

### **Research Publications 2005-2006**

1. Structural study of some non-simple elements of group II-VI: A Charged Hard Sphere approach. P. N. Gajjar, Manjul Kumar, Mitesh Joshi, B. Y. Thakore and A. R. Jani; Indian J. Phys. **79** (9), 967 (2005).
2. Some physical properties of  $\text{Si}_{1-x}\text{Ge}_x$  Solid solutions using Pseudo-alloy atom model. A. R. Jivani, H. J. Trivedi, P. N. Gajjar and A. R. Jani; Journal of Semiconductor Physics, quantum electronic and optoelectronics **8** (4), (2005)
3. Total energy, equation of state and Bulk modulus of AlP, AlAs and AlSb Semiconductors. A. R. Jivani, H. J. Trivedi, P. N. Gajjar and A. R. Jani; Pramanna J. of Phys. (India) **64**, 153 (2005)
4. Some Physical properties of GaX (X=P, As and Sb) semiconductor compounds using higher order perturbation theory. A.R. Jivani, H. J. Trivedi, P. N. Gajjar and A. R. Jani; Physica **B** (Netherlands) **357**, 305 (2005)
5. Electronic properties of CdS, CdSe and CdTe Semiconductor binary alloys. A.R. Jivani, H. J. Trivedi, P. N. Gajjar and A. R. Jani; Ind. J. P.A. P. **44**, (1), 59 (2006)
6. Ground State Properties of ZnX, (X=S, Se and Te) Semiconductors. A.R. Jivani, H. J. Trivedi, P. N. Gajjar and A. R. Jani; Indian J. Phys, Vol. No. 2 February, 2006
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11. Single crystal growth and characterization of strontium tartrate. S.K. Arora, Vipul Patel, Bhupendra Chudasama and Anjana Kothari; *J. Crystal Growth (Netherlands)* **275/1-2**, 651-56 (2005)
12. An indigenous Solution Growth Apparatus. S.K. Arora and Brijesh Amin; 'PRAJNA' – *J. Pure & Appl. Sci. (Sardar Patel University, India)* **13**, 169 – 75 (2005)
13. Micromechanical hardness of  $\text{SrC}_4\text{H}_4\text{O}_6 \cdot 3\text{H}_2\text{O}$  crystals. S.K. Arora, Vipul Patel, Anjana Kothari and Bhupendra Chudasama; *J. Amer. Ceram. Soc. (USA)*, **88 (12)**, 3469 - 73 (2005)
14. Optical Absorption in Gel-Grown Cadmium Tartrate Single Crystals. S.K. Arora, Anjana Kothari, R. G. Patel and Bhupendra Chudasama; *J. Physics 'A' (UK)* - Accepted (2005)
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