

Condensed matter

1. ^{57}Fe Mossbauer studies on natural ilmenites. D.S.S.Babu, **D.Das, M.Sudarshan, V.R.Reddy, S.N.Chintalapudi** and C.K.Majumdar, Indian Jou. Pure & Applied Phys., 34, 474 (1996).
2. ^{57}Fe Mossbauer studies on natural chromites. **D.Das, M.Sudarshan, S.N.Chintalapudi, K.L.Chakravarty** and C.K.Majumdar. Bull. Mat. Sci. Vol 19 No.6, 1095. (1996)
3. An X-ray diffraction and Mossbauer study of nanocrystalline $\text{Fe}_2\text{O}_3\text{-Cr}_2\text{O}_3$ solid solution A.Bhattacharya, A.Hartridge, K.K.Mallick, C.K.Majumdar, **D.Das, and S.N.Chintalapudi**, Jou. Mat. Sci. 32 557(1997)
4. ^{57}Fe Mossbauer spectroscopic characterisation of a ferromanganese nodule from Central Indian Ocean. **R.K.Dutta, D.Das, M.Sudarshan, S.N.Bhattacharya, S.N.Chintalapudi** and V.Chakravorty, J. Radioanal. and Nucl. Chem. Vol 223, 1-2, 12. (1997)
5. Crystalline size dependence on the magnetic properties of nano crystalline magnetic powders ; A.Hartridge, A.K.Bhattacharyya, K.K.Mallick, C.K.Majumdar, **D.Das and S.N.Chintalapudi**, Jou. of Mag. Mag. Mat., L89, 176 (1997)
6. Absorption spectra of isomeric oh adducts 0f 1,3,7 Trimethylxanthine ; M.S.Vinchurkar, B.S.M.Rao, H.Mohan and B.S.M.Rao. J.Phys. Chem. 101 2953-59(1997).
7. Effect of calcination temperature on indian ocean manganese nodules : Mossbauer, XRD, FTIR AND TG-DTA Studies ; K.M.Parida, A.Samal, **D.Das and S.N.Chintalapudi**, Thermochimica Acta 4551 (1998) 1-8.
8. Magnetic studies of thermally treated rare earthiron mixed oxides ; S.P.Taneja, Y.Nakamura and V.K.Garg, Applied Physics A (1998).
9. Electric field gradient studies in SnSe ; **G.Pal, K.Sebastian, S.N.Chintalapudi** and D.R.S.Somayajulu, Hyperfine Interactions HF A1,1-5 (1999).
10. Effect of Calcination temperature on Indian Ocean Manganese Nodule Mossbauer XRD and TG-DTA studies, K.M.Parida, A.Samal, **D.Das and S.N.Chintalapudi** Thermochimica Acta 325, (1999), 69
11. Disorder in nano crystalline Ni_3Fe ; A.Dutta, D.Chakraborty, **D.Das, M.Pal , S.N. Chintalapudi**, J. Mag. Mag. Mat. Vol- 205 (1999) 301.

12. Thermal transformation of trinuclear Fe(III) acetato complex intercalated montmorillonite ; K.M. Parida , T. Mishra , **D.Das** , **S.N. Chintalapudi**, Applied Clay Science 15 463. (1999)
13. Positron annihilation studies of Boron ion irradiated selenium ; Y.K.Vijay, R.K.Vijai, I.P.Jain, D.K.Awasthi, and A.Tripathi , NIM B156, 270 (1999).
14. Preparation of nanocomposites containing iron and nickel – zinc ferrites ; M.Pal, **D.Das**, **S.N.Chintalapudi** and D.Chakraborty Journal of Mat. Res. Vol 15, 683 (2000)
15. Ion induced effects in polymers ; Y.K.Vijay, Sanjay Warte, D.K.Awasthi, **D.Das and S.Ghugre**, Indian Journal of Engr and Mat.Sc. Vol 7, (2000) 375
16. ^{57}Fe Mossbauer studies on soil from tea gardens from Darjeeling Himalayas ; S.C.Das, **D.Das**, **S.N.Chintalapudi** and S.C.Bhargav, Indian Journal of Pure and Applied Physics 38, 324 (2000)
17. Positron annihilation lifetime and gas permeation studies of energetic ion- irradiated polycarbonate membranes ; S.Wate, N.K.Acharya, K.C.Bhahada, Y.K.Vijay, A.Tripathi, D.K.Avasthi, **D.Das**, **S.Ghugre**, Radiation Physics and Chemistry 73(2005) 296-301.
18. Oxygen Enrichment of Silicon Wafer by ion Implantattion method and fabrication of Surface Barrier Detectors ; **S.K.Chaudhuri**, **P.V.Rajesh**,**S.S.Ghugre** and **D.Das**, Defects and Diffusion Forum vols. 245-246,(2005), pp 23-28.
19. Magnetic and hyperfine properties of $\text{Ni}_{0.2}\text{Zn}_{0.6}\text{Cu}_{0.2}\text{Fe}_2\text{O}_4$ prepared by a chemical route, P.K.Chakrabarti, **B.K.Nath**, S.Brahama, S.Das, K.Goswami, U.Kumar, P.K.Mukhopadhyay, **D.Das**, M.Ammar and F.Mazaleyrat, J.Phys. Condens. Matter, 18 (2006),1-15.
20. Anomalous agglomeration characteristics observed in iron oxide nanoclusters ; P.Deb, A.Basumallick, D.Sen, S.Majumder, **B.K.Nath and D.Das**, Philosophical Magazine Letters, **86** (2006) 491-496.
21. Isochronal annealing behaviour of defects induced by swift oxygen ions in high resistivity p-type silicon ; **S K Chaudhuri**, K Goswami, **S S Ghugre and D Das**; J. Phys.: Condens. Matter **19** (2007) 216206.
22. Characterization of defects in ZnO nanocrystals ; Photoluminescence and positron annihilation spectroscopic studies, **A. K. Mishra**, **S. K. Chaudhuri**, **S. Mukherjee**, **A. Priyam**, **A. Saha**, and **D. Das**, Journal of Applied Physics, **102**, 103514 (2007).

23. Correlation between microstructure and optical properties of ZnO nanoparticles synthesized by ball milling ; P. K. Giri, S. Bhattacharyya, Dilip K Singh, R. Kesavamoorthy, B. K. Panigrahi , and K.G. M. Nair , J. Appl. Phys. 102, 093515 (2007).
24. Studies on ZincOxide Nanorods Grown by Electron Beam Evaporation Technique ; P. K. Giri, P. K. Patel, C. J. Panchal, S. Bhattacharyya, Satchi Kumari, Dilip K. Singh, V. A. Kheraj, N. M.Shah, P. D. Vakil, B. R. Rehani, V. J. Rao, R. R. Desai, D. Lakshminarayana, P. B. Patel, Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry 37, 437 (2007).
25. Correlating the Microstructural and Photoluminescence Properties of ZnO Nanoparticles Prepared By Ball Milling ; P. K. Giri, Dilip K. Singh, R. Kesavamoorthy, B. K. Panigrahi and K.G.M. Nair , Proc.14th International Workshop on Physics of Semiconductor Devices, Mumbai, India. Dec 16-20, 2007. (@IEEE Proc. 2007). p. 905-908 (DOI 10.1109/IWPSD.2007.4472669).
26. Ion-conductivity and Young's modulus of the polymer electrolyte PEO–ammonium perchlorate ; Minakshi Goswami Maitra, Mrinal Sinha, Anoop K. Mukhopadhyay, Tapas Ranjan Middya, Udayan De , Sujata Tarafdar, Solid State Ionics 178 (2007) 167–171.
27. Effect of growth conditions on the structural and optical properties of ZnO thin films grown by RF sputter deposition ; Prabhakar Palni, Sachi Kumar, Dilip K Singh, R.V.M. Naidu and P K Giri, Presented at 10th International Conference on Advanced Materials (ICAM 2007), Bangalore, India. Oct 8-13, 2007. SEM of Alligned ZnO nanorods
28. A novel shape transformation of Fe–MgO nanocomposites: microstructural, magnetic and hyperfine investigations ; **S Mukherjee**, S.K.Kumar and **D.Das** , Phys. D: Appl. Phys. **40**, 4425-4430 . (2007)
29. Characterisation of defects in ZnO nanocrystals: Photoluminescence and positron annihilation spectroscopic studies ; **A.K.Mishra**, **S.K.Chaudhuri**, **S.Mukherjee**, **A.Priyam**, **A.Saha** and **D.Das** , Journal of Applied Physics 102, 103514, (2007)
30. Magnetic and hyperfine properties of chemically synthesized nanocomposites of $(\text{Al}_2\text{O}_3)_x(\text{Ni}_{0.2}\text{Zn}_{0.6}\text{Cu}_{0.2}\text{Fe}_2\text{O}_4)_{(1-x)}$ ($x=0.15,0.30,0.45$) ; P.K. Chakrabarti, **B.K. Nath**, S. Brahma, S. Das, **D. Das**, M. Ammar and F. Mazaleyrat. Solid State Communications Volume **144**, , Pages 305-309 (2007)

31. Study of effects of Mn_2^+ in CdS nanocrystals ; Balaram Tripathi, F.Singh, D.K.Avasthi, **D.Das**, Y.K.Vijay , Physica B, 400, 70-76(2007)
32. Study on solid solution of $YMn_{1-x}Fe_xO_3$; Structural,magnetic and dielectric properties.S.L.Samal,W.Gian, S.E.Lofland, K.V.Ramannujachary, **D.Das**, A.K.Ganguli J.Solid State Chemistry, 181 ,61-66(2008),..
33. Novel low temperature chemical synthesis and characterization of zinc oxide nanostructures; P. K. Giri, S. Bhattacharyya_, B. Chetia, B. K. Panigrahi , K.G. M. Nair and P. K. Iyer, J. Nanosci. Nanotech. 8, 1 (2008), (doi:10.1166/jnn.2008.031).
34. Fabrication of SnS thin films by the successive ionic layer adsorption and reaction (SILAR) method ; B. Ghosh, M. Das, P. Banerjee and S. Das, Semiconductor Science and Technology, 23, 125013 (2008).
35. Exchange interaction at the interface of Fe-NiO nanocomposites ; **S. P. Pati, B. Bhushan and D. Das**, J. Solid State Chem., 2010, 183, 2903.
36. RBS spectrometric studies on the interdiffusion profile of multilayer thin film structure to yield $Cd_{1-x}MnxTe$ alloy ; P. Banerjee, B. Ghosh, Journal of Alloys and Compounds 484, 712 (2009).
37. Magnetic susceptibilities, crystal field Stark energies, and hyperfine behavior of Sm^{3+} in hexagonal single crystals of $Sm(CF_3SO_3)_3 \cdot 9H_2O$; J. Mondal,S. Acharya, D. Bisui, K. N. Chattopadhyay, M. Ghosh, and P. K. Chakrabarti, Journal of Applied Physics 105, 063921 (2009).
38. Low Temperature Route to the Multiferroic $FeAlO_3$: XRD and Mössbauer Characterizations ; **B. Bhushan, S. Mukherjee, A. Basumallick, S. K. Bandopadhyay and D. Das**, Hyperfine Interaction (2008) **187** 101-107.
39. Preparation and characterizationa of SiO_2 -coated nanoparticles of $Mn_{0.4}Zn_{0.6}Fe_2O_4$; S.Modak, S.Karan, S.K.Roy, **S.Mukherjee D.Das**, P.K.Chakabarti, Jou. Mag. Mag. Materials **321**(2009)169-174.
40. Characteristics of metal/p-SnS Schottky barrier with and without post-deposition annealing ; B. Ghosh, M. Das, P. Banerjee, S. Das, Solid State Sciences 11, 461 (2009)
41. Probing defects in chemically synthesized ZnO nanostructures by positron annihilation & photoluminescence spectroscopy ; **S.K.Chaudhuri**, Manoranjan Ghosh, **D.Das**, A.K.Raychaudhuri, Journal of Applied Physics, 108,064319 (2010)

42. Effect of gamma irradiation on a polymer electrolyte: Variation in crystallinity, viscosity and ion-conductivity with dose ; P. Nanda, S.K. De, S. Manna, U. De , S. Tarafdar, Nuclear Instruments and Methods in Physics Research B 268, 73 (2010).
43. Variation in viscosity and ion conductivity of a polymer–salt complex exposed to gamma irradiation ; S. Tarafdar, S. K De, S. Manna, U. De and P. Nanda, Pramana Journal of Physics, 74, 271 (2010)
44. Paramagnetic susceptibilities, crystal field Stark energies and hyperfine properties of Eu³⁺ in europium trifluoromethane sulfonate nonahydrate ; D. Bisui K. N. Chattopadhyay, M.Ghosh, P.K.Chakrabarti, Journal of Physics and Chemistry of Solids 71, 1278 (2010).
45. Growth and characterization of Cd_{1-x}Zn_xTe thin films prepared from elemental multilayer deposition ; R. Ganguly, S. Hajra, T. Mandal, P.Banerjee, B. Ghosh, Applied Surface Science 214, 4879 (2010).
46. Paramagnetic susceptibilities, crystal field Stark energies and hyperfine properties of Eu³⁺ in europium trifluoromethane sulfonate nonahydrate ; D. Bisui K. N. Chattopadhyay, M.Ghosh, P.K.Chakrabarti, Journal of Physics and Chemistry of Solids, 71, 1278 (2010).
47. Size tunable synthesis and characterization of cerium tungstate nanoparticles via H₂O/AOT/heptanes microemulsion ; S. Pramanik and S.C. Bhattacharya, Material Chemistry and Physics, 121, 125 (2010)
48. Coulomb explosion sputtering of selectively oxidized Si ; J. Phys.Condens. Matter 22 (2010) 175005, P. Karmakar, **S. Bhattacharjee**, V. Naik , **A. K. Sinha** and A. Chakrabarti.
49. Evidence of formation of tetravacancies in uniformly oxygen irradiated n-type silicon ; S.K.Chaudhuri, K.Goswami, **S.S Ghugre, D.Das** , Physica B, 406 (2011)693-698
50. Effect of gamma radiation on the structural and optical properties of Polyethylene terephthalate (PET) Polymer ; Siddhartha, Suveda Aarya, Kapil Dev, Suresh Kumar Raghuvanshi, **J.B.M.Krishna**, M.A.Wahab Accepted in Radiation Physics and Chemistry, 2011

51. Uvarivite from chromite bearing ultramafic intrusive, Orissa, India, a crystal crystal-chemical characterization using ^{57}Fe Mossbauer spectroscopy ; Tapan Pal and **Dipankar Das** , American Minerarologist, **95** (2011)839-843.
52. Effect of gamma irradiation on the optical properties of UHMWPE (Ultra-high-molecular-weight-polyethylene) Polymer ; S.K.Raghuvanshi, Bashir Ahmad, Siddhartha, A.K.Srivastava, **J.B.M.Krishna**, M.A.Wahab , Nuclear Instrum. Methods B 271, 44-47, 2012
53. Effect of γ -irradiation on optical and chemical properties of CR-39 polymer ; S.K.Raghuvanshi, Bashir Ahamad, Siddhartha, **J.B.M.Krishna**, A.K.Srivastava, M.A.Wahab and S.A.Khan, Radiation Effects & Defects in Solids, iFirst, 2012, 1-8.
54. Biocompatible nanocrystalline natural bonelike carbonated hydroxyapatite synthesized by mechanical alloying in a record minimum time ; S. Lala , S. Brahmachari , P.K. Das , **D. Das** , T. Kar , S.K. Pradhan , Materials Science and Engineering **C 42** (2014) 647-656.
55. Reduced graphene oxide-polyaniline composites—synthesis, characterization and optimization for thermoelectric applications ; Mousumi Mitra, Chiranjit Kulsi, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee and Shyamaprosad Goswami, RSC Advances **5** (2015) 31039.
56. The influence of cross-linking and clustering upon the nanohole free volume of the SHI and γ -radiation induced polymeric material ; Paramjit Singh, Rajesh Kumar, Rajinder Singh, **Anirban Roychowdhury**, **D. Das**, Applied Surface Science **328** (2015) 482-490
57. Investigation of charge transport properties in less defective nanostructured ZnO based Schottky Diode ; Arka Dey, Animesh Layek, **Anirban Roychowdhury**, Mrinmay Das, Joydeep Datta, Somnath Middya, **Dipankar Das** and Partha Pratim Ray, RSC Advances **5** (2015), 36560.
58. Structural and microstructural interpretations of Zn-doped biocompatible bone-like carbonated hydroxyapatite synthesized by mechanical alloying ; S. Lala, M. Ghosh, P. K. Das, **D. Das**, T. Kar and S. K. Pradhan, J. Appl. Cryst. **48** (2015), 138-148
59. Higher $\text{Fe}^{2+}/\text{total Fe}$ ratio in iron doped phosphate glass melted by microwave heating, Ashis K. Mandal, Prasanta K. Sinha, **Dipankar Das**, Chandan Guha , Ranjan Sen, Materials Research Bulletin 63 (2015) 141–146.

60. A comparison of 4 MeV Proton and Co-60 gamma irradiation induced degradation in the electrical characteristics of N-channel MOSFETs Arshiya Anjum, N.H. Vinayakprasanna, T.M. Pradeep, N. Pushpa, **J.B.M. Krishna, A.P. Gnana Prakash**, Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms (In Press)

LTHM

1. Effect of alkaline earth metal doping on thermal, optical, magnetic and dielectric properties of BiFeO₃ nanoparticles, **B. Bhushan**, A. Basumallick, S. K. Bandopadhyay , N. Y. Vasanthacharya and **D. Das**, Jou. Phys. D : Appl. Phys. (2009) **42** 0665004.
2. Sr induced modification of structural, optical and magnetic properties in Bi_{1-x}Sr_xFeO₃ (x = 0, 0.01, 0.03, 0.05 and 0.07) multiferroic nanoparticles, **B.Bhushan**, A. Basumallick, N. Y. Vasanthacharya, S. Kumar and **D. Das**, Solid State Sciences, 2010, 12, 1063
3. Magnetic and Mössbauer effect study of (Co_{0.5}Zn_{0.4}Cu_{0.1}Fe₂O₄)_(1-x) (Al₂O₃/PVA)_x (x = 0 and 0.30 synthesised by sonchemical route **S.Mukherjee**, **D.Das**, S.Mukherjee and P.K.Chakrabarti, Jou. Phys. Chem. C, 2010, 114 (35), pp 14763–14771
4. Exchange interaction at the interface of Fe-NiO nanocomposites, **S. P. Pati**, **B. Bhushan** and **D. Das**, Jou. Solid State Chemistry, (2010), 183, 2903.
5. Investigation on Fe doped ZnO nanostructures prepared by a chemical route ; **A. K. Mishra** and **D. Das**, Material Science and Engineering B doi:10.1016 / j.mseb. 2010.03.045
6. Enhanced magnetic behavior of Al substituted LaFeO₃ (La(1-x)Al_xFeO₃, x=0.10 and 0.30) ; S. Acharya, A.K. Deb, **D. Das**, P.K. Chakrabarti, Materials Letters, **65**, 1280-1282 (2011).
7. Exchange bias and suppression of superparamagnetism of α -Fe nanoparticles in NiO matrix ; **S. P. Pati**, **B. Bhushan**, A. Basumallick, S. Kumar and **D. Das**, Material Science and Engineering: **B**, **176**, 1015 (2011)
8. Metastability and inverse magnetocaloric effect in doped manganite (Nd_{0.25}Sm_{0.25}Sr_{0.5}MnO₃) and ferromagnetic shape memory alloy (Ni₂Mn_{1.36}Sn_{0.64}): A comparison ; **S. Chatterjee**, S. Giri, S. Majumdar, Jou. Phys.: Condensed. Matter 24 (2012) 36600
9. Sol-gel derived nanoparticles of Zn-substituted lithium ferrite (Li_{0.32}Zn_{0.36}Fe_{2.32}O₄): magnetic and Mossbauer effect measurements and their theoretical analysis ; S.Sutradhar, S.Pati, S.Acharya, S.Das, **D.Das**, P.K. Chkrabarti. Jou. Mag. Mag. Materials. **324**, 1317 (2012).

10. Stability of charge and orbital order in half-doped $\text{Y}_{0.5}\text{Ca}_{0.5}\text{MnO}_3$ nanocrystallites ; Putul Malla Chowdhury, Barnali Ghosh, A. K. Raychaudhuri, S. D. Kaushik , V. Siruguri, J. Nanoparticle Res., **15** (2013) 1585.
11. Memory effects in exchange coupled $\text{Fe}/\text{Co}_3\text{O}_4$ nanocomposites ; **S. P. Pati**, S. Kumar and **D. Das**, Mater. Chem. Phys. 137 (2012) 303-309.
12. Conductivity modification of ZnO film by low energy Fe^{10+} ion implantation ; Ashutosh Kumar, **J.B.M.Krishna, D.Das**, Sunita Keshri Applied Surface Science, 258(7), 2237-2245.2012
13. Metastability and inverse magnetocaloric effect in doped manganite ($(\text{Nd}_{0.25}\text{Sm}_{0.25}\text{Sr}_{0.5}\text{MnO}_3)$) and ferromagnetic shape memory alloy ($\text{Ni}_2\text{Mn}_{1.36}\text{Sn}_{0.64}$): A comparison.
14. Revival of martensitic instability in Ga doped Ni-Mn-In alloys ; S. Pramanick, **S. Chatterjee**, D. Venkateshwarlu, V. Ganesan, S. K. De, S. Giri, S. Majumdar, Intermetallics, **42** (2013) 56.
15. Multiple magneto-functional properties of $\text{Ni}_{46}\text{Mn}_{41}\text{In}_{13}$ shape memory alloy; S. Pramanick, **S. Chatterjee**, S. Giri, S. Majumdar, V. V. Koledov, A. Mashirov, A. M. Aliev, A. B. Batdalov, B. Hernando, W.O. Rosa, L. González-Legarreta, J. Alloys Compounds, **578** (2013) 157.
16. Magnetically addressable fluorescent $\text{Fe}_3\text{O}_4/\text{ZnO}$ nanocomposites: structural, optical and magnetization studies. **A.Roychowdhury, S. P. Pati, A. K. Mishra**, S. Kumar and **D. Das** Jou. Phys. Chem. Solids, **74** (2013) 811.
17. Signature of exchange bias and spin-glass like phenomena in Fe/CoO nanocomposite **S. P. Pati, A. Roychowdhury**, S. Kumar and D. Das, Jou. Appl. Phys, **113** (2013) 17D708
18. Nature of the glassy magnetic state in the $\text{Cu}_{2.84}\text{Mn}_{0.44}\text{Al}_{0.72}$ shape memory alloy ; **S. Chatterjee**, S. Chattopadhyay, S. Giri, S. Majumdar, Euro Phys. Lett. **104** (2013) 47014.
19. Spin correlated dielectric memory and rejuvenation in multiferroic CuCrS_2 ; A .Karmakar, K. Dey, **S. Chatterjee**, S. Majumdar, and S. Giri, Appl. Phys. Lett. **104** (2014) 052906.
20. Nature of temperature and magnetic-field-dependent conduction mechanism in electron-doped $\text{Ca}_{0.85}\text{R}_{0.15}\text{MnO}_3$ ($\text{R} = \text{Pr, La}$) magnates ; Momin Hossain Khan, Sudipta Pal, and Esa Bose, Phys. Status Solidi B, **251** (2014) 559.

21. Structural and magnetic characterizations of undoped and K-doped NdMnO₃ single crystals synthesized by the sol-gel route ; A.Nandy, **A. Roychoudhury, D. Das** and S.K. Pradhan, Powder Technology **254** (2014) 538.
22. Effect of Co doping on magneto-transport properties of Eu_{0.5}Sr_{0.5}MnO₃ ; **P. Dutta , D. Das, S. Chatterjee** , S. Majumdar, Jou. Alloys Compouds **590** (2014) 313.
23. Effects of magnetite nanoparticles on optical properties of zinc sulfide in fluorescent-magnetic Fe₃O₄/ZnS nanocomposites ; **A.Roychowdhury, S. P. Pati**, S. Kumar and **D. Das**, Powder Technology, **254** (2014) 583.
24. Magneto-resistive property study of direct and indirect band gap thermoelectric Bi-Sb alloys ; Diptasikha Das, K. Malik, S. Bandyopadhyay, **D. Das, S. Chatterjee**, and Aritra Banerjee, Appl. Phys. Lett. **105** (2014) 082105.
25. Excess Ni-doping induced enhanced room temperature magneto-functionality in Ni-Mn-Sn based shape memory alloy ; S Pramanick, **S Chatterjee**, S Giri, S Majumdar, Appl. Phys. Lett. **105** (2014) 112407.
26. Anomalous giant positive magnetoresistance and heavy fermion like behaviour in Mn₁₁Ge₈" ; S. Pramanick, S. Giri, S. Majumdar, **S. Chatterjee**, D. Venkateshwarlu, V. Ganesan, Materials Research Express, **1** (2014) 025047.
27. Cooperative spin freezing and the pinning assisted thermoremanent magnetization in Ni_{2.04}Mn_{1.36}Sn_{0.6} alloy ", S Pramanick, S Chattopadhyay, S Giri, S Majumdar, **S Chatterjee**, Jou. Appl. Phys, **116** (2014) 083910.
28. Overcoming inherent magnetic instability, preventing spin canting and magnetic coding in an assembly of ferrimagnetic nanoparticles ; S. Dey, S. K. Dey, K. Bagani, S. Majumder, **A. Roychowdhury**, S. Banerjee, V. R. Reddy, **D. Das**, and S. Kumar, Appl. Phys. Lett. **105** (2014) 063110.
29. Effect of particle size distribution on the structure, hyperfine, and magnetic properties" of Ni_{0.5}Zn_{0.5}Fe₂O₄ nanopowders. Kaustav Bhattacharjee, **Satya P. Pati**, G. C. Das, **D. Das**, and K. K. Chattopadhyay, Journal of Applied Physics **116** (2014) 233907
30. Structural, optical, hyperfine and magnetization studies of ZnO encapsulated a-Fe nanoparticles ; A.K. Rathore , **S.P. Pati** , **A. Roychowdhury** , M. Ghosh , **D. Das** . Materials Research Bulletin **60** (2014) 566–571.

31. Nature of electrical hopping conduction and magneto-transport studies in the electron doped manganite $\text{Ca}_{0.85}\text{Gd}_{0.15}\text{MnO}_3$; M. H. Khan, S. Pal, Phys. Lett. A, **379** (2015) 401
32. Metal-insulator transition and non-adiabatic small polaron hopping conduction in electron-doped $\text{Ca}_{0.85}\text{Pr}_{0.15}\text{MnO}_3$ manganite ; M. H. Khan, S. Pal, and E. Bose, Phys. Scr. **90** (2015) 035803.
33. Magnetic property, Mössbauer spectroscopy and microwavereflection loss of maghemite nanoparticles ($\alpha\text{-Fe}_2\text{O}_3$) encapsulated in carbon nanotubes ; S. Sutradhar, S. Das, **A. Roychowdhury, D. Das**, P.K. Chakrabarti, Materials Science and Engineering B **196** (2015) 44-52
34. Composition-structure–physical property relationship and nonlinear optical properties of multiferroic hexagonal $\text{ErMn}_{1-x}\text{Cr}_x\text{O}_3$ nanoparticles ; B. Raneesh, K. Nandakumar, **A. Saha, D. Das**, H. Soumya, J. Philip,P. Sreekanthe and R. Philip, RSC Advances, **5** (2015) , 12480.
35. Structural, optical and magnetic studies of co-doped mesoscopic ZnO nanoparticles ; M. S. Inpasalini, **P. V. Rajesh, Dipankar Das**, Samrat Mukherjee, Jou. Mater Sci: Mater Electron **26** (2015) 1053-1059.
36. Spin-glass–like ground state and observation of exchange bias in $\text{Mn}_{0.8}\text{Fe}_{0.2}\text{NiGe}$ alloy ; **P. Dutta**, S. Pramanick, D. Venkateshwarlu, V. Ganesan, S. Majumdar, **D. Das, S. Chatterjee**, Euro Phys. Lett. **108** (2014) 17012.
37. Structural, magnetic and hyperfine properties of single-phase $\text{SrFe}_{12}\text{O}_{19}$ nanoparticles prepared by a sol-gel route. **A. Das, A. Roychowdhury, S. P. Pati**, S. Bandyopadhyay, and **D. Das**, Phys. Scr. **90**, 025802 (2015)
38. Multifunctional behavior of Fe-doped MnNiGe magnetic equiatomic compound ; **P. Dutta**, S.Pramanick, S.Majumdar, **D. Das**, and **S. Chatterjee**, Jou. Mag. Mag. Matter, **95** (2015) 312.
39. Magnetic and magnetotransport studies of iron-chalcogenide superconductor $\text{Fe}(\text{Se}_{0.4}\text{Te}_{0.6})_{0.82}$: observation of thermally activated transport and flux jump ; **P Dutta, S Chattopadhyay, D Das, S Majumdar and S Chatterjee**, Supercond. Sci. Technol. **28** (2015) 115004.

40. Investigation of glassy magnetic state in Co doped $\text{Eu}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$; **P. Dutta**, S. Majumdar, S. Bandyopadhyay, **D. Das**, and **S. Chatterjee**, Jou. Alloys Compounds, **653** (2015) 585
41. Anomalous magnetotransportbehavior in Fe-doped MnNiGe alloys ; **P. Dutta**, S. Pramanick, Vijay Singh, Dan Thomas Major, **D. Das**, and **S. Chatterjee**, Phys. Rev. B93 (2016) 134408.
42. Hydrostatic pressure effect on the magnetocaloricbehavior of Ga-doped MnNiGe magnetic equiatomic alloy ; **P Dutta, D Das, S Chatterjee**, S Pramanickand S Majumdar, Jou. Phys. D: Appl. Phys. 49 (2016) 125001
43. Near room temperature magnetodielectric consequence in (Li, Ti) doped NiO ceramic ; S. Mukherjee, **S. Chatterjee**, S. Rayaprol, S. D. Kaushik, S. Bhattacharya, and P. K. Jana Jou. Appl. Phys. 119 (2016) 134103
44. Non-monotonous variation of structural instability in self-doped Ni-Mn-Sn based shape memory alloys ; S. Pramanick, **P. Dutta**, **S. Chatterjee**, S. Giri and S. Majumdar, Jou. Alloys Compounds, **657** (2016) 313.
45. Multiple magnetic transitions and associated room temperature magneto-functionality in $\text{Ni}_{2.048}\text{Mn}_{1.312}\text{In}_{0.64}$; S. Pramanick, **P. Dutta**, **S. Chatterjee**, S.Giri and S.Majumdar, Jou. Mag. Mag. Mater, **405** (2016) 270.
46. Synthesis of $\alpha\text{-Fe}_2\text{O}_3$ -functionalised graphene oxide nanocomposite by a facile low temperature method and study of its magnetic and hyperfine properties ; Sanchayita Nag, **Anirban Roychowdhury**, **Dipankar Das**, Sampad Mukherjee, Materials Research Bulletin, **74** (2016) 109.
47. Magneto-optical properties of $\alpha\text{-Fe}_2\text{O}_3@\text{ZnO}$ nanocomposites prepared by the high energyball-milling technique; Chandana Roy Chaudhury, **Anirban Roychowdhury**, **Anusree Das**, **Dipankar Das**, Journal of Physics and Chemistry of Solids, **92**(2016)38
48. Tuning of thermoelectric properties with changing Se content in Sb_2Te_3 D. Das, K. Malik, A. K. Deb, V. A. Kulbachinskii, V. G. Kytin, **S. Chatterjee**, **D. Das**, S. Dhara, S. Bandyopadhyay and A. Banerjee , Euro Phys. Lett.**113** (2016) 47004
49. Tunable properties of magneto-optical $\text{Fe}_3\text{O}_4/\text{CdS}$ nanocomposites on size variation of the magnetic component, **Anirban Roychowdhury**, **Satya Prakash Pati**, Sanjay Kumar, **Dipankar Das** , Materials Chemistry and Physics **151** (2015) 105-111

50. Multi-functional biomimetic graphene induced transformation of Fe_3O_4 to $\epsilon\text{-Fe}_2\text{O}_3$ at room temperature. Soumya Bhattacharya, **Anirban Roychowdhury, Dipankar Das** and Suprabha Nayar, RSC Adv. **5** (2015) 89488.
- 51.** Synthesis, X-ray Rietveld analysis, infrared and Mössbauer spectroscopy of R_2FeSbO_7 ($\text{R}^{3+} = \text{Y}, \text{Dy}, \text{Gd}, \text{Bi}$) pyrochlore solid solution ; Y.M. Jana, P. Halder, A. Ali Biswas, **A. Roychowdhury, D. Das, S. De, S. Kumar**, Jou. Alloys Compound., **656** (2016) 226.
- 52.** Magneto-transport characteristics of electron-doped $\text{Ca}_{0.85}\text{Sm}_{0.15}\text{MnO}_3$ manganite: Hopping and tunneling ; Momin Hossain Khan, Sudipta Pal, Jou. Mag. Mag. Mater., **393** (2015) 110
- 53.** Adiabatic polaron hopping conduction and Griffiths phase in electron-doped $\text{Ca}_{0.85}\text{Dy}_{0.15}\text{MnO}_3$, ; M. H. Khan, **A. Roychowdhury, D. Das, S. Pal**, J. Alloys Compound., **650** (2015) 328
54. Tuning of thermoelectric properties with changing Se content in Sb_2Te_3 ; D. Das, K. Malik, A. K. Deb, V. A. Kulbachinskii, V. G. Kytin, **S. Chatterjee, D. Das**, S. Dhara, S. Bandyopadhyay and A. Banerjee, Euro Phys. Lett. **113** (2016) 47004
55. Magnetic Phase Separation in Diluted Magnetic System: $\text{Zn}_{1-x}\text{Fe}_x\text{O}$; Archita Mondal, Sanchari Sarkar, Neepamala Giri, Souvik Chatterjee, Ruma Ray, Acta Metall. Sin. (Engl. Lett.) DOI 10.1007/s40195-017-0530-6.
56. Observation of ultrasharp metamagnetic jumps in polycrystalline $\text{Er}_2\text{Cu}_2\text{O}_5$; A Banerjee, J Sannigrahi, S Giri and S Majumdar, Jou. Phys.: Condens. Matter **29** (2017) 115803.
57. Room Temperature Magnetism in Free-standing nano-Ni/PVDF Composites ; Rajkumar Dey, Ritamay Bhunia, Shamima Hussain, **Prabir Dutta, Souvik Chatterjee**, Radhaballav Bhar, and Arun Kumar Pal, Polymer-Plastics Technology and Engineering, <http://dx.doi.org/10.1080/03602559.2016.1263865>
58. Enhanced magnetoelectric properties of BiFeO_3 on formation of $\text{BiFeO}_3\text{-SrFe}_{12}\text{O}_{19}$ nanocomposites; **A. Das, S. Chatterjee**, S. Bandyopadhyay, and **D. Das**, J. Appl. Phys. **119**, (2016) 234102.

59. Magnetic, dielectric and magnetoelectric properties of BiFeO₃-CoFe₂O₄ nanocomposites ; **A. Das**, S. De, S. Bandyopadhyay, **S. Chatterjee**, and **D. Das**, J. Alloys Compd. 697, (2017) 353.
60. Hydrostatic pressure tuned magneto-structural transition and occurrence of pressure induced exchange bias effect in Mn0.85Fe0.15NiGe alloy ; **P. Dutta**, **S. Pramanick**, **D. Das**, and **S. Chatterjee**, J. Phys. D: Appl. Phys. 49 (2016) 385001.
61. Giant positive magnetoresistance and field-induced metal insulator transition in Cr₂NiGa ; **S. Pramanick**, **P. Dutta**, **S. Chatterjee**, S. Giri, and S. Majumdar, Jou. Physics. D: Appl. Phys. 50 (2017) 035006