Sc. Thesis, University of Melbourne. [Ch. 17].
- Fisher, P.M.J., 1968, *Jap. J. Appl. Phys.* 7, 191. [Ch. 10].
- Fisher, P.M.J., 1969, Ph.D. Thesis, University of Melbourne. [Ch. 15].
- Fisher, P.M.J., 1972, private communication. [Ch. 15, 17].
- Fisher, P.M.J., 1971, private communication. [Ch. 10].
- Fisher, R.M., J.S. Lally, C.J. Humphreys and A.J.E. Metherell, in: *Microscopie Electronique, 1970*, 1, 107. [Ch. 15].
- Flinn, P.A., 1956, *Phys. Rev.* 104, 350. [Ch. 12, 17].
- Flocken, J.W. and J.R. Hardy, 1970, *Phys. Rev.* B1, 2447. [Ch. 12].
- Fues, E., 1949, *Z. f. Phys.* 125, 531. [Ch. 14].
- Fujimoto, F., 1959, *J. Phys. Soc. Japan* 14, 1558. [Ch. 8, 10, 11].
- Fujimoto, F. and Y. Kainuma, 1963, *J. Phys. Soc. Japan* 18, 1792. [Ch. 12, 14].
- Fujimoto, F. and A. Howie, 1966, *Phil. Mag.* 13, 1131. [Ch. 12].
- Fujimoto, F. and K. Komaki, 1968, *J. Phys. Soc. Japan* 25, 1679. [Ch. 12].

- Fujimoto, F., 1977, in: *High voltage electron microscopy 1977*, Eds. T. Imura and H. Hashimoto (Japanese Soc. Electron Microscopy, Tokyo) p. 271. [Ch. 14].
- Fujiwara, K., 1957, *J. Phys. Soc. Japan* 12, 7. [Ch. 17].
- Fujiwara, K., 1959, *J. Phys. Soc. Japan* 14, 1513. [Ch. 8, 10, 11].
- Fujiwara, K., 1961, *J. Phys. Soc. Japan* 16, 2226. [Ch. 8].
- Fukuhara, A., 1966, *J. Phys. Soc. Japan* 21, 2645. [Ch. 10].
- Gaudig, W. and S.L. Saas, 1979, *Philos. Mag.* A39, 725. [Ch. 18].
- Gehlen, P.C. and J.B. Cohen, 1965, *Phys. Rev.* 139, A844. [Ch. 17].
- Georgopolous, P. and J.B. Cohen, 1977, *J. de Physique C-7, Suppl.* 12, 191. [Ch. 17].
- Giardina, M.D. and A. Merlini, 1973, *Z. Naturforsch* 28a, 1360. [Ch. 4].
- Gjønnnes, J.K., 1962, *Acta Cryst.* 15, 703. [Ch. 8, 16].
- Gjønnnes, J.K., 1962, *J. Phys. Soc. Japan* 17, Suppl. BII, 137. [Ch. 17].
- Gjønnnes, J.K., 1964, *Acta Cryst.* 17, 1075. [Ch. 4].
- Gjønnnes, J.K., 1965, *Proc. Int. Conf. on Electron diffraction and the nature of defects in crystals*, Melbourne (Australian Acad. of Science) paper IH-2. [Ch. 12].
- Gjønnnes, J.K. and A.F. Moodie, 1965, *Acta Cryst.* 19, 65. [Ch. 13, 15].
- Gjønnnes, J.K., 1966, *Acta Cryst.* 20, 240. [Ch. 10, 12, 14].
- Gjønnnes, J.K. and D. Watanabe, 1966, *Acta Cryst.* 21, 297. [Ch. 12].
- Gjønnnes, J.K. and R. Høier, 1971, *Acta Cryst.* A27, 166. [Ch. 12].
- Gjønnnes, J.K. and R. Høier, 1971, *Acta Cryst.* A27, 313. [Ch. 15].
- Glauber, R. and V. Schomaker, 1953, *Phys. Rev.* 89, 667. [Ch. 4].
- Goldberger, M.L. and F. Seitz, 1947, *Phys. Rev.* 71, 294. [Ch. 8].
- Goodman, J.W., 1968, *Introduction to fourier optics* (McGraw Hill, New York). [Ch. 1].
- Goodman, P. and G. Lehmpfuhl, 1964, *Z. Naturforsch.* 19a, 818. [Ch. 9].
- Goodman, P. and A.F. Moodie, 1965, in: *Proc. Int. Conf. on Electron diffraction and the nature of defects in crystals*, Melbourne (Australian Acad. of Science). [Ch. 11].
- Goodman, P. and G. Lehmpfuhl, 1967, *Acta Cryst.* 22, 14. [Ch. 15].
- Goodman, P., 1968, *Acta Cryst.* A24, 400. [Ch. 15].
- Goodman, P. and G. Lehmpfuhl, 1968, *Acta Cryst.* A24, 339. [Ch. 15].
- Goodman, P., 1971, *Acta Cryst.* A27, 140. [Ch. 15].
- Goodman, P. and A.F. Moodie, 1974, *Acta Cryst.* A30, 280. [Ch. 8, 11, 15].
- Goodman, P., 1975, *Acta Cryst.* A31, 804. [Ch. 15].
- Goodman, P. and A.W.S. Johnson, 1977, *Acta Cryst.* A33, 997. [Ch. 15].
- Goodman, P., 1978, in: *Electron diffraction 1927-77*, Eds. P.J. Dobson, J.B. Pendry and C.J. Humphreys (Institute of Physics, Bristol) 116. [Ch. 15].
- Gragg, J.E., 1970, Ph.D. Thesis, Northwestern University. [Ch. 17].
- Grinton, G.R. and J.M. Cowley, 1971, *Optik.* 34, 221. [Ch. 11, 13].
- Guan, D.Y. and S.L. Sass, 1973, *Philos. Mag.* 26, 1211. [Ch. 18].
- Guinier, A., 1963, *X-ray diffraction in crystals, imperfect crystals and amorphous bodies* (W.H. Freeman and Co., San Francisco and London). [Ch. 5, 18].
- Hall, C.R., 1965, *Phil. Mag.* 12, 815. [Ch. 12].
- Hall, C.R. and P.B. Hirsch, 1965, *Proc. Roy. Soc.* A286, 158. [Ch. 12].
- Hall, C.R., P.B. Hirsch and G.R. Booker, 1966, *Phil. Mag.* 14, 979. [Ch. 12].
- Hall, C.R. and P.B. Hirsch, 1968, *Phil. Mag.* 18, 115. [Ch. 9].

- Harburn, G., C.A. Taylor and T.R. Welberry, 1975, *Atlas of optical transforms* (Cornell Univ. Press, New York). [Ch. 2].
- Hart, M. and A.D. Milne, 1970, *Acta Cryst.* A26, 223. [Ch. 15].
- Hashimoto, H., A. Howie and M.J. Whelan, 1960, *Phil. Mag.* 5, 967. [Ch. 18].
- Hashimoto, H., 1962, *Proc. Roy. Soc.* A269, 80. [Ch. 18].
- Hashimoto, H., M. Mannami and T. Naiki, 1961, *Phil. Trans. Roy. Soc.* 253, 459 and 490. [Ch. 13].
- Hashimoto, H., A. Kumao, K. Hino, H. Yotsumoto and A. Ono, 1973, *Jap. J. Appl. Phys.* 10, 1115. [Ch. 13].
- Hashimoto, S. and S. Ogawa, 1970, *J. Phys. Soc. Japan* 29, 710. [Ch. 17].
- Haubold, H.G., 1974, *Proc. Int. discussion meeting on studies of lattice distortions and local atomic arrangements by X-ray, neutron and electron diffraction*, Jülich, April–May, 1974. [Ch. 12].
- Hauptman, H.A., 1972, *Crystal structure determination: the role of the cosine invariants* (Plenum Press, New York). [Ch. 6].
- Hauptman, H., 1978, *Acta Cryst.* A34, 525. [Ch. 6].
- Hashimoto, H., H. Endoh, T. Tanji, A. Ono and E. Watanabe, 1977, *J. Phys. Soc. Japan* 42, 1073. [Ch. 13].
- Head, A.K., 1967, *Australian J. Phys.* 20, 557. [Ch. 15, 18].
- Head, A.K., P. Humble, L.M. Clarebrough, A.J. Morton and C.T. Forwood, 1973, *Computed electron micrographs and defect identification* (North-Holland, Amsterdam). [Ch. 18].
- Heidenreich, R.D., 1942, *Phys. Rev.* 62, 291. [Ch. 9].
- Heidenreich, R.D., 1962, *J. Appl. Phys.* 33, 2321. [Ch. 12].
- Heidenreich, R.D., 1964, *Fundamentals of transmission electron microscopy* (Interscience Publishers, New York). [Ch. 8, 13].
- Heidenreich, R.D. and R.W. Hamming, 1965, *Bell System Tech. J.* 44, 207. [Ch. 13].
- Helmholtz, H.V., 1886, *Crelles Journ.* 100, 213. [Ch. 1].
- Heno, Y. and P.P. Ewald, 1968, *Acta Cryst.* A24, 16. [Ch. 10].
- Hendricks, S. and E. Teller, 1942, *J. Chem. Phys.* 10, 147. [Ch. 18].
- Hiraga, K., M. Hirabayashi and D. Shindo, 1977, in: *High voltage electron microscopy 1977*, Eds. T. Imura and H. Hashimoto (Japanese Soc. Electron Microscopy) 309. [Ch. 13].
- Hirsch, P.B., 1952, *Acta Cryst.* 5, 176. [Ch. 14].
- Hirsch, P.B., A. Howie, R.B. Nicholson, D.W. Pashley and M.J. Whelan, 1965, *Electron microscopy of thin crystals* (Butterworth and Co., London). [Ch. 8, 13, 15, 18].
- Hoerni, J., 1950, *Helv. Phys. Acta.* 23, 587. [Ch. 9].
- Hoerni, J.A. and J.A. Ibers, 1953, *Phys. Rev.* 91, 1182. [Ch. 4].
- Hoerni, J.A., 1956, *Phys. Rev.* 102, 1534. [Ch. 4].
- Høier, R., 1969, *Acta Cryst.* A25, 516. [Ch. 14].
- Høier, R., 1973, *Acta Cryst.* A29, 663. [Ch. 12].
- Holmes, R.J., I.E. Pollard and C.J. Ryan, 1970, *J. Appl. Cryst.* 3, 200. [Ch. 15].
- Honjo, G., 1947, *J. Phys. Soc. Japan.* 2, 133. [Ch. 9].
- Honjo, G. and K. Mihama, 1954, *J. Phys. Soc. Japan* 9, 184. [Ch. 9].
- Hopkins, H.H., 1950, *Wave theory of aberrations* (Oxford University Press). [Ch. 3].
- Hopkins, H.H., 1953, *Proc. Roy. Soc.* A217, 408. [Ch. 3].
- Hoppe, W., 1956, *Z. f. Krist.* 107, 406. [Ch. 12].

- Hoppe, W., 1964, in: *Advances in structural research by diffraction methods*, Ed. Brill (Interscience Publ.) p. 90. [Ch. 12].
- Horiuchi, S., 1978–1979, *Chemica Scripta* 14, 75. [Ch. 13].
- Horstmann, M. and G. Meyer, 1962, *Acta Cryst.* 15, 271. [Ch. 16].
- Horstmann, M. and G. Meyer, 1965, *Zeit. f. Phys.* 182, 380. [Ch. 16].
- Hosemann, R. and R.N. Baggchi, 1962, *Direct analysis of diffraction by matter* (North-Holland, Amsterdam). [Ch. 5].
- Hove, L. van, 1954, *Phys. Rev.* 95, 249. [Ch. 12].
- Howie, A. and M.J. Whelan, 1961, *Proc. Roy. Soc. A* 263, 217. [Ch. 8, 10, 18].
- Howie, A., 1963, *Proc. Roy. Soc. A* 271, 268. [Ch. 12].
- Howie, A., 1966, *Phil. Mag.* 14, 223. [Ch. 14].
- Howie, A. and Z.S. Basinski, 1968, *Phil. Mag.* 17, 1039. [Ch. 10].
- Howie, A. and Z.S. Basinski, 1968, *Philos. Mag.* 17, 1038. [Ch. 18].
- Hren, J.J., J.I. Goldstein and D.C. Joy, Eds., 1979, *Introduction to analytical electron microscopy* (Plenum Press, New York). [Ch. 13].
- Huang, K., 1947, *Proc. Roy. Soc. A* 190, 102. [Ch. 12, 17].
- Humble, P., 1970, in: *Modern diffraction and imaging techniques in materials science*, Eds. S. Amelinckx et al. (North-Holland, Amsterdam) p. 99. [Ch. 18].
- Humphreys, C.J. and P.B. Hirsch, 1968, *Phil. Mag.* 18, 115. [Ch. 12].
- Humphreys, C.J. and M.J. Whelan, 1969, *Phil. Mag.* 20, 165. [Ch. 12].
- Humphreys, C.J. and R.M. Fisher, 1971, *Acta Cryst.* A27, 42. [Ch. 8].
- Humphreys, C.J., L.E. Thomas, J.S. Lally and R.M. Fisher, 1971, *Phil. Mag.* 23, 87. [Ch. 13].
- Humphreys, C.J., J.P. Spencer, R.J. Woolf, D.C. Joy, J.M. Titchmarsh and G.R. Booker, 1972, in: *Scanning electron microscopy 1972* (I.I.T. Research Institute, Chicago). [Ch. 14].
- Humphreys, C.J., R. Sandstrom and J.P. Spencer, 1973, in: *Scanning electron microscopy 1973* (I.I.T. Research Institute, Chicago). [Ch. 14].
- Iijima, Sumio, 1971, *J. Appl. Phys.* 42, 5891. [Ch. 13].
- Iijima, Sumio, 1973, *Acta Cryst.* A29, 18. [Ch. 13].
- Iijima, S. and J.G. Allpress, 1974a, *Acta Cryst.* A30, 22. [Ch. 13].
- Iijima, S. and J.G. Allpress, 1974b, *Acta Cryst.* A30, 29. [Ch. 13].
- Iijima, S., 1978, *Acta Cryst.* A34, 922. [Ch. 13].
- Iizumi, M., J.D. Axe, G. Shirane and K. Shimaoka, 1977, *Phys. Rev.* B15, 4392. [Ch. 17].
- Imamov, R.M. and Z.G. Pinsker, 1965, *Soviet Physics – Crystallography* 10, 148. [Ch. 16].
- Imamov, R.M., V. Pannkhorst, A.S. Avilov and Z.G. Pinsker, 1976, *Kristallografiya* 21, 364. [Ch. 16].
- Imeson, D., J.R. Sellar and C.J. Humphreys, 1979, *Proc. 37th ann. meet. electron microscopy Soc. Amer.*, Ed. G.W. Bailey (Claitor's, Baton Rouge). [Ch. 15].
- Ishida, K., 1970, *J. Phys. Soc. Japan* 28, 450. [Ch. 12].
- Ishizuka, K., 1980, *Ultramicroscopy* 5, 55. [Ch. 13].
- Ishizuka, K. and N. Uyeda, 1977, *Acta Cryst.* A33, 740. [Ch. 11].
- Izui, K., S. Furuno and H. Otsu, 1977, *J. Electron Microscopy* 26, 129. [Ch. 13].

- James, R.W., 1948, *The optical principles of the diffraction on X-rays* (G. Bell and Sons, London). [Ch. 8, 12, 14].
- Jap, B.K. and R.M. Glaeser, 1978, *Acta Cryst.* A34, 94. [Ch. 11].
- Jennison, R.C., 1961, *Fourier transforms and convolutions for the experimentalist* (Pergamon Press, Oxford). [Ch. 2].
- Johnson, A.W.S., 1968, *Acta Cryst.* A24, 534. [Ch. 10].
- Johnson, A.W.S., 1972, *Acta Cryst.* A28, 89. [Ch. 15].
- Jouffrey, B. and D. Taupin, 1967, *Phil. Mag.* 15, 507. [Ch. 10].
- Jouffrey, B. and D. Taupin, 1967, *Philos. Mag.* 16, 703. [Ch. 18].
- Kainuma, Y., 1953, *J. Phys. Soc. Japan* 8, 685. [Ch. 14].
- Kainuma, Y. and M. Kogiso, 1968, *Acta Cryst.* A24, 81. [Ch. 12, 14].
- Kakinoki, J. and Y. Komura, 1951, *J. Inst. Poly Tech., Osaka City Uni.* 2, 1. [Ch. 18].
- Kakinoki, J. and Y. Komura, 1952, *J. Inst. Poly Tech., Osaka City Uni.* 3B, 1 and 35. [Ch. 18].
- Kakinoki, J. and Y. Komura, 1952, *J. Phys. Soc. Japan* 7, 30. [Ch. 18].
- Kambe, K., 1957, *J. Phys. Soc. Japan* 12, 13, 25. [Ch. 14].
- Kambe, K. and K. Moliere, 1970, *Advances in structure research by diffraction methods*, Eds. R. Brill and R. Mason, 3, 53. [Ch. 8].
- Kambe, K., G. Lehmpfuhl and F. Fujimoto, 1974, *Z.f. Naturforsch.*, 29a, 1034. [Ch. 13, 14].
- Kamiya, Y. and R. Uyeda, 1961, *J. Phys. Soc. Japan* 16, 1361. [Ch. 13].
- Kanzaki, H., 1957, *J. Phys. Chem. Solids* 2, 107. [Ch. 12].
- Kato, N., 1952, *J. Phys. Soc. Japan* 7, 397 and 406. [Ch. 9].
- Kato, N., 1955, *J. Phys. Soc. Japan* 10, 46. [Ch. 14].
- Kato, N. and A.R. Lang, 1959, *Acta Cryst.* 12, 787. [Ch. 9, 15, 18].
- Kato, N., 1960, *Z. f. Naturforsch.* 15a, 369. [Ch. 18].
- Kato, N., 1961, *Acta Cryst.* 14, 526 and 627. [Ch. 9, 18].
- Kato, N., 1969, *Acta Cryst.* A25, 119. [Ch. 9, 15].
- Kato, N., 1973, *Z. f. Naturforsch.* 28a, 604. [Ch. 18].
- Kato, N., 1976, *Acta Cryst.* A32, 543, 458. [Ch. 16].
- Kato, N., 1979, *Acta Cryst.* A35, 9. [Ch. 16].
- Kikuchi, S., 1928, *Proc. Jap. Acad. Sci.* 4, 271, 275, 354, 475. [Ch. 14].
- Kikuta, S., T. Matsushita and K. Kohra, 1970, *Phys. Letters* 33A, 151. [Ch. 15].
- Kikuta, S., 1971, *Phys. Stat. Sol.(b)* 45, 333. [Ch. 15].
- Kinder, E., 1943, *Naturwiss.* 31, 149. [Ch. 9].
- Knowles, J.W., 1956, *Acta Cryst.* 9, 61. [Ch. 9].
- Kogiso, M. and Y. Kainuma, 1968, *J. Phys. Soc. Japan* 25, 498. [Ch. 16].
- Kohra, K., 1954, *J. Phys. Soc. Japan* 9, 690. [Ch. 14, 15].
- Kohra, K. and S. Kikuta, 1968, *Acta Cryst.* A24, 200. [Ch. 15].
- Kossel, W., V. Loeck and H. Voges, 1934, *Z. f. Phys.* 94, 139. [Ch. 14].
- Kossel, W. and G. Mollenstedt, 1939, *Ann. Phys.* 36, 113. [Ch. 9, 14].
- Kreutle, M. and G. Meyer-Ehmsen, 1969, *Phys. Stat. Sol.* 35, K17. [Ch. 15].
- Krivanek, O.L., 1978–1979, *Chem. Scripta* 14, 213. [Ch. 18].
- Krivoglaz, M.A. and K.P. Ryaboshapka, 1963, *Fiz. Metal. i Metalloved.* 15, 18. [Ch. 18].
- Krivoglaz, M.A., 1969, *Theory of X-ray and thermal neutron scattering by real crystals* (Plenum Press, New York). [Ch. 12].

- Kumm, H., F. Bell, R. Sizmann, H.J. Kreiner and D. Harder, 1972, *Rad. Effects* 12, 52. [Ch. 14].
- Kuriyama, M., 1970, *Acta Cryst.* A26, 56 and 667. [Ch. 8].
- Kuriyama, M., 1972, *Acta Cryst.* A28, 588. [Ch. 8].
- Kuriyama, M., 1973, *Z. f. Naturforsch.* 28a, 622. [Ch. 18].
- Kuwabara, Shigeya, 1959, *J. Phys. Soc. Japan* 14, 1205. [Ch. 6].
- Kuwabara, S., 1961, *J. Phys. Soc. Japan* 16, 2226. [Ch. 16].
- Kuwabara, S., 1962, *J. Phys. Soc. Japan* 17, 1414. [Ch. 12].
- Kuwabara, S., 1967, *J. Phys. Soc. Japan* 22, 1245. [Ch. 16].
- Kuwabara, S. and J.M. Cowley, 1973, *J. Phys. Soc. Japan* 34, 1575. [Ch. 12].
- Ladd, M.F.C. and R.A. Palmer, 1977, *Structure determination by X-ray crystallography* (Plenum, New York). [Ch. 6].
- Lally, J.S., C.J. Humphreys, A.J.F. Metherell and R.M. Fisher, 1972, *Phil. Mag.* 25 321. [Ch. 15].
- Lang, A., 1958, *J. Appl. Phys.* 29, 597. [Ch. 18].
- Lang, A., 1959, *Acta Cryst.* 12, 249. [Ch. 9, 15, 18].
- Lang, A., 1970, in: *Modern diffraction and imaging techniques in materials science*, Eds. S. Amelinckx et al. (North-Holland, Amsterdam). [Ch. 15].
- Langmore, J.P., J. Wall and M.S. Isaacson, 1973, *Optik.* 38, 335. [Ch. 13].
- Laue, M. von, 1931, *Ergeb. Exakt. Natur.* 10, 133. [Ch. 1, 8].
- Laue, M. von, 1935, *Ann. Phys. Lpz.* 23, 705. [Ch. 1, 14].
- Laue, M. von, 1952, *Acta Cryst.* 5, 619. [Ch. 9].
- Laval, J., 1958, *Rev. Mod. Phys.* 30, 222. [Ch. 12].
- Lehmpfuhl, G. and A. Reissland, 1968, *Z.f. Naturforsch.* 23a, 544. [Ch. 9, 15].
- Lervig, P., J. Lindhard and V. Nielsen, 1967, *Nucl. Phys.* A96, 481. [Ch. 14].
- Lighthill, M.J., 1960, *Fourier analysis and generalized functions* (Cambridge University Press, Cambridge, UK). [Ch. 2].
- Lindhard, J., 1965, *Mat. Fys. Medd. Dan. Vid. Selsk.* 34, 1. [Ch. 14].
- Linfoot, E.H., 1955, *Recent advances in optics* (Oxford University Press). [Ch. 3].
- Lipson, H. and C.A. Taylor, 1958, *Fourier transforms and X-ray diffraction* (G. Bell and Sons, London). [Ch. 3].
- Lipson, H. and W. Cochran, 1966, *The determination of crystal structures*, 3rd revised edition (G. Bell and Sons, London). [Ch. 6].
- Lipson, S.G. and H. Lipson, 1969, *Optical physics* (Cambridge University Press, Cambridge, UK). [Ch. 1].
- Lonsdale, K., 1947, *Phil. Trans. Roy. Soc.* A240, 219. [Ch. 14].
- Lynch, D., 1971, *Acta Cryst.* A27, 399. [Ch. 11, 15].
- Lynch, D.F. and M. O'Keefe, 1973, *Acta Cryst.* A28, 536. [Ch. 13].
- MacGillavry, C.H., 1940, *Physica* 7, 329. [Ch. 9].
- Mackay, K.J.H., 1966, *Proc. IV Congr. X-ray optics and microanalysis* (Hermann, Paris) p. 544. [Ch. 14].
- Massover, W.H., 1978, in: *Electron microscopy 1978*, Vol II, Ed. J.M. Sturgess (Microscopical Soc, Toronto, Canada) 182. [Ch. 13].
- Mazel, A. and R. Ayroles, 1968, *J. de Microscopie* 7, 793. [Ch. 15].

- Kumm, H., F. Bell, R. Sizmann, H.J. Kreiner and D. Harder, 1972, *Rad. Effects* 12, 52. [Ch. 14].
- Kuriyama, M., 1970, *Acta Cryst.* A26, 56 and 667. [Ch. 8].
- Kuriyama, M., 1972, *Acta Cryst.* A28, 588. [Ch. 8].
- Kuriyama, M., 1973, *Z. f. Naturforsch.* 28a, 622. [Ch. 18].
- Kuwabara, Shigeya, 1959, *J. Phys. Soc. Japan* 14, 1205. [Ch. 6].
- Kuwabara, S., 1961, *J. Phys. Soc. Japan* 16, 2226. [Ch. 16].
- Kuwabara, S., 1962, *J. Phys. Soc. Japan* 17, 1414. [Ch. 12].
- Kuwabara, S., 1967, *J. Phys. Soc. Japan* 22, 1245. [Ch. 16].
- Kuwabara, S. and J.M. Cowley, 1973, *J. Phys. Soc. Japan* 34, 1575. [Ch. 12].
- Ladd, M.F.C. and R.A. Palmer, 1977, *Structure determination by X-ray crystallography* (Plenum, New York). [Ch. 6].
- Lally, J.S., C.J. Humphreys, A.J.F. Metherell and R.M. Fisher, 1972, *Phil. Mag.* 25 321. [Ch. 15].
- Lang, A., 1958, *J. Appl. Phys.* 29, 597. [Ch. 18].
- Lang, A., 1959, *Acta Cryst.* 12, 249. [Ch. 9, 15, 18].
- Lang, A., 1970, in: *Modern diffraction and imaging techniques in materials science*, Eds. S. Amelinckx et al. (North-Holland, Amsterdam). [Ch. 15].
- Langmore, J.P., J. Wall and M.S. Isaacson, 1973, *Optik.* 38, 335. [Ch. 13].
- Laue, M. von, 1931, *Ergeb. Exakt. Natur.* 10, 133. [Ch. 1, 8].
- Laue, M. von, 1935, *Ann. Phys. Lpz.* 23, 705. [Ch. 1, 14].
- Laue, M. von, 1952, *Acta Cryst.* 5, 619. [Ch. 9].
- Laval, J., 1958, *Rev. Mod. Phys.* 30, 222. [Ch. 12].
- Lehmpfuhl, G. and A. Reissland, 1968, *Z.f. Naturforsch.* 23a, 544. [Ch. 9, 15].
- Lervig, P., J. Lindhard and V. Nielsen, 1967, *Nucl. Phys.* A96, 481. [Ch. 14].
- Lighthill, M.J., 1960, *Fourier analysis and generalized functions* (Cambridge University Press, Cambridge, UK). [Ch. 2].
- Lindhard, J., 1965, *Mat. Fys. Medd. Dan. Vid. Selsk.* 34, 1. [Ch. 14].
- Linfoot, E.H., 1955, *Recent advances in optics* (Oxford University Press). [Ch. 3].
- Lipson, H. and C.A. Taylor, 1958, *Fourier transforms and X-ray diffraction* (G. Bell and Sons, London). [Ch. 3].
- Lipson, H. and W. Cochran, 1966, *The determination of crystal structures*, 3rd revised edition (G. Bell and Sons, London). [Ch. 6].
- Lipson, S.G. and H. Lipson, 1969, *Optical physics* (Cambridge University Press, Cambridge, UK). [Ch. 1].
- Lonsdale, K., 1947, *Phil. Trans. Roy. Soc.* A240, 219. [Ch. 14].
- Lynch, D., 1971, *Acta Cryst.* A27, 399. [Ch. 11, 15].
- Lynch, D.F. and M. O'Keefe, 1973, *Acta Cryst.* A28, 536. [Ch. 13].
- MacGillavry, C.H., 1940, *Physica* 7, 329. [Ch. 9].
- Mackay, K.J.H., 1966, *Proc. IV Congr. X-ray optics and microanalysis* (Hermann, Paris) p. 544. [Ch. 14].
- Massover, W.H., 1978, in: *Electron microscopy 1978*, Vol II, Ed. J.M. Sturgess (Microscopical Soc, Toronto, Canada) 182. [Ch. 13].
- Mazel, A. and R. Ayroles, 1968, *J. de Microscopie* 7, 793. [Ch. 15].

- McMahon, A.G., 1969, M.Sc. Thesis, University of Melbourne. [Ch. 15].
- Menadue, J.F., 1972, *Acta Cryst.* A28, 1. [Ch. 8].
- Menter, J.W., 1956, *Proc. Roy. Soc.* A236, 119. [Ch. 13].
- Meyer, G., 1966, *Phys. Letters* 20, 240. [Ch. 15].
- Miyake, S. and R. Uyeda, 1950, *Acta Cryst.* 3, 314. [Ch. 15].
- Miyake, S. and R. Uyeda, 1955, *Acta Cryst.* 8, 335. [Ch. 14, 15].
- Miyake, S., 1959, *J. Phys. Soc. Japan* 14, 1347. [Ch. 8].
- Miyake, S., K. Fujiwara, M. Tokonami and F. Fujimoto, 1964, *Jap. J. Appl. Phys.* 3, 276. [Ch. 13].
- Miyake, S., K. Hayakawa and R. Miida, 1968, *Acta Cryst.* A24, 182. [Ch. 9].
- Moliere, K. and H. Wagenfeld, 1958, *Z. Krist.* 110, 3. [Ch. 9].
- Moodie, A.F. and C.E. Warble, 1967, *Phil. Mag.* 16, 891. [Ch. 13].
- Moodie, A.F., 1972, Dynamical n -beam theory of electron diffraction, in: *Encyclopaedia dictionary of physics*. Suppl. 4, Ed. A. Thewlis. [Ch. 3, 11].
- Moodie, A.F., 1978–1979, *Chem. Scripta* 14, 21. [Ch. 10].
- Moon, A.R., 1972, *Zeit. f. Naturforsch.* 27b, 390. [Ch. 10].
- Morse, P.M., 1930, *Phys. Rev.* 35, 1310. [Ch. 8].
- Moser, B., D.T. Keating and S.C. Moss, 1968, *Phys. Rev.* 175, 868. [Ch. 17].
- Moss, S.C., 1964, *J. Appl. Phys.* 35, 3547. [Ch. 17].
- Moss, S.C., 1965, in: *Local atomic arrangements studied by X-ray diffraction*, Eds. J.B. Cohen and J.E. Hilliard (Gordon and Breach, New York). [Ch. 17].
- Nagata, F. and A. Fukuhara, 1967, *Jap. J. Appl. Phys.* 6, 1233. [Ch. 15].
- Nakayama, K., S. Kikuta and K. Kohra, 1971, *Phys. Letters* 37A, 29. [Ch. 15].
- Niehurs, H., 1959a, *Z. f. Phys.* 156, 446. [Ch. 8].
- Niehurs, H., 1959b, *Z. f. Naturforsch.* 149, 504. [Ch. 8].
- Niehurs, H., 1962, *J. Phys. Soc. Japan* 17, Suppl. B-II, 104. [Ch. 13].
- Nussbaum, A. and R.A. Phillips, 1976, *Contemporary optics for scientists and engineers* (Prentice Hall, New Jersey). [Ch. 1].
- O'Connor, D.A., 1967, *Proc. Phys. Soc.* 91, 917. [Ch. 12].
- Ogawa, S., 1962, *J. Phys. Soc. Japan* 17, Suppl. B-II, 253. [Ch. 17].
- Ohtsuki, Y.H. and S. Yanagawa, 1965, *Phys. Letters* 14, 186. [Ch. 8].
- Ohtsuki, Y.H. and S. Yanagawa, 1966, *J. Phys. Soc. Japan* 21, 326. [Ch. 8].
- Ohtsuki, Y.H., 1967, *Phys. Letters* A24, 691. [Ch. 12].
- Okamoto, K., T. Ichinokawa and Y. Ohtsuki, 1971, *J. Phys. Soc. Japan* 30, 1690. [Ch. 14].
- O'Keefe, M., 1973, *Acta Cryst.* A29, 389. [Ch. 13].
- O'Keefe, M.A. and S. Iijima, 1978, in: *Electron Microscopy 1978 Vol. I*, Ed. J.M. Sturgess (Microscopical Soc., Toronto, Canada) p. 282. [Ch. 11, 13].
- Parsons, J.R. and C.W. Hoelke, 1969, *J. Appl. Phys.* 40, 866. [Ch. 13].
- Parsons, J.R. and C.W. Hoelke, 1970, *Phil. Mag.* 22, 1071. [Ch. 13].
- Paskin, A., 1958, *Acta Cryst.* 11, 165. [Ch. 12].
- Paskin, A., 1959, *Acta Cryst.* 12, 290. [Ch. 12].
- Pendry, J.B., 1974, *Low Energy Electron Diffraction* (Academic Press, London). [Ch. 8].
- Pfister, H., 1953, *Ann. Phys.* 11, 239. [Ch. 14].
- Phillips, V.A. and J.A. Hugo, 1968, *Appl. Phys. Letters* 13, 67. [Ch. 13].

- Phillips, V.A. and J.A. Hugo, 1970, *Acta Met.* 18, 123. [Ch. 13].
- Pines, D., 1955, in: *Solid state physics* (Academic Press, New York). [Ch. 12].
- Pines, D., 1956, *Rev. Mod. Phys.* 28, 184. [Ch. 12].
- Pines, D., 1964, *Elementary excitations in solids* (Benjamin, New York). [Ch. 12].
- Pinsker, Z.G., 1964, *Structure analysis by electron diffraction*, Translated from the Russian (Butterworths, London). [Ch. 6, 8].
- Pinsker, Z.G., 1978, *Dynamical theory of X-ray scattering in ideal Crystals* (Springer-Verlag, Berlin) (Russian Edition, 1974). [Ch. 8, 9].
- Pogany, A.P., 1968, Ph.D. Thesis, University of Melbourne. [Ch. 12].
- Pogany, A.P. and P.S. Turner, 1968, *Acta Cryst.* A24, 103. [Ch. 1].
- Pollard, I.E., 1970, Ph.D. Thesis, University of Melbourne. [Ch. 15].
- Pollard, I.E., 1972, private communication. [Ch. 15].
- Post, B., 1979, *Acta Cryst.* A35, 17. [Ch. 15].
- Raether, H.A., 1980, *Excitation of plasmons and interband transitions by electrons* (Springer-Verlag, Berlin). [Ch. 12].
- Rayleigh, Lord, 1881, *Phil. Mag.* 11, 196. [Ch. 1].
- Rees, A.L.G. and J.A. Spink, 1950, *Acta Cryst.* 3, 316. [Ch. 6].
- Rez, P., 1977, Ph.D. Thesis (Oxford Univ., U.K.). [Ch. 8, 10].
- Rez, P., 1978, in: *Electron Diffraction 1927-77*, Eds. P.J. Dobson, J.B. Pendry and C.J. Humphreys (Institute of Physics, Bristol) p. 61. [Ch. 18].
- Ritchie, R.H., 1957, *Phys. Rev.* 106, 874. [Ch. 12].
- Sass, S.L. and R.W. Baluffi, 1976, *Phil. Mag.* 33, 103. [Ch. 18].
- Sass, S.L., 1980, *J. Appl. Cryst.* 13, 109. [Ch. 18].
- Sato, H. and R.S. Toth, 1963, in: *Alloying behaviour and effects in concentrated solid solutions*, Ed. T.B. Massalski (Gordon and Breach, New York). [Ch. 17].
- Scherzer, O., 1949, *J. Appl. Phys.* 20, 20. [Ch. 13].
- Schomaker, V. and R. Glauber, 1952, *Nature* 170, 290. [Ch. 4].
- Schwarzenberger, D.R., 1959, *Phil. Mag.* 47, 1242. [Ch. 14].
- Seeman, H., 1919, *Phys. Zeit.* 20, 169. [Ch. 14].
- Seeman, H., 1926, *Naturwiss.* 23, 735. [Ch. 14].
- Sellar, J.R. and J.M. Cowley, 1973, in: *Scanning electron microscopy, 1973*, Ed. Om Johari (I.I.T. Research Institute, Chicago) p. 243. [Ch. 13].
- Shinohara, K., 1932, *Sci. Pap. Inst. Phys. Chem. Res. Tokyo* 21, 21. [Ch. 14].
- Shirley, C.G., 1970, M.Sc. Thesis, University of Melbourne. [Ch. 17].
- Shirley, C.G. and Stephen Wilkins, 1972, *Phys. Rev.* B6, 1252. [Ch. 17].
- Shull, C., 1968, *Phys. Rev. Letters* 21, 1585. [Ch. 9].
- Skarnulis, A.J., S. Iijima and J.M. Cowley, 1976, *Acta Cryst.* A32, 799. [Ch. 13].
- Smith, David J. and J.M. Cowley, 1971, *J. Appl. Cryst.* 4, 482. [Ch. 14].
- Smith, P.J. and G. Lehmpfuhl, 1975, *Acta Cryst.* A31, S220. [Ch. 15].
- Sneddon, I.N., 1951, *Fourier transforms*, Appendix C (McGraw-Hill, New York). [Ch. 2].
- Spence, J.C.H. and A.E.C. Spargo, 1970, *Phys. Letters* 33A, 116. [Ch. 12].
- Spence, J.C.H., M.A. O'Keefe and S. Iijima, 1978, *Phil. Mag.* 38, 463. [Ch. 13].
- Spence, J.C.H., J.M. Cowley and R. Gronsky, 1979, *Ultramicroscopy* 4, 429. [Ch. 13].
- Spence, J.C.H. and H. Kolar, 1979, *Phil. Mag.* A39, 59. [Ch. 13, 18].
- Steeds, J.W., 1970, *Phys. Stat. Sol.* 38, 203. [Ch. 15].

- Sturkey, L., 1957, *Acta Cryst.* 10, 858. [Ch. 8].
- Sturkey, L., 1962, *Proc. Phys. Soc.* 80, 321. [Ch. 8, 10].
- Sumida, N., Y. Uchida, F. Fujimoto and H. Fujita, 1977, in: *High voltage electron microscopy 1977*, Eds. T. Imura and H. Hashimoto (Japanese Soc. Electron Microscopy, Tokyo) p. 281. [Ch. 14].
- Tachiki, M. and K. Teramoto, 1966, *J. Phys. Chem. Solids* 27, 335. [Ch. 17].
- Takagi, S., 1958, *J. Phys. Soc. Japan* 13, 278, 287. [Ch. 12].
- Takagi, S., 1962, *Acta Cryst.* 15, 1311. [Ch. 18].
- Talbot, F., 1836, *Phil. Mag.* 9, 401. [Ch. 1].
- Tanaka, M. and G. Honjo, 1964, *J. Phys. Soc. Japan* 19, 549. [Ch. 15].
- Tanaka, M. and G. Lehmpfuhl, 1972, *Acta Cryst.* A28, 5202. [Ch. 15].
- Taylor, C.A. and H. Lipson, 1964, *Optical transforms* (G. Bell and Sons, London). [Ch. 3, 6].
- Terasaki, O., D. Watanabe and J. Gjønnes, 1979, *Acta Cryst.* A35, 895. [Ch. 15].
- Tewordt, L., 1958, *Phys. Rev.* 109, 61. [Ch. 12].
- Tibballs, J.E., 1975, *J. Appl. Cryst.* 8, 111. [Ch. 17].
- Tixier, R. and C. Wache, 1970, *J. Appl. Cryst.* 3, 466. [Ch. 14].
- Tournarie, M., 1960, *Bull. Soc. Franc. Miner. Crist.* 83, 179. [Ch. 8].
- Tournarie, M., 1961, *C.R. Acad. Sci.* 252, 2862. [Ch. 8].
- Turner, P.S. and J.M. Cowley, 1969, *Acta Cryst.* A25, 475. [Ch. 16].
- Unwin, P.N.T., 1971, *Phil. Trans. Roy. Soc. London* B261, 95. [Ch. 13].
- Uyeda, N., T. Kobayashi, E. Suito, Y. Harada and M. Watanabe, 1970, in: *Microscopie électronique, 1970*, Proc. 7th Int. Conf. on Electron Microscopy, Grenoble, Vol. I, p. 23; 1972, *J. Appl. Phys.* 43, 5181. [Ch. 13].
- Uyeda, R. and M. Nonoyama, 1965, *Jap. J. Appl. Phys.* 4, 498. [Ch. 9, 15].
- Uyeda, R., 1968, *Acta Cryst.* A24, 175. [Ch. 10, 15].
- Uyeda, N., T. Kobayashi, K. Ishizuka and Y. Fujiyoshi, 1978–1979, *Chemica Scripta* 14, 47. [Ch. 13].
- Vainshtein, B.K., 1964, *Structure analysis by electron diffraction*, Translated from the Russian (Pergamon Press, Oxford). [Ch. 6, 16].
- Van Dyck, D., 1978, in: *Electron microscopy 1978*, Vol. I, Ed. J.M. Sturgess (Microscopical Soc., Toronto, Canada) p. 196. [Ch. 13].
- van Hove, L., 1954, *Phys. Rev.* 93, 268; 95, 249 and 1374. [Ch. 5].
- Voges, H., 1936, *Ann. Phys.* 27, 694. [Ch. 14].
- Wadsley, A.D., 1961, *Acta Cryst.* 14, 660. [Ch. 13].
- Warren, B.E. and B.L. Averbach, 1950, *J. Appl. Phys.* 21, 595. [Ch. 16].
- Warren, B.E., B.L. Averbach and B.W. Roberts, 1951, *J. Appl. Cryst.* 22, 1493. [Ch. 17].
- Warren, B.E. and B.L. Averbach, 1952, *J. Appl. Phys.* 23, 497. [Ch. 16].
- Warren, B.E., 1969, *X-ray diffraction* (Addison-Wesley, Reading, Mass.). [Ch. 5, 8, 12, 16, 18].
- Watanabe, D. and P.M.J. Fisher, 1965, *J. Phys. Soc. Japan* 20, 2170. [Ch. 17].
- Watanabe, D., R. Uyeda and M. Kogiso, 1968, *Acta Cryst.* A24, 249. [Ch. 15].
- Watanabe, D., R. Uyeda and A. Fukuhara, 1969, *Acta Cryst.* A25, 138. [Ch. 15].

- Watanabe, H., 1966, in: *Electron microscopy, 1966, 6th Int. Conf. on Electron Microscopy*, Kyoto, Vol. 1 (Maruzen Co., Tokyo) p. 63. [Ch. 12].
- Weisel, H., 1910, *Ann. Phys. Lpz.* 33, 995. [Ch. 1].
- Whelan, M.J., 1965, *J. Appl. Phys.* 36, 2099. [Ch. 12].
- Willis, B.T.M. and A.W. Pryor, 1975, *Thermal vibrations in crystallography* (Cambridge Univ. Press, Oxford). [Ch. 12].
- Wilson, A.J.C., 1942, *Proc. Roy. Soc.* A180, 277. [Ch. 18].
- Wilson, A.J.C., 1952, *Acta Cryst.* 5, 318. [Ch. 18].
- Wolfke, M., 1913, *Ann. Phys., Lpz.* 40, 194. [Ch. 1].
- Wolfson, M.M., 1961, *Direct methods in crystallography* (Oxford Univ. Press, New York). [Ch. 6].
- Wolfson, M.M., 1970, *An introduction to X-ray crystallography* (Cambridge Univ. Press, Oxford). [Ch. 6].
- Wu, T. and T. Ohmura, 1962, *Quantum theory of scattering* (Prentice Hall, New York). [Ch. 1, 4].
- Yoshioka, H., 1957, *J. Phys. Soc. Japan* 12, 618. [Ch. 12].
- Young, R.A., R.J. Gerdes and A.J.C. Wilson, 1967, *Acta Cryst.* 22, 155. [Ch. 16].
- Zachariasen, W.H., 1945, *Theory of X-ray diffractions in crystals* (Wiley, New York). [Ch. 8, 14].
- Zachariasen, W.H., 1968, *Acta Cryst.* A24, 212, 324, 421, 425. [Ch. 16].
- Zachariasen, W.H., 1969, *Acta Cryst.* A25, 102. [Ch. 16].