

List of Publications

Book Chapter

1. A. Chanda, S. Goswami, and **Dipten Bhattacharya**, “Energy efficient future generation electronics based on strongly correlated electron systems”, in *Sustainable Energy Technology and Policies: A Transformational Journey*, Volume 2, edited by S. De, S. Bandyopadhyay, M. Assadi, and D.A. Mukherjee (Springer Nature, Singapore, 2018) pp. 397. [ISBN 978-981-10-8392-1, ISSN 1865-3529]
2. S. Goswami, C.K. Ghosh, and **Dipten Bhattacharya**, “Multiferroic thin film for energy harvesting”, in *Comprehensive Materials Processing (Second Edition)*, Editor-in-Chief Saleem Hashmi (Elsevier, Amsterdam, 2024) Vol. 4, p. 1-23. [ISBN 978-0-323-96021-2]

In Refereed Journals

- *89. G.S. Kumar, S. Goswami, S. Chatterjee, D. Mukherjee, C.K. Ghosh, and **Dipten Bhattacharya**, “Enhanced negative capacitance in a ferroelectric capacitor by tuning bias voltage pulse to intrinsic domain switching kinetics”, *Phys. Rev. Lett.* (under review).
88. R. Kabir, R. Begum, K.R. Sahoo, S. Goswami, S.N. Das, M.R. Karim, **Dipten Bhattacharya**, S. Seth, and C.K. Ghosh, “Nanoarchitectonics of interstitial oxygen and Jahn-Teller distortion to enhance the electrochemical performance of CuMnO₂: symmetric coin cell”, *Appl. Phys. A* (accepted for publication).
87. S. Goswami, S. Mishra, M.R. Sahoo, K.K. Sahoo, B. Kumar, S. Chatterjee, D. Mukherjee, K. Pradhan, A. Garg, C.K. Ghosh, and **Dipten Bhattacharya**, “Evidence of spin-reorientation transition below ~150 K from magnetic force microscopy in ferromagnetic BiFeO₃ thin film”, *Phys. Rev. B* **110**, 214401 (2024).
86. Sk. H. Rahaman, S. Bodhak, V.K. Balla, and **Dipten Bhattacharya**, “Role of in-situ electrical stimulation on early-stage mineralization and in-vitro osteogenesis of electroactive bioactive glass composites”, *Biomater. Adv.* **166**, 214062 (2025).
85. S. Chatterjee, K. Yadav, N. Mondal, G.S. Kumar, **Dipten Bhattacharya**, and Devajyoti Mukherjee, “Interfacial strain induced giant magnetoresistance and magnetodielectric effects in multiferroic BCZT/LSMO thin film heterostructures”, *J. Appl. Phys.* **135**, 184101 (2024).
84. T. Chatterjee, S. Mishra, A. Mukherjee, P. Pal, B. Satpati, and **Dipten Bhattacharya**, “Charge-transfer-driven enhanced room-temperature ferromagnetism in BiFeO₃/Ag nanocomposite”, *Nanotechnology* **34**, 495705 (2023).

83. A. Dey, S. Goswami, S.N. Das, **Dipten Bhattacharya**, and C.K. Ghosh, “Cu²⁺ at the surface/sub-surface region of CuFeO₂ rhombohedral nanostructures facilitates specific capacitance (~611 F/g): an understanding of the solvation energy dependent charge transfer mechanism”, *Physica B* **667**, 415207(2023).
82. S. Goswami, S. Mishra, S. Sen, C.K. Ghosh, and **Dipten Bhattacharya**, “Large room-temperature magnetodielectric effect in polyvinylidene fluoride-trifluoroethylene/La_{0.7}Sr_{0.3}MnO₃ (0-3) nanocomposite thin films”, *J. Phys. Chem. Solids* **179**, 111418 (2023).
81. T. Chatterjee, A. Mukherjee, P. Pal, and **Dipten Bhattacharya**, “Influence of Van der Waals bonds on crystallographic and physical properties of reduced-graphene-oxide/BiFeO₃ nanocomposites”, *J. Alloys and Compd.* **944**, 169210 (2023).
80. S. Goswami, S. Mishra, K. Dana, A.K. Mandal, N. Dey, P. Pal, B. Satpati, M. Mukhopadhyay, C.K. Ghosh, and **Dipten Bhattacharya**, “Room temperature multiferroicity in GaFeO₃ thin film grown on (100)Si substrate”, *J. Appl. Phys.* **132**, 214101 (2022).
- *79. S. Mishra, A. Roy, A. Sahoo, B. Satpati, A. Roychowdhury, P.K. Mohanty, C.K. Ghosh, and **Dipten Bhattacharya**, “Room-temperature surface multiferroicity in Y₂NiMnO₆ nanorods”, *Phys. Rev. B* **105**, 235429 (2022).
- *78. S. Mishra, C.K. Ghosh, A. Sahoo, **Dipten Bhattacharya**, S. Mondal, and P. Mandal, “Electric-field-driven resistive transition in multiferroic SrCo₂Fe₁₆O₂₇/Sr₃Co₂Fe₂₄O₄₁ composite”, *J. Appl. Phys.* **131**, 204101 (2022).
77. A. Sahoo, **Dipten Bhattacharya**, M. Das, and P. Mandal, “Shape dependent multiferroic behaviour in Bi₂Fe₄O₉ nanoparticles”, *Nanotechnology* **33**, 305702 (2022).
- *76. T. Chatterjee, A. Mukherjee, P. Pal, S.D. Kaushik, V. Siruguri, S. Mandal, S. Hazra, S. Bhattacharjee, C.K. Ghosh, and **Dipten Bhattacharya**, “Nonmonotonic magnetic field dependence of remanent ferroelectric polarization in reduced-graphene-oxide-BiFeO₃ nanocomposite”, *Phys. Stat. Solidi RRL* **16**, 2200077 (2022).
75. S. Das, R.C. Sahoo, S. Mishra, **Dipten Bhattacharya**, and T.K. Nath, “Effects of Ni doping at Co-site on dielectric, impedance spectroscopy, and ac conductivity in La₂CoMnO₆ double perovskites”, *Appl. Phys. A* **128**, 354 (2022).
74. A. Sahoo, M. Das, P. Mandal, and **Dipten Bhattacharya**, “Hydrothermal synthesis of Bi₂Fe₄O₉ nanochains and study of their multiferroic coupling”, *Mater. Lett.* **296**, 129905 (2021). (IF = 3.019)

73. S. Goswami, K. Dey, S. Chakraborty, S. Giri, U. Chowdhury, and **Dipten Bhattacharya**, “Large magnetoelectric coupling in thin film of multiferroic CuO”, *ACS Omega* **5**, 22883 (2020). (IF = 3.512)
72. S. Goswami, A. Sahoo, **Dipten Bhattacharya**, O. Karci, and P.K. Mohanty, “Large structure-dependent room temperature exchange bias in self-assembled BiFeO₃ nanoparticles”, *APL Mater.* **8**, 081101 (2020). (IF = 5.096)
71. C. Khatua, **Dipten Bhattacharya**, and V. K. Balla, “In-situ electrical stimulation for enhanced bone growth: a mini review”, *Medical Devices & Sensors* **3**, 10090 (2020).
70. A. Sahoo, **Dipten Bhattacharya**, and P.K. Mohanty, “Effect of surface pinning on magnetic nanostructures”, *Phys. Rev. B* **101**, 064414 (2020). (IF = 4.036)
- *69. U. Chowdhury, S. Goswami, A. Roy, S.S. Rajput, A.K. Mall, R. Gupta, S.D. Kaushik, V. Siruguri, S. Saravanakumar, S. Israel, R. Saravanan, A. Senyshyn, T. Chatterji, J.F. Scott, A. Garg, and **Dipten Bhattacharya**, “Origin of ferroelectricity in orthorhombic LuFeO₃”, *Phys. Rev. B* **100**, 195116 (2019). (IF = 4.036)
68. B. Sikder, A. Chanda, S. Goswami, **Dipten Bhattacharya**, and S. Velaga, “Influence of spin-state transition on structural and other physical properties in Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} ceramic”, *Mater. Chem. Phys.* **236**, 121770 (2019). (IF = 4.094)
67. C. Khatua, S. Sengupta, B. Kundu, **Dipten Bhattacharya**, and V.K. Balla, “Enhanced strength, in-vitro bone cell differentiation, and mineralization of injectable bone cement reinforced with multiferroic particles”, *Materials and Design* **167**, 107628 (2019). (IF = 7.991)
- *66. A. Sahoo and **Dipten Bhattacharya**, “Shape-dependent magnetoelectric coupling in nanoscale BiFeO₃”, *J. Alloys Compd.* **772**, 193 (2019). (IF = 4.650)
65. C. Khatua, **Dipten Bhattacharya**, B. Kundu, V.K. Balla, S. Bodhak, and S. Goswami, “Fabrication and properties of bioactive glass/bismuth ferrite composites for bone tissue engineering applications”, *Adv. Engg. Mater.* **20**, 1800329 (2018). (IF = 3.862)
- *64. S. Goswami, **Dipten Bhattacharya**, C.K. Ghosh, B. Ghosh, S.D. Kaushik, V. Siruguri, and P.S.R. Krishna, “Nonmonotonic particle size dependence of magnetoelectric coupling in strained nanosized particles of BiFeO₃”, *Sci. Rep.* **8**, 3728 (2018). (IF = 3.998)

63. S. Bhattacharjee, C.K. Ghosh, G.C. Das, A. Roychowdhury, D. Das, **Dipten Bhattacharya**, and P. Sen, “Non-inversion anisotropy energy in NiO coral structure: asymmetric hysteresis loop at room temperature”, *Appl. Surf. Sci.* **449**, 389 (2018). (IF = 6.61)
62. R. Singh, A. Chakravarty, U. Chowdhury, **D. Bhattacharya**, and S.K. Biswas, “Electrical conduction aluminium nitride-single-walled carbon nanotube nanocomposites”, *Mater. Lett.* **215**, 144 (2018). (IF = 3.019)
- *61. S. Goswami and **Dipten Bhattacharya**, “Magnetic transition at ~150 K in nanoscale BiFeO₃”, *J. Alloys Compd.* **738**, 277 (2018). (IF = 4.650)
- *60. S. Mishra, K. Dey, U. Chowdhury, **Dipten Bhattacharya**, C.K. Ghosh, and S. Giri, “Multiferroicity around Verwey transition in Fe₃O₄ thin films”, *AIP Advances* **7**, 125015 (2017). (IF = 1.579)
- *59. U. Chowdhury, S. Goswami, **Dipten Bhattacharya**, A. Midya, and P. Mandal, “Determination of intrinsic hysteretic polarization in lossy improper ferroelectric systems”, *Appl. Phys. Lett.* **109**, 092902 (2016). (IF = 3.791)
- *58. S. Goswami and **Dipten Bhattacharya**, “Magnetoelectric multiferroicity at nanoscale” (invited feature article) *Sci. Adv. Today* **2**, 25722 (2016).
- *57. T. Maity, S. Goswami, **Dipten Bhattacharya**, and S. Roy, “Reply to the Comment on ‘Superspin Glass mediated Giant Spontaneous Exchange Bias in a Nanocomposite of BiFeO₃-Bi₂Fe₄O₉; Phys. Rev. Lett. **110**, 107201 (2013)’ by A. Harres, J. Geshev, and V. Skumryev”, *Phys. Rev. Lett.* **114**, 099704 (2015). (IF = 9.161)
- *56. S. Goswami, **Dipten Bhattacharya**, L. Keeney, T. Maity, S.D. Kaushik, V. Siruguri, G.C. Das, H. Yang, W. Li, C.-Z. Gu, M.E. Pemble, and S. Roy, “Large magnetoelectric coupling in nanoscale BiFeO₃ from direct electrical measurements”, *Phys. Rev. B* **90**, 104402 (2014). (IF = 4.036)
- *55. U. Chowdhury, S. Goswami, **Dipten Bhattacharya**, J. Ghosh, S. Basu, and S. Neogi, “Room temperature multiferroicity in orthorhombic LuFeO₃”, *Appl. Phys. Lett.* **105**, 052911 (2014). (IF = 3.791)
- *54. T. Maity, S. Goswami, **Dipten Bhattacharya**, and S. Roy, “Origin of the asymmetric exchange bias in BiFeO₃-Bi₂Fe₄O₉ nanocomposite”, *Phys. Rev. B* **89**, 140411(R) (2014). (IF = 4.036)
53. T. Chatterji, T. Hansen, S.A.J. Kimber, and **Dipten Bhattacharya**, “Magnetoelastic effects in multiferroic HoMnO₃”, *Solid State Commun.* **180**, 46 (2014). (IF = 2.100)

- *52. U. Chowdhury, S. Goswami, **Dipten Bhattacharya**, A. Midya, P. Mandal, P. Das, and Y.M. Mukovskii, “Large magnetocapacitance in electronic ferroelectric manganite systems”, *J. Appl. Phys.* **114**, 194104 (2013). (IF = 2.286)
- *51. S. Goswami, **Dipten Bhattacharya**, G.N. Iles, B. Ghosh, A.A. Prytuliak, B. Malard, G.C. Das, B. Ouladdiaf, and T. Chatterji, “Anomaly in structural noncentrosymmetry around T_N in bulk and nanoscale BiFeO_3 ”, *Powder Diffraction* **28**, S94 (2013). (IF = 2.544)
- 50. S. Kundu, N. Das, S. Chakraborty, **Dipten Bhattacharya**, and P.K. Biswas, “Synthesis of sol-gel based nanostructured Cr(III)-doped indium tin oxide films on glass and their optical and magnetic characterizations”, *Opt. Mater.* **35**, 1029 (2013). (IF = 3.900)
- 49. T. Maity, S. Goswami, **Dipten Bhattacharya**, G.C. Das, and S. Roy, “Spontaneous exchange bias in a nanocomposite of BiFeO_3 - $\text{Bi}_2\text{Fe}_4\text{O}_9$ ”, *J. Appl. Phys.* **113**, 17D916 (2013). (IF = 2.286)
- 48. R. Nath, A.K. Raychaudhuri, Y.M. Mukovskii, P. Mondal, **Dipten Bhattacharya**, and P. Mandal, “Electric field driven destabilization of the insulating state in nominally pure LaMnO_3 ”, *J. Phys.: Condens. Matter* **25**, 155605 (2013). (IF = 2.707)
- *47. S. Goswami, **Dipten Bhattacharya**, W. Li, A. Cui, Q. Jiang, and C.-Z. Gu, “A training effect on electrical properties in nanoscale BiFeO_3 ”, *Nanotechnology* **24**, 135705 (2013). (IF = 3.953)
- *46. T. Maity, S. Goswami, **Dipten Bhattacharya**, and S. Roy, “Superspin glass mediated giant spontaneous exchange bias in a nanocomposite of BiFeO_3 - $\text{Bi}_2\text{Fe}_4\text{O}_9$ ”, *Phys. Rev. Lett.* **110**, 107201 (2013). (IF = 9.161)
- 45. T. Chatterji, B. Ouladdiaf, P.F. Henry, and **Dipten Bhattacharya**, “Magnetoelastic effects in multiferroic YMnO_3 ”, *J. Phys.: Condens. Matter* **24**, 336003 (2012). (IF = 2.707)
- 44. M. Sivakumar, A. Towata, K. Yasui, T. Tuziuti, T. Kozuka, Y. Iida, M.M. Maiorov, E. Blums, **Dipten Bhattacharya**, N. Sivakumar, and M. Ashok, “Ultrasonic cavitations induced water in vegetable oil emulsion droplets – a simple and easy technique to synthesize manganese zinc ferrite nanocrystals with improved magnetization”, *Ultrason. Sonochem.* **19**, 652 (2012). (IF = 8.400)
- *43. S. Goswami, **Dipten Bhattacharya**, P. Choudhury, B. Ouladdiaf, and T. Chatterji, “Multiferroic coupling in nanoscale BiFeO_3 ”, *Appl. Phys. Lett.* **99**, 073106 (2011). (IF = 4.000)

- *42. P. Mondal, **Dipten Bhattacharya**, and P. Mandal, “Current-driven orbital order-disorder transition in LaMnO_3 ”, *Phys. Rev. B* **84**, 075111 (2011). (IF = 3.908)
- *41. P. Mondal, **Dipten Bhattacharya**, Anwesa Maity, O.P. Chakrabarti, A.K.M. Maidul Islam, and M. Mukherjee, “Evolution of orbital phases with particle size in nanoscale stoichiometric LaMnO_3 ”, *J. Appl. Phys.* **109**, 084327 (2011). (IF = 2.286)
- *40. S. Goswami, **Dipten Bhattacharya**, P. Choudhury, “Particle size dependence of magnetization and noncentrosymmetry in nanoscale BiFeO_3 ”, *J. Appl. Phys.* **109**, 07D737 (2011). (IF = 2.286)
- *39. P. Sujatha Devi, A. Kumar, **Dipten Bhattacharya**, S. Karmakar, and B.K. Chaudhuri, “Correlation between extrinsic electroresistance and magnetoresistance in fine-grained $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ ”, *Jpn. J. Appl. Phys.* **49**, 083001 (2010). (IF = 1.491)
- 38. T. Chatterji, B. Ouladdiaf, and **Dipten Bhattacharya**, “Neutron diffraction investigation of the magnetic structure and magnetoelastic effects in NdMnO_3 ”, *J. Phys.: Condens. Matter* **21**, 306001 (2009). (IF = 2.707)
- *37. B. Ghosh, **Dipten Bhattacharya**, A.K. Raychaudhuri, and S. Arumugam, “Frequency dependence of dielectric anomaly around Néel temperature in bilayer manganite $\text{Pr}(\text{Sr}_{0.1}\text{Ca}_{0.9})_2\text{Mn}_2\text{O}_7$ ”, *J. Appl. Phys.* **105**, 123914 (2009). (IF = 2.286)
- 36. T. Chatterji, G.J. Schneider, L. van Eijck, B. Frick, and **Dipten Bhattacharya**, “Direct evidence for the Nd magnetic ordering in NdMnO_3 from the hyperfine field splitting of Nd nuclear levels”, *J. Phys.: Condens. Matter* **21**, 126003 (2009). (IF = 2.707)
- 35. R. Mazumder, D. Chakravarty, **Dipten Bhattacharya**, and A. Sen, “Spark plasma sintering of BiFeO_3 ”, *Mater. Res. Bull.* **44**, 555 (2009). (IF = 4.641)
- 34. S. Kundu, **Dipten Bhattacharya**, P. Das, J. Ghosh, and P.K. Biswas, “Ferromagnetism in transparent Mn(II)-doped indium tin oxide films prepared by sol-gel coating”, *Chem. Phys. Lett.* **469**, 313 (2009). (IF = 2.719)
- 33. N. Das, **Dipten Bhattacharya**, A. Sen, and H.S. Maiti, “Sonochemical synthesis of LaMnO_3 nano-powder”, *Ceram. Inter.* **35**, 21 (2009). (IF = 5.200)
- *32. P. Mondal, **Dipten Bhattacharya**, P. Choudhury, and P. Mandal, “Dielectric anomaly at T_N in LaMnO_3 as a signature of coupling between spin and orbital degrees of freedom”, *Phys. Rev. B* **76**, 172403 (2007). (IF = 3.908)

- *31. R. Mazumder, P. Sujatha Devi, **Dipten Bhattacharya**, P. Choudhury, A. Sen, and M. Raja, "Ferromagnetism in nanoscale BiFeO₃", *Appl. Phys. Lett.* **91**, 062510 (2007). (IF = 4.000)
30. D. Mallick, O.P. Chakrabarti, **Dipten Bhattacharya**, M. Mukherjee, H.S. Maiti, and R.N. Majumdar, "Electrical conductivity of cellular Si/SiC ceramic composites prepared from plant precursors", *J. Appl. Phys.* **101**, 033707 (2007). (IF = 2.286)
- *29. R. Mazumder, S. Ghosh, P. Mondal, **Dipten Bhattacharya**, S. Dasgupta, N. Das, A. Sen, A.K. Tyagi, M. Sivakumar, T. Takami, and H. Ikuta, "Particle size dependence of the magnetization and phase transition near T_N in multiferroic BiFeO₃", *J. Appl. Phys.* **100**, 033908 (2006). (IF = 2.286)
28. M. Sivakumar, T. Takami, H. Ikuta, A. Towata, K. Yasui, T. Tuziuti, T. Kozuka, **Dipten Bhattacharya**, and Y. Iida, "Fabrication of zinc ferrite nanocrystals by sonochemical emulsification and evaporation – observation of magnetization and its relaxation at low temperature", *J. Phys. Chem. B* **110**, 15234 (2006). (IF = 3.466)
- *27. N. Das, P. Mondal, and **Dipten Bhattacharya**, "Particle size dependence of the orbital order-disorder transition in LaMnO₃", *Phys. Rev. B* **74**, 014410 (2006). (IF = 3.908)
- *26. P. Mondal, **Dipten Bhattacharya**, P. Choudhury, "Dielectric anomaly near orbital order-disorder transition in LaMnO_{3+δ}", *J. Phys.: Condens. Matter* **18**, 6869 (2006). (IF = 2.707)
- *25. **Dipten Bhattacharya**, "Magnetoresistivity in solids", *Trans. Ind. Ceram. Soc. (India)* **65**, 1 (2006). (IF = 1.200)
24. Amarjeet Kaur, Ramadhar Singh, K.L. Yadav, **Dipten Bhattacharya**, "Mechanism of charge transport in polypyrrole-heparin composites", *J. Macromol. Sc. Part A* **41**, 1369 (2004). (IF = 2.216)
- *23. **Dipten Bhattacharya**, P. Sujatha Devi, and H.S. Maiti, "Orbital order-disorder transition in La_{1-x}Nd_xMnO₃ (x = 0.0-1.0) and La_{1-x-y}Nd_xSr_yMnO₃ (x = 0.1, y = 0.05, 0.1)", *Phys. Rev. B* **70**, 184415 (2004). (IF = 3.908)
22. M. Sivakumar, A. Gedanken, **D. Bhattacharya**, Y. Yeshurun, W. Zhong, Y.W. Du, I. Felner, and I. Nowik, "Sonochemical synthesis of nanocrystalline rare-earth orthoferrites using Fe(CO)₅ precursor", *Chem. Mater.* **16**, 3623 (2004). (IF = 10.508)
21. M. Sivakumar, A. Gedanken, W. Zhong, Y.H. Jiang, Y.W. Du, I. Bruckental, **D. Bhattacharya**, Y. Yeshurun, and I. Nowik, "Sonochemical synthesis of nanocrystalline LaFeO₃", *J. Mater. Chem.* **14**, 764 (2004). (IF = 6.626)

20. B. Kalisky, A. Shaulov, **D. Bhattacharya**, T. Tamegai, and Y. Yeshurun, "Vortex order-disorder transition in relaxation and field-sweep experiments", *Physica C* **408-410**, 382 (2004). (IF = 1.534)
19. M. Sivakumar, A. Gedanken, W. Zhong, Y.W. Du, **D. Bhattacharya**, Y. Yeshurun, and I. Felner, "Nanophase formation of strontium hexaferrite fine powder by the sonochemical method using $\text{Fe}(\text{CO})_5$ ", *J. Magn. Magn. Mater.* **268**, 95 (2004). (IF = 2.717)
18. A. Poddar, B. Bandyopadhyay, P. Mandal, **D. Bhattacharya**, P. Choudhury, U. Sinha, and B. Ghosh, "Studies of transport properties of MgB_2 superconductor", *Physica C* **390**, 191 (2003). (IF = 1.534)
17. Ramadhar Singh, Amarjeet Kaur, K.L. Yadav, and **Dipten Bhattacharya**, "Mechanism of dc conduction in ferric chloride doped poly(2-methyl thiophene)", *Curr. Appl. Phys.* **3**, 235 (2003). (IF = 2.856)
- *16. **Dipten Bhattacharya** and H.S. Maiti, "Reentrant metallic behavior at a temperature above T_c at the breakdown of cooperative Jahn-Teller order in perovskite manganites", *Phys. Rev. B* **66**, 132413 (2002). (IF = 3.908)
- *15. **Dipten Bhattacharya**, Pintu Das, A. Pandey, A.K. Raychaudhuri, Amitava Chakraborty, and V.N. Ojha, "On the factors affecting the high temperature insulator-metal transition in rare-earth manganites", *J. Phys.: Condens. Matter* **13**, L431 (2001). (IF = 2.707)
- *14. A. Pandey, Arun Pratap, **Dipten Bhattacharya**, and R.G. Sharma, "Stability of oxygen in HgO added bulk Y-Ba-Cu-O superconductor", *Physica C* **341-348**, 2449 (2000). (IF = 1.453)
13. D.R. Mishra, H.S. Zadeh, **Dipten Bhattacharya**, P.N. Dheer, and R.G. Sharma, "Studies on percolation models in Y-Ba-Cu-O and Bi-Pb-Sr-Ca-Cu-O systems", *Physica C* **341-348**, 1931 (2000). (IF = 1.534)
- *12. **Dipten Bhattacharya**, A. Pandey, and R.G. Sharma, "Flux pinning in an array of Josephson junctions with columnar defects", *Physica C* **341-348**, 1205 (2000). (IF = 1.534)
- *11. A. Pandey, **Dipten Bhattacharya**, and R.G. Sharma, "Role of intergranular silver in modulating the aperiodicity in disordered Josephson junction arrays: impact on relaxation of intergranular critical state", *Physica C* **340**, 211 (2000). (IF = 1.534)
- *10. **Dipten Bhattacharya**, Amitava Chakraborty, and H.S. Maiti, "Evidence of relaxation of Jahn-Teller polarons above T_c in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ ($0.1 < x \leq 0.5$)", *J. Phys.: Condens. Matter* **11**, 5845 (1999). (IF = 2.707)

9. R.G. Sharma, S. Lahiry, A. Pandey, and **Dipten Bhattacharya**, “Study of the impact of HgO addition and low-field magnetic relaxation behavior in granular high- T_c superconductors”, *Bull. Mater. Sc.* **22**, 265 (1999). (IF = 1.878)
8. Amitava Chakraborty, **Dipten Bhattacharya**, and H.S. Maiti, “Zero-field resistivity anomaly and low-field response of the canted antiferromagnetism in unsubstituted and Ba-substituted $\text{LaMnO}_{3+\delta}$ within the insulating regime”, *Phys. Rev. B* **56**, 8828 (1997). (IF = 3.908)
7. M. Pal, P. Brahma, D. Chakravorty, **D. Bhattacharya**, and H.S. Maiti, “Preparation of nanocrystalline barium hexaferrite in a glass medium”, *Nanostruct. Mater.* **8**, 731 (1997).
6. **Dipten Bhattacharya**, H.S. Maiti, and G.C. Das, “Role of superconductor-normal metal-superconductor proximity junctions in governing the intergranular flux pinning in electrophoretically deposited Y-Ba-Cu-O films”, *Jpn. J. Appl. Phys.* **36**, 669 (1997). (IF = 1.491)
5. M. Pal, P. Brahma, D. Chakravorty, **D. Bhattacharya**, and H.S. Maiti, “Nanocrystalline nickel-zinc ferrite prepared by glass-ceramic route”, *J. Magn. Magn. Mater.* **164**, 256 (1996). (IF = 2.717)
4. **Dipten Bhattacharya**, A. Sen, S.N. Roy, and H.S. Maiti, “Unusual thickness dependence of the magnetic critical current density for granular high- T_c films”, *Phys. Rev. B* **51**, 11819 (1995). (IF = 3.908)
3. **Dipten Bhattacharya**, P. Choudhury, S.N. Roy, and H.S. Maiti, “Analysis of the thickness dependence of critical current density for electrophoretically deposited $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ films”, *J. Appl. Phys.* **76**, 1120 (1994). (IF = 2.286)
2. **Dipten Bhattacharya** and H.S. Maiti, “Role of Sb doping in governing the thermal conductivity of Bi-Pb-Sr-Ca-Cu-O superconductors between 10 and 150K”, *Physica C* **216**, 147 (1993). (IF = 1.534)
1. **Dipten Bhattacharya**, S.N. Roy, R.N. Basu, A. Das Sharma, and H.S. Maiti, “Critical current in electrophoretically deposited thick films of YBCO superconductor”, *Mater. Lett.* **16**, 337 (1993). (IF = 3.019)

In National/International Conference Proceedings

4. T. Chatterji, B. Ouladdiaf, P.F. Henry, and **Dipten Bhattacharya**, “Magnetoelastic effects in multiferroic YMnO_3 and HoMnO_3 ”, presented at the 22nd International Congress of the *International Union of Crystallography (IUCr)*, Madrid, Spain, 22-30 August, 2011.

3. P. K. Biswas, S. Kundu, S. Jana, N. Das, and **Dipten Bhattacharya**, “Photoluminescence of magnetic ion doped nanostructured indium tin oxide films”, in *Advances in Optical Materials*, OSA Technical Digest (Optical Society of America, 2009) paper: awa4.
(<http://www.opticsinfobase.org/abstract.cfm?URI=AIOM-2009-AWA4>)
2. B. Ghosh, B. Bandyopadhyay, A. Poddar, P. Mandal, **Dipten Bhattacharya**, P. Choudhury, and U. Sinha, “Emerging Superconducting Materials : Electrical resistivity, thermoelectric power and thermal conductivity of MgB_2 ”, *Solid State Phys. (India)* **44**, 607 (2001).
1. R.N. Basu, B. Guettler, D. Schiel, **Dipten Bhattacharya**, S.N. Roy, and H.S. Maiti, “Electrophoretically deposited thick films of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ and their characterization by Raman spectrometry”, in *Applied Superconductivity*, edited by H.C. Freyhardt (DGM Informationsgesellschaft, Oberursel, 1993) Vol. 1., p. 629.

* marked papers have been submitted as corresponding author