

Publications in Journals

Names of authors from Universities and colleges are shown in bold face, names of authors from UGC-DAE CSR are underlined and those from DAE marked by #

5.1 Publications from Collaborative research:

1. Structural study of silver photodoped Ge-Sb-Te films, **Sandeep Kumar, Digvijay Singh, R. Thangaraj**, Chalcogenide Letters, **8**, No. 5,(2011) 355 – 361
2. Change in the magnetostructural properties of rare earth doped cobalt ferrites relative to the magnetic anisotropy, S. R. Naik and A. V. Salker, J. Mater. Chem., 22 (2012) 2740, DOI: 10.1039/c2jm15228b
3. A magnetic Compton scattering study of Ga rich Co–Ni–Ga ferromagnetic shape memory alloys. Jagrati Sahariya, Shailja Tiwari, H. S. Mund, Sidananda Sarma, A. Srinivasan, M. Itou, Y. Sakurai and B. L. Ahuja. J. Phys.: Condens. Mater 23, 386002 (2011).
4. Biosorption of chromium(VI) ions from aqueous solutions by iron oxide-impregnated alginate nanocomposites: batch and column studies, Priyanka Agrawal and A.K. Bajpai, Toxicological & Environmental Chemistry 93, 1277–1297 (Aug. 2011).
5. Alkaline Earth (Ca) and Transition Metal (Ni) Doping on the Transport Properties of $Y_{1-x}Ca_xBa_2(Cu_{1-y}Ni_y)_{3O_{7-\delta}}$ Superconductors. Dinesh Varshney, Arvind Yogi1, NehaDodiya, Irfan Mansuri. Journal of Modern Physics,2, 922-927, (2011).
6. Colossal magnetoresistance in $La_{0.7}Ca_{0.3-x}Hg_xMnO_3$ ($0 \leq x \leq 0.2$) system over wide temperature range Vilas Shelke, Subhash Khatarkar, Rashmi Yadav, Avneesh Anshul, R.K. Singh, J. Magn. Magn. Mater 322, 1224 (2010).
7. Crystal structure refinement of $Bi_{1-x}Nd_xFeO_3$ multiferroic by the Rietveld method”, Ashwini Kumar and Dinesh Varshney., Ceramics International (2012)
8. Effect of indium doping on structural, magnetic and transport properties of ordered Sr_2FeMoO_6 double perovskite Y. Markandeya, D. Saritha, M. Vithal, A.K. Singh, G. Bhikshamaiah, J Alloys and Compounds 509, 5195 (2011).
9. Enhanced magnetization in cobalt substituted Ni-Zn nanoferrites, **M.Chaitanya Varma, A.Mahesh Kumar and K.H.Rao.**, International J. of Nanoscience 10 (2011) 571
10. Micro-Raman investigation of nanosized zinc ferrite: effect of crystallite size and fluence of irradiation **Jitendra Pal Singh, R. C. Srivastava, H. M. Agrawal, and Ravi Kumar** Journal of Raman Spectroscopy, 42 (2011) 1510
11. Polyvinyl alcohol: an efficient fuel for synthesis of superparamagnetic LSMO nanoparticles for biomedical application. **N. D. Thorat, K. P. Shinde, S. H. Pawar**, K. C. Barick[#], C. A. Betty[#] and R. S. Ningthoujam[#]. Dalton Trans. **41**, 3060 (2012).
12. Study of structural, electrical and magnetic properties of Zn doped $La_{0.67}Sr_{0.33}MnO_3$.**Hilal Ahmed, Shakeel Khan, Wasi Khan, Razia Nongjai, Imran Khan**, Journal of Alloys and Compounds **527** (2012) 48.
13. Study of 200 MeV Ag^{15+} ion induced amorphisation in nickel ferrite thin films **Gagan Dixit, Jitendra Pal Singh, R.C. Srivastava, H.M. Agrawal** Nuclear Instruments and Methods in Physics Research B **269** (2011) 133–139
14. 200 MeV Ag^{15+} ion induced surface modification and transport behaviour in manganite based thin film devices **Ashish Ravalia, Megha Vagadia, P.S. Vachhani, R.J. Choudhary, D.M. Phase, K. Asokan, D.G. Kuberkar**, Applied Surface Science **258**, 4203 (2011).
15. A change from second to first-order transition in $(La_{1-x}Eu_x)_{0.67}Ca_{0.33}MnO_3$ ($0 \leq x \leq 0.2$). Debasis De, R. Rawat, S. Ram, A. Banerjee and S. K. Roy. J. Phys.: Condens. Mater, **24**, 076001 (2012).

16. A comparative study of thermoelectric effect in p-CuInSe₂ and n-CuIn₃Se₅ thin films, **R. Jacob, R. Geethu, T. Shripathi, G. S. Okram, V. Ganesan** and **R. R. Philip**, Phys. Stat. Solidi B DOI:10.1002/pssb.201147581 (2012).
17. Interface engineering with an MOCVD grown ZnO interface passivation layer for ZrO₂-GaAs metal-oxide-semiconductor devices by S. Kundu, **T. Shripathi**, P. Banerji, Solid State Communications **15** (2011) 1881-1884.
18. Effect of ion irradiation on optoelectronic properties of Ba_{0.12}Sr_{0.88}SO₄: Euphosphor, A. Choubey, S.K.Sharma, S.P.Lochab, **T. Shripathi**, Physica B **406** (2011) 4483-4488
19. Pulsed laser deposited Ga doped ZnO/SiOx/Si(100) thin films and their field emission behaviour, **S.D. Shinde, S.M. Jejurikar, S.S. Patil, D.S. Joag, S.K. Date, M.A. More, S. Kaimal, T. Shripathi** and **K.P. Adhi**, Solid State Sciences **13** (2011) 1724-1730
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23. **Correlation of Raman and Photoluminescence spectra of Al₂O₃ capped silicon nanoparticles grown by reactive pulsed laser deposition A.P. Detty, L.M. Kukreja#, B.N. Singh, V.G. Sathe, T. Shripathi, V.P. Mahadevan Pillai** J. Nano- Electron. Phys. **3** (2011) No1, P. 323-329
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25. Optoelectronic and thermoelectric properties in Ga doped - PbS₂ nanostructured thin films **Geethu R., Jacob R., Shripathi T., Okram G.S., Ganesan V., Tripathi S., Fatima A., Sreenivasan P.V., Urmila K.S., Pradeep B., Philip R.R.** Applied Surface Science, (2012), **258** (17), pp. 6257-6260.
26. Structural, optical, electrical and low temperature thermoelectric studies on the ordered vacancy compound AgGa₃Se₅ **J. Rajani, R. Geethu, T. Shripathi, G. S. Okram, V. Ganesan, B. Pradeep, K. S. Urmila, R. R. Philip**. Physica status solidi-B, DOI: 10.1002/pssb.201147581,2012.
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29. Anisotropic magnetic properties and giant magneto caloriceffect in antiferromagnetic RMnO₃ crystals R=Dy, Tb, Ho, and Yb. **Midya A., Das S.N., Mandal P., Pandya S., Ganesan V.** Physical Review B **84** (2011), (23).
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32. Characterization of Ni/Al multilayer on Si substrate by diffraction and reflectometry techniques **Mitali Swain#, Saibal Basu#, Debarati Bhattacharya#, and Mukul Gupta** AIP Conf. Proc. 1447, 647 (2012)
33. Columnar growth of nanocrystalline ZnO thin films prepared through RF magnetron sputtering **Saravanakumar K., Ganesan. V., Lalla N.P., Gopinathan C., Mahalakshmi K., Sanjeeviraja C.** Advanced Studies in Theoretical Physics(2011), **5** (1 -4), pp. 143- 149.

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42. Effect of Ga doping on micro/structural, electrical and optical properties of pulsed laser deposited ZnO thin films **S.D. Shinde, A.V. Deshmukh, S.K. Date, V.G. Sathe and K.P. Adhi** *Thin Solid Films* **520**, (2011) **1212**
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