

### Publications 2010:

1. NMR study of a magnetic phase transition in  $\text{Ca}_3\text{CuNi}_2(\text{PO}_4)_4$ : A spin trimer compound: M. Ghosh, K. Ghoshray, M. Majumder, B. Bandyopadhyay and A. Ghoshray, *Phys. Rev.* **B81**, (2010) 064409.
2. Magnetic properties of the spin trimer compound  $\text{Ca}_3\text{Cu}_2\text{Mg}(\text{PO}_4)_4$ : M. Ghosh, M. Majumder, K. Ghoshray and S. Banerjee, *Phy. Rev.* **B81**, (2010) 094401.
3. Effect of Interfacial Hydrogen Bonding on the Freezing /Melting Behavior of Nano-Confined Liquid: P. Maheshwari, Dhanadeep Dutta, Sandeep Sharma, Kathi Sudarshan, Pradeep Pujari, M. Majumder, B. Pahar, B. Bandyopadhyay, K. Ghoshray, and A. Ghoshray, *J. Phys. Chem. C* **114**, (2010) 4966.
4. Magnetocaloric effect in  $\text{HoMnO}_3$  crystal: A. Midya, P. Mandal, S. Das, S. Banerjee, L. S. Sharath Chandra, V. Ganesan, and S. Roy Barman, *Appl. Phys. Lett.* **96**, (2010) 142514.
5. Reversal of the sign of giant magnetoresistance upon boron filling in  $\text{RPd}_3$  compounds (R=Tb, Er): Abhishek Pandey, Chandan Mazumdar and R. Ranganathan, *J. Phys.: Conference Series* **200** (2010) 032055, Proc. of the International Conference on Magnetism (ICM 2009), 26<sup>th</sup> C31 July, 2009, Karlsruhe, Germany.
6. Spin glass-like behaviour in Fe-rich phases of  $\text{Sr}_2\text{Fe}_{1-x}\text{Mn}_x\text{MoO}_6$  ( $0.1 < x < 0.4$ ): Asok Poddar and Chandan Mazumdar, *J. Alloys Comp.* **502** (2010) 15.
7. Exchange bias in  $\text{LaFeO}_3$  nanoparticles: H. Ahmadvand, H. Salamati, P. Kameli, Asok Poddar, M. Ace, and K. Zakeri, *J. Phys. D: Appl. Phys.* **43** (2010) 245002.
8. Enhanced ferromagnetism in nano-sized  $\text{Zn}_{0.95}\text{Mn}_{0.05}\text{O}$  grains: R. N. Bhowmik, Asok Poddar, A. Saravanan, *J. Magn. Magn. Mater.* **322** (2010) 2340.
9. Effect of hydrostatic pressure on magnetic phase transition and magnetocaloric properties of  $(\text{Sm}_{0.8}\text{Nd}_{0.2})_{0.52}\text{Sr}_{0.48}\text{MnO}_3$ , S. Arumugam, P. Sarkar, P. Mandal, A. Murugeswari, K. Matsubayashi, C. Ganguli, and Y. Uwatoko, *J. Appl. Phys.* **107**, 113904 (2010)
10. Spin glass like behaviour and magnetic enhancement in nanosized Ni-Zn ferrite system, B. Ghosh, S. Kumar, A. Poddar, C. Mazumdar, S. Banerjee, V. R. Reddy and A. Gupta *J. App. Phys.* (2010) (accepted).
11. Magnetism and transport studies in off-stoichiometric metallic perovskite compounds  $\text{GdPd}_3\text{B}_x$  ( $x = 0.25, 0.50$  and  $0.75$ ), A. Pandey, Chandan Mazumdar, and R. Ranganathan, *J. Magn. Magn. Mater.* (2010) (accepted).
12. Rotational spectrum of propyne observed in a DC glow discharge and DFT calculation. A.I. Jaman, P. Hemant Kumar and P. R. Bangal, *Asian J. Spectroscopy* (accepted).

13. Millimeter-wave spectrum of Chlorocynoacetylene (ClCCN) generated by DC glow discharge technique, P. R. Varadwaj and A. I. Jaman, Asian J. Spectroscopy (accepted).

14. Critical behavior in single crystalline  $\text{La}_{0.67}\text{Sr}_{0.33}\text{CoO}_3$ , N. Khan, A. Midya, K. Mydeen, P. Mandal, A. Loidl, and D. Prabhakaran, Phys. Rev. B (accepted)

15. Electron spin dynamics in grain-aligned LaCoPO: An itinerant ferromagnet, M. Majumder, K. Ghoshray, A. Ghoshray, B. Bandyopadhyay, and M. Ghosh, Phys. Rev. B (accepted)