

### Research Publications 2007-2008

1. High Pressure P-V relation and Gruneisen parameter elemental strontium. P. R. Vyas, V. B. Gohel, N. K. Bhatt and A. R. Jani; Indian Journal Of Pure and Applied Physics **45** (2007)82
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3. Variation of electrical resistivity with temperature of liquid ternary alloys of Na- K-Rb. P.N. Gajjar, S.R.Mishra and A.R.Jani; Indian Journal of Physics (India) **45** (2007)89-92,
4. Structural Study of some d shell liquid metals. P.B. Thakore,P.N. Gajjar and A.R.Jani; Indian Journal of Pure and Applied Physics **45** (2007)509-513
5. Finite temperature thermophysical properties of fcc-Ca. N.K.Bhatt, P.R.Vyas, V.B. Gohel and A.R.Jani; Eur. Phys. J. B **58** (2007)61-68
6. Electronic structure of rhodium using Compton profiles: Experiment and theory. B.L. Ahuja, V.Sharma, A. Rathor, A.R. Jani and B.K.Sharma; Nuclear Instruments and methods in Phys. Research B **262** (2007)391-398
7. The first principle study for phase transition on platinum carbide. B. Y. Thakore, M. J. Joshi, P. N. Gajjar and A. R. Jani.; Proc. of Solid State Physics Symposium 52 (2007)163
8. Electronic structure of some liquid metals. P. B. Thakore, B. Y. Thakore, P. N. Gajjar and A. R. Jani.; Proc. of Solid State Physics Symposium 52 713 (2007)
9. Growth and Electrical properties of 2H-TaSe<sub>2</sub> Single crystals. A.J. Patel, K. R. Patel, S. S. Patel, S. G. Patel and A. R. Jani.; Proc. of Solid State Physics Symposium 52 (2007)823
10. High Pressure Melting Curve of Lead. P. R. Vyas, N. K. Bhatt, V. B. Gohel and A. R. Jani.; Proc. of Solid State Physics Symposium **52** (2007) 87.
11. Temperature dependent electrical resistivity of liquid Bi-Sn alloys. Manjul Kumar, P. N. Gajjar, B. Y. Thakore and A. R. Jani.; Proc. of Solid State Physics Symposium **52** (2007) 881
12. Synthesis and characterization of cadmium tartrate single crystals. S.K.Arora, A. Kothari, B. Amin and B Chudasama; Cryst. Research & Tech. (Germany) 42, (2007)589-594

13. Performance evaluation of tungsten sulphoselenides as a material for non-conventional energy devices. D.N.Gujarathi, G.K.Solanki, M.P.Deshpande, & M.K.Agarwal,; Materials Letters **61** (2007) 3511-3515
14. Synthesis, characterization and studies of phase transition in GeSe single crystals grown using different transporting agents. G.K.Solanki, M.P.Deshpande & M.K.Agarwal; Indian Journal of Engineering & Materials Sciences **14** (2007) 373-380
15. Transport property measurements in tungsten sulphoselenide single crystals grown by a chemical vapour transport technique. G.K.Solanki, D.N.Gujarathi, M.P.Deshpande, D.Laxminarayana & M.K.Agarwal; Crystal Research Technology **43** (2) (2008)179-185
16. Growth and X-ray diffraction studies of ZnSe crystals. J.R.Gandhi, G.K.Solanki, K.D.Patel & S.G.Patel; Journal of Pure and Applied Sciences Prajna **15**(2007)127-131
17. Effect of high pressure on the electrical resistance of  $\text{CuFe}_2\text{O}_4$  and  $\text{MnFe}_2\text{O}_4$ . A.R.Tanna, M.C.Chhantbar, G.K.Solanki & H.H.Joshi; Proceedings of the 52<sup>nd</sup> DAE Solid State Physics Symposium **52** (2007) 871-872.
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36. Multiquark states as dihadronic molecules. Ajaykumar Rai, J N Pandya, P C Vinodkumar; Nucl. Phys.A**782**(2007) 406 (Elsevier)
37. Decay rates of quarkonia in the NRQCD formalism. J N Pandya, Ajaykumar Rai, P C Vinodkumar; ArXiv :hep- h/0701026v1,Jan2007 (International Pre-Print service).
38. Sensitivity of nuclear matter EoS parameters on neutron star properties. C J Chammasheril and P C Vinodkumar; Indian J. Phys. **81**(8) (2007) 793-801.