

## References

- 1 Alterovitz S. and Gerlich, D. Phys. Rev. **B1**, 4136, (1970).
- 2 Andrezej K. and Krzysztof, S. J. Phys. Chem. Solids, **49**, 1197, (1988).
- 3 Barinso M. T. and Moreno, M. Chem. Phys. Lett. (Netherlands) **112**, 165, (1984).
- 4 Barker A. S. (Jr.) and Sievers A. J. Rev. Mod. Phys. **47**, Suppl. 2, 51, (1975).
- 5 Barker A. S. and Sievers, A. J. Rev. Mod. Phys. **47**, Supp 1.2 S1 (1975).
- 6 Barmatz, M. Testardi L. R. and Disalvo, F. J. Phys. Rev. **B12**, 4367, (1975).
- 7 Beck, E. Metallurgie, **5**, 514, (1908).
- 8 Beerman R. and Balkanski, M. Phys. Rev. **B1**, 608, (1970).
- 9 Blackman, M. Proc. Roy. Soc. London **159A**, 416, (1937).
- 10 Born M. and Hung, K. "Dynamical Theory of Crystal Lattices" (Oxford University Press, London), P. **45**, (1954).
- 11 Born M. and Karman Von Z. Phys. **13**, 297, (1912); **14**, 12, (1913).
- 12 Born M. Ann. Phys. **44**, 605, (1914).
- 13 Bottger, H. "Principles of the theory of Lattice Dynamics" Seenheim: Physik-Verlag, Printed in GDR (1983).
- 14 Brattas L and Kjekshus A., Acta Chem. Scand **2**, 1290, (1973).
- 15 Braunstein R., Moore H. R. and Herman F. Phys. Rev. **109**, 695, (1958).
- 16 Bullet D. W., J. Phys. **C12**, 4501, (1978).
- 17 Chalchal and Garg A. K., I. J. Pure and Applied Phys., **46**, 330, (2008).
- 18 Chanchal and Garg A. K., J. Raman Spectrosc, 39, **115**, (2008).
- 19 Chanchal and Garg A. K., Physica B, 383, **189**, (2006).
- 20 Chandra Suresh in Superionic solids, Principles and Applications, North Holland Publishing Company. **ix** (1981).

- 21 Chang I. F. and Mitra S. S. Adv. Phys. **20**, 359 (1979).
- 22 Chang L. F. and Mitra S. S. Phys. Rev. **172**, 924, (1968).
- 23 Chang L. F. and Mitra S. S., Advs. Phys. **20**, 359, (1971).
- 24 Chang L. F. Ph.D. Dissertation, University of Rhode Island, (1968) (unpublished).
- 25 Chang, R. K. Lacina B. and Pershan, P. S. Phys. Rev. Lett. **17**, 755, (1966).
- 26 Chen Y. S., Shockley W. and Pearson G. L. Phys. Rev. **151**, 648, (1966).
- 27 Chernevskaia E. G. and Ananeva G. V., Soviet Phys. Solid State, **8**, 169, (1966).
- 28 Chopra K. K. and Dayal B., Pramana, **8**, 408, (1977).
- 29 Ciepielewski P. and Kosacki, I. Solid State Commun. **44**, 417, (1982).
- 30 Ciepielewski, I. Proceedings of the 2<sup>nd</sup> International conference on phonon Physics, Budapest (1985).
- 31 Cingolane A., Tugara, M. Scamaricio G. and Levy, F. Solid State Commun. **62**, 121, (1987).
- 32 Clark B. C., Gazis D. C. and Wallis R. F. Phys. Rev. **134**, 1486, (1964).
- 33 Cochran W. Proc. Roy. Soc. (London), **A253**, 200, (1959); Phys. Rev. Letts. **2**, 495, (1950).
- 34 Coulson C. A., Redel L. and Stocker D. Progress Report **No. 5**, Wave Mechanics group, Mathematical Institute, University of Oxford (1959).
- 35 Cran C. C. and Sangster, M. J. L. J. Phys. **C1**, 1937, (1974).
- 36 Dandeker, D. P. Tsou J. J. and Ho J. C., Phys. Rev. **B20**, 3523, (1979).
- 37 Dayal B. and Tripathi, B. B. Proc. Phys. Soc. **77**, 303, (1961).
- 38 De Launay M. J. and Ushioda, S. Phys. Of Superionic Conductors (edited by Salamon M. B.) (1979).
- 39 Dicknes M. H. and Hutchings, M. T. J. Phys. **C11**, 461, (1978).
- 40 Disalvo, F.J. Moncton D. E. and Waszozak J. V., Phys. Rev. **B14**, 4321, (1976).
- 41 Dyal B. and Singh S. P. Proc. Phy. Soc. **A78**, 1495, (1961).

- 42 Edward S. F. and Jones, R. C. J. Phys. C, L194 (1971); J. Phys. C4, 2109, (1971).
- 43 Elliot, R. J. Krumhansl J. A. and Leath, P. L. Rev. Mod. Phys. 46, 465, (1974).
- 44 Ewald P. P. Z. Krist. 56, 129, (1921).
- 45 Ewald P. P. Z. Krist. 93, 396, (1936).
- 46 Fischer J. E. Comments on Solid State Phys. 8, 153, (1978).
- 47 Freund G. A and Kirby R. D., Phys. Rev. B30, 7122, (1984).
- 48 Gamble F. R. and Geballe, T. H. Treatise on Solid State Chemistry, edited by Hanney, N. B. (Plenum, New York), 3, 89, (1976).
- 49 Garg A. K., J. Phys. C19, 3949, (1986).
- 50 Gobeau, J. Heuret M. and Mon, J. P. Defects and Amorphous Materials, 432, (1978).
- 51 Greenaway D. L. and Nitsche, R. J. Phys. Chem. Solids 26, 1445, (1965).
- 52 Gupta H. C., Sinha M. M. and Tripathi B. B. Solid State Commun. 62, 777, (1987).
- 53 Gupta H. C., Sood G., Sinha M. M. and Tripathi B. B. Physica B159, 383, (1989).
- 54 Gupta H. C., Sood Geeta, Sinha M. M. and Tripathi B. B. Phys. Rev. B37, 8370, (1988).
- 55 Gupta P., Mishra A., Mishra S. K. and Sachan S. K., I. J. Theoretical Phys., Vol. 53, No. 1, 23, (2005).
- 56 Gupta S., Singh U. P., Mishra P., Mishra S. K. and Tripathi C., SCITECH, Vol. 4, No. 2, 64, (2009).
- 57 Harbec J. Y., Powell B. M. and Jandl S., Phys. Rev. B28, 7009, (1983).
- 58 Harper H. E., Geballe T. H. and Disalvo, F. J. Phys. Rev. B15, 2943, (1975).
- 59 Hayes, W. Contemp. Phys. 19, 469, (1978).
- 60 Hayes, W. Light Scattering in solids, (edited by Balkanski M. and Guncherodt G.) Springer Verlag, Berlin, Heidelberg, New York, 93, (1982).
- 61 Herman T. C. and Malngalis, I. Appl. Solid State Sciences, Vol. 4 (edited by Wolfe R.) (1974).

- 62 Hodul D. T. and Stacy A. M., J. Phys. Chem. Solids, **46**, 1447, (1985).
- 63 Hodul D. T. and Stacy A. M., J. Solid State Chem. **54**, 438, (1984).
- 64 Holy J. A., Woo K. C., Klien M. V. and Brown F. C. Phys. Rev. **B16**, 3628, (1977).
- 65 Katkanant V. and Kirby, R. D. Phys. Rev. **B40**, 1152, (1989).
- 66 Kellermann E. W. Phil. Trans. Roy. Soc. **A238**, 513, (1940).
- 67 Kellermann E. W. Phil. Trans. Roy. Soc.(London) **A238**, 513, (1940); Proc. Roy. Soc. (London), **A178**, 17, (1941).
- 68 Kirby R. D., Fragerquist R. L. and Nieveen W. R., Solid State Commun. **51**, 131, (1984).
- 69 Kliche G., Solid State Commun. **59**, 587, (1986).
- 70 Kosacki I. and Dynowska E. , J. Cryst. Growth **50**, 575, (1980).
- 71 Kosacki I. and Hibner, K. Solid State Commun. **57**, 729, (1986).
- 72 Kosacki I., Kibner K., Litvinchuk A. P. and Valakh M. Ya. Solid State Commun. **57**, 729, (1986).
- 73 Kosacki, I. Valakh M. Ya. and Litvinchuk, A. P. Solid State Commun. **53**, 373, (1985).
- 74 Kowalski, B. J. Chab V and Orłowski, B. A. Phys. Rev. **B36**, 7642, (1987).
- 75 Kutty, A. P. G Solid State Commun. **14**, 213, (1974).
- 76 Langar D. W., Park Y. S. and Ewwema R. N. Phys. Rev. **152**, 788, (1966).
- 77 Langer J. S. J. Math. Phys. **2**, 584, (1961).
- 78 Launay J. De Solid State Physics (edited by Seitz F. and Turnbull D. academic press N.Y.) **2**, 220, (1956).
- 79 Leibfried G. and Ludwig W. Solid State Physics, edited by Seitz F. and Turnbell D. (Academic Press, INC, NewYork), **vol. 12**, P. 275, (1961).
- 80 Lodin I. O. Ark. Mat. Astro. Phys. **35A**, 30, (1947).
- 81 Logothetis E. M., Kaiser W. J., Kukkonen C. A., Faile S. P., Colella R. and Gambold J. J. Phys. **C12**, 6521, (1979).

- 82 Lowdin P. O. A Theoretical Investigation into Zone Properties of Ionic Crystals (Almgvist Bokryshen), AB, Upsale (1948).
- 83 Lowdin P. O. I. Chem. Fys. **18**, 36, (1950).
- 84 Lucovsky G. and Chen, M. F. Solid State Commun. **8**, 1397, (1970).
- 85 Lucovsky G., Liang W. Y. and white R. M., Solid State Commun. **19**, 303, (1976).
- 86 Lucovsky, G. Burstein E. and Brodsky M., Proceedings of the international conference on Localized Excitations in Solids, Plenum New York, (1968).
- 87 Lundqvist S. O. Ark. Fys. **12**, 263, (1957).
- 88 Lundqvist S. O. Ark. Fys. **19**, 113, (1961).
- 89 Lundqvist S. O. Ark. Fys. **9**, 435, (1955).
- 90 Lundqvist S. O. Ark. Fys. **6**, 25, (1952).
- 91 Lundqvist S. O., Lundstrom V., Teners E. and Waller, L. Ark. Fys. **15**, 193, (1959).
- 92 Lyddane R. H. and Herzfeld K. F. Phys. Rev. **54**, 846, (1938).
- 93 Lyddane R. H., Sacks R. G., and Teller E. Phys. Rev. **59**, 673, (1941).
- 94 Majewski J. A. and Langer, J. M. Acta Phys. Poi. **A67**, 909, (1985).
- 95 Makur M. and Ghosh S., Pramana, **Vol. 36**, No. 4, 393, (1991).
- 96 Makur M. and Gosh, S. Pramana, **35**, 151, (1990).
- 97 Makur M. and Gosh, S. Pramana, **37**, 505, (1991).
- 98 Manaresh M. O. and Pederson, D. O. Phys. Rev. **B31**, 3960, (1985).
- 99 Margaret, M. and Elcombe, M. J. Phys. **C5**, 2702, (1972).
- 100 Matossi F. J. Chem. Phys. **19**, 161, (1951).
- 101 Nair I. R. and Walker C. T., Phys. Rev. **B7**, 2740, (1973).
- 102 Narayana R. S., Gupta H. C. and Tripathi B. B., Indian J. Pure Appl. Phys. **20**, 777 (1982).
- 103 Pederson D. O., Brewer J. A. and Ho J. C., Phys. Rev. **B17**, 866, (1978).

- 104 Ratajack M. T., Kaunewurf, C. R. Revelli J. F., and Wagner, J. B. Phys. Rev. **B17**, 4674, (1978).
- 105 Rumpf, E. Z. Physik Chem. (Leipzig) **B7**, 148, (1930).
- 106 Scharli M. and Levy, F. Phys. Rev. **B33**, 4317, (1986).
- 107 Shapiro S. M. and Reidinger F., Physics of Superionic Conductors, (edited by Salomon M. B.) (1979).
- 108 Singh R. K. and Pandey, N. K., Phys. **C7**, 1937, (1974).
- 109 Sinha M. M. and Wakamura K., Solid State Ionics, **136-137**, 1345, (2000).
- 110 Slater J. C. and Koster G. F. Phys. Rev. **94**, 1499, (1954).
- 111 Smith A. J., Meek P. E. and Liang W. Y., J. Phys. **C10**, 1321, (1977).
- 112 Soven P., Phys. Rev. **156**, 809, (1967).
- 113 Suchocki, A. Acta Phys. Pol. **A67**, 93, (1985), *ibid* **a67**,95, (1985).
- 114 Szigeti B. Proc. Roy. Soc. **A204**, 1, (1950).
- 115 Szigeti B. Trans. Paraday Soc. **45**, 155, (1949).
- 116 Taylor D. W. Phys. Rev. **156**, 1017, (1967).
- 117 Taylor D. W. Solid State Commun. **13**, 117, (1973).
- 118 Valakh M. Ya., Kosacki I., Litvinchuk A. P. and Tarsov G. G. Phys. Solid State **27**, 2208, (1985).
- 119 Varshney S. C., Vetelino J. F., Mitra S. S. and Chang L. F. Phys. Rev. **B12**, 5912, (1975).
- 120 Vaterlaus H. P. and Levy F., J. Phys. **C18**, 2351, (1985).
- 121 Verleur H. W and Barker A. S. Phys. Rev. **149**, 715, (1968).
- 122 Verleur H. W. and Barker, A. S. Phys. Rev. **164**, 1169, (1967).
- 123 Vetelino J. F. and Mitra S. S. Phys. Solid State Common. **7**, 1181, (1969).
- 124 Vetelino J. F. and Mitra S. S. Physics of structurally disordered solids, edited by Mitra S. S. (Plenum, New York, 1976), **P. 541**.

- 125 Vetelino J. F., Mitra S. S. and Namjoshi K. V. Phys. Rev. **B2**, 2167, (1970); **B7**, 4001, (1973).
- 126 Vetelino J. F., Namjoshi K. V. and Mitra S. S. J. App. Phys. **41**, 5141, (1970).
- 127 Vetelino J. F., Sutherland J. L. and Mitra S. S. Solid State Commun. **13**, 1425, (1973).
- 128 Vrgard K. Spr. Nor. Uidesk. Akad. Osio. **12**, 83, (1947).
- 129 Wakabayashi N. and Nicklow R. Physics and Chemistry of materials with layered structures, edited by Mooser E. (Reidel, Dordrecht, 1977), **Vol. 3**
- 130 Wakabayashi N., Smith H. G., Woo K. C. and Brown F. C., Solid State Commun. **28**, 923, (1978).
- 131 Williams P. M. and Scruby C. B., Phil. Mag. **29**, 695, (1974).
- 132 Wilson J. A. Di Salvo F.J. and Mahajan S. Adv. Phys. **24**, 117, (1975).
- 133 Wilson J. A. and Yoffe A. D. Adv. Phys. **15**, 193, (1969).
- 134 Wilson, J. A. Disalvo F. J. and Mahajan, S. Phys. Rev. Lett. **32**, 882, (1974).
- 135 Woo K. C., Brown F. C., Mc Millan, W. L. Miller, R. J. Schaffman M. J and Sears M. P., Phys. Rev. **B14**, 3242, (1976).
- 136 Zunger A. and Freeman A. J, Phys. Rev. **B17**, 1839, (1978).