

ANNEXURE - I

LIST OF PUBLICATION

- 1) Influence of major parameters on the sensing mechanism of semiconductor metal oxide based chemiresistive gas sensors: A review focused on personalized healthcare
S Das, S Mojumder, D Saha, **M Pal***
Sensors and Actuators B: Chemical **352**, (2022) 131066
- 2) Enhanced blue photoluminescence of cobalt-reduced graphene oxide hybrid material and observation of rare plasmonic response by tailoring morphology
N Singh, JR Ansari, **M Pal**, A Das, D Sen, D Chattopadhyay, A Datta
Applied Physics A **127** (7) (2021) 1-12
- 3) Effect of annealing on the defect mediated blue phosphorescence in ZnO nanocrystals, Sagnik. Das, Uttam Kumar Ghorai, Rajib Dey, Chandan Kumar Ghosh and **Mrinal Pal***.
RSC. Adv., **11** (2021) 335
- 4) Microporus copper chromite thick film based novel and ultrasensitive capacitance humidity sensor., P.L. Mahapatra, S. Das, P.P. Mondal, T.Das, D. Saha, **M. Pal***.
J. Alloys and Comp., **859** (2021) 157778
- 5) A highly sensitive cobalt chromite thick film based trace acetone sensor with fast response and recovery time for the detection of diabetes from exhaled breath., Sagnik Das, Priti Lata Mahapatra, Partha Pratim Mondal, Tanushri Das, **Mrinal Pal** and Debdulal Saha.
Mat. Chem. Phys., **262** (2021) 124291
- 6) Sol-gel derived cobalt containing Ni-Zn ferrite nanoparticles: Dielectric relaxation and magnetic property study., S. Chakrabarty, S. Bandopadhyay, **M. Pal** and A. Dutta,
Mat. Chem. Phys., **259** (2021) 124193
- 7) Novel barium hexaferrite based highly selective and stable trace ammonia sensor for detection of renal disease by exhaled breath analysis., T. Das, S. Das, M. Karmakar, S. Chakraborty, D. Saha and **M. Pal***.
Sensor and Actuator B: **325** (2020) 128765
- 8) Non-invasive monitoring of human health by exhaled breath analysis: A comprehensive review., S. Das and **M. Pal***,
J. Electrochemical Soc., **167** (2020) 037562
- 9) Synthesis and Magnetic properties of stable cobalt nanoparticles decorated reduced graphene oxide sheets in the aqueous medium., N. Singh, J.R. Ansari, **M. Pal**, N.T.K. Thanh, T. Le and A. Datta.
J. Mat. Sci: Mat. Elect., **31** (2020) 15108

- 10) **Bismuth Doped Nickel Ferrite Nanoparticles for Room Temperature Memory Devices**
Mahasweta Banerjee, A Mukherjee, S Chakrabarty, soumen basu, **M Pal***
ACS Appl. Nano. Mater., **2** (2019) 7795
- 11) Ethanol Sensing Properties of Nanocrystalline α -MoO₃
Sucheta Sau, Sonam Chakraborty, Tanushri Das and **Mrinal Pal***,
Front. Mater. **6** (2019) 6: 285. doi.org/10.3389/fmats.2019.00285
- 12) Non-invasive Monitoring of Human Health by Exhaled Breath Analysis: Comprehensive Review", Sagnik Das, **Mrinal Pal***
J. Elec. Chem. Soc., **167** (2020) 037562
- 13) Highly selective and stable acetone sensor based on chemically prepared bismuth ferrite nanoparticles
Sonam Chakraborty and **Mrinal Pal***, *J. Alloy. Comp.* **787** (2019) 1204
- 14) A Light Induced Tunable n-Doping of Ag Embedded GO/RGO Sheets in Polymer Matrix"
N. Singh, D. Kothari, J. Ansari, **M. Pal**, S. Mandal, S. Dhara and A. Datta, *J. Phys. Chem. C.* **123** (2019) 10557.
- 15) Impact of morphology on the electrical and photocatalytic property of CdS nanostructures
Sonam Chakraborty, Sucheta Sau and **Mrinal Pal***, *Mater. Today: Proceedings*, **18** (2019) 5481
- 16) Microscopic length scale of charge transport and structural properties of cobalt doped Ni–Zn ferrite nanocrystals: A structure property correlation study
S.Chakrabarty, Swagata Bandyopadhyay, A.Dutta and **M.Pal***, *Mat.Chem.Phys.*, **233** (2019) 310
- 17) Tailoring of microstructure, magnetic properties and charge carrier dynamics of YIG nanoparticles by Gd doping
S.Chakrabarty, Ankurava Sinha, A.Dutta and **M.Pal***, *J. Mag. Mag. Mater.*, **468** (2018) 215
- 18) Effect of yttrium doping on structure, magnetic and electric properties of nanocrystalline cobalt ferrites.
S. Chakraborty, A. Datta and **M. Pal***, *J. Mag. Mag. Mater.*, **461** (2018) 69
- 19) **Yttrium Doped Cobalt Ferrite Nanoparticles: Study of Dielectric relaxation and Charge Carrier Dynamics.**
Sabyasachi Chakrabarty, **Mrinal Pal*** and Abhigyan Dutta, *Ceram. Int.* **44** (2018) 14652

- 20) Highly efficient novel carbon monoxide gas sensor based on bismuth ferrite nanoparticles for environmental monitoring.
S. Chakraborty and **M. Pal***, *New. J. Chem.*, **42** (2018) 7188
- 21) Hedgehog ZnO/Ag heterostructure: an environment-friendly rare earth free potential material for cold-white light emission with high quantum yield
Puja Bhattacharyya, Swarupananda Bhattacharjee, Manoranjan Bar, Uttam Kumar Ghorai, **Mrinal Pal**, Sujoy Baitalik and Chandan Kr. Ghosh, *Applied Physics A* **124** (2018) 782
- 22) Novel multiple phosphorescence in nanostructured Zinc oxide and calculation of correlated colour temperature.
Sagnik Das , Uttam Kumar Ghorai , Rajib Dey , Chandan Kumar Ghosh , **Mrinal Pal*** , *Phys. Chem. Chem. Phys.*, **19** (2017) 22995
- 23) [Improved sensitivity of CdS nanoparticles by virtue of calcium doping: Promising candidate for monitoring alcohol in exhale human breath](#)
S. Chakraborty and **M. Pal***, *Materials & Design*, **126** (2017) 18
- 24) [Improved ethanol sensing behaviour of cadmium sulphide nanoflakes: Beneficial effect of morphology.](#)
S. Chakraborty and **M. Pal***, *Sensor Actuator B*, **242** (2017) 1155.
- 25) Enhanced and selective acetone sensing properties of SnO₂-MWCNT nanocomposites: Promising materials for diabetes sensor.
M. Narjinary, P. Rana, A. Sen and **M. Pal***, *Materials & Design*, **115** (2017) 158
- 26) [Nanoporous \$\gamma\$ -alumina based novel sensor to detect trace moisture in high temperature and high pressure environment](#), D Saha, DK Ghara, **M Pal***, *Sensors and Actuators B: Chemical* **222**, (2016) 1043.
- 27) Enhanced magnetic properties of Mn-Ni codoped cobalt ferrite nanoparticles corroborated with microstructural analysis.
[Sabyasachi Chakrabarty](#) · **Mrinal Pal** and [Abhigyan Dutta](#), *Adv. Sc. Lett.*, **22** (2016) 89.
- 28) Novel green phosphorescence from pristine ZnO quantum dots: Tuning of correlated color temperature.
S. Das, C.K. Ghosh*, R. Dey and **M. Pal***, *RSC Advances*, **6** (2016) 236
- 29) Multifunctionality in graphene decorated with cobalt nanorods.
O. Mondal, **M. Pal**, D. Chakravorty and A. Dutta, *Materials & Design*, 101 (2016) 204

- 30) Effect of Mn and Ni codoping on ion dynamics of nanocrystalline cobalt ferrite: A structure property correlation study
S. Chakraborty, A. Dutta and **M. Pal***, *Electro. Chemica. Acta*, **184** (2015) 70
- 31) Effect of Y and Mn co-doping on multiferroic properties of nanocrystalline BFO.
A. Mukherjee, S. Basu, Nguyen TK Thanh, Luke AW Green **M. Pal*** *J. Mat. Sc.*, **50** (2015) 1891.
- 33) [Enhanced magnetic properties of doped cobalt ferrite nanoparticles by virtue of cation distribution.](#)
S. Chakraborty, A. Dutta and **M. Pal***, *J. Alloys and Comp.*, **625** (2015) 216–223
- 33) Structural, optical and electrical properties of chemically derived nickel substituted zinc ferrite nanocrystals.
S. Chakraborty, **M. Pal** and A. Dutta, *Mater. Chem. Phys.*, **153** (2015) 221
- 34) Synthesis and characterization of redox non-innocent cobalt(III) complexes of a O,N,O donor ligand: Radical generation, semi-conductivity, antibacterial and anticancer activities.
P. Ghosh, A. Roy Chowdhury, S. Kr. Saha, M. Ghosh, **M. Pal**, N.C. Murmu and P. Banerjee., *Inorg. Chimica Acta.*, **429** (2015) 99
- 35) Influence of doping on crystal growth, structure and optical properties of nanocrystalline CaTiO₃: a case study using small-angle neutron scattering.
O. Mondal, M. Pal, R. Singh, D. Sen, S. Mazumder and **M. Pal***, *J. Appl. Cryst.* (2015) **48**, 836.
- 36) Reduced graphene oxide synthesis by high energy ball milling, O. Mondal, S. Mitra, **M. Pal**, A. Dutta, S. Dhara, D. Chakravorty, *Mater. Chem. Phys.*, **161** (2015) 123
- 37) Enhanced Magnetodielectric and Multiferroic Properties of Er-doped Bismuth Ferrite Nanoparticles Materials Chemistry and Physics.

A. Mukherjee, M. Banerjee, S. Basu, M.D. Mukadam, S.M. Yusuf, **M. Pal***, *Mater. Chem. Phys.*, **162** (2015) 140.
- 38) Giant magnetodielectric and enhanced multiferroic properties Sm-doped BiFeO₃ nanoparticles.
A. Mukherjee, S. Basu, P.K. Manna, S.M. Yusuf and **M. Pal***, *J. Mater. Chem. C*, **2** (2014) 5885.
- 39) Ethanol and acetone sensing properties of Mg-Zn ferrite nanoparticulate chemiresistive sensor
M. Karmakar, P. Das, B. Mondal, **M. Pal** and K. Mukherjee, *J. Mater. Sc.*, **49** (2014) 5766.
- 40) Enhanced magnetic and electric properties of Y and Mn co-doped BiFeO₃ nanoparticles.

- A.Mukherjee, M. Banerjee, S.Basu, N.TK Thanh, Luke AW Green and **M. Pal**, *Physica B*, **448** (2014) 199-203.
- 41)** Enhancement of multiferroic properties of nanocrystalline BiFeO₃ powder by Gd doping.
A.Mukherjee, S.Basu, P.K. Manna, S.M. Yusuf and **M. Pal***, *J. Alloys. Comp.*, **598** (2014) 142
- 42)** Acetone and Ethanol sensing of barium hexaferrite particles: A case study considering the possibilities of non-conventional hexaferrite sensor.
M. Karmakar, B. Mondal, **M. Pal** and K. Mukherjee, *Sensor and Actuator B*, **190** (2014) 627.
- 42)** Gadolinium substitution induced defect restructuring in multiferroic BiFeO₃: Case study by positron annihilation spectroscopy.
A.Mukherjee, M. Banerjee, S.Basu, PGM. Nambissan and **M. Pal***, *J. Phys.D.: Appl. Phys.*, **46** (2013) 495309
- 44)** Ultrafine narrow dispersed copper nanoparticles synthesized by a facile chemical reduction method.
O. Mondal, A. Datta, D. Chakravorty and **M. Pal***, *MRS Communication*, **3**, (2013) 91.
- 45)** Improved and unusual magnetic properties of ZnO nanorings.
Oindrila Mondal, Nguyen TK Thanh, Luke AW Green and **Mrinal Pal***
Funct. Mater.Lett. **6** (2013) 1350049.
- 46)** Unusual and strong emission in visible region from Mn²⁺ and Y³⁺ doped ZnO nanocrystals,
O. Mondal and **M. Pal***, *Optical Materials*, **35** (2013) 1520.
- 47)** Effect of Mn doping on microstructure and optical properties of nanocrystalline ZnO.
M. Karmakar, O. Mondal, B. Roy, P.K. Pal and **M. Pal***, *NANO*, **8** (2013) 1350058.
- 48)** Effect of Ni-Co codoping on structure and electrical properties of multiferroic BiFeO₃ nanoparticles
SK. M. Hossain, A.Mukherjee, S.Basu and **M. Pal***, *Micro and Nano Letters*, **8** (2013) 374.
- 49)** Enhanced multiferroic properties in nanocrystalline BiFeO₃ through La doping.
SK. M. Hossain, A.Mukherjee, S. Chakraborty, S.Basu, **M. Pal***, *Mater. Focus*, **2** (2013) 92.
- 50)** Preparation of Polystyrene-Clay nanocomposite by Solution Intercalation Technique P. K. Paul, S. A. Hussain, D. Bhatnagar and **M. Pal**, *Bul. Mater. Res.***36** (2013) 361.
- 51)** Ni-substitution induced inversion in ZnFe₂O₄ seen by positron annihilation.
P.M.G. Nambissan, O. Mondal, S. Chakrabarty and **M. Pal**, *Mater. Sci. Forum*, **733**

- (2013) 219.
- 52) Effect of Yttrium doped on Electrical transport properties of BiFeO₃ nanoparticles. A. Mukherjee, S. Basu, G. Chakraborty and **M.Pal**, *J.Appl.Phys.* **112** (2012) 014321.
 - 53) Effect of yttrium doping on multiferroic BFO nanoparticles, A. Mukherjee, SK. M. Hussain, **M.Pal** and S. Basu, *Applied Nanoscience*, **2** (2012) 305.
 - 54) Effect of neodymium doping on structure, electrical and optical properties of nanocrystalline ZnO B. Roy, S. Chakrabarty, O. Mondal, **M. Pal** and A Dutta, *Mater. Char.* **70** (2012) 1.
 - 55) Preparation and characterization of borate glass containing manganese and zinc oxide, Manisha Pal, B. Roy and **M. Pal**^{*}, *J. Modern. Phys.*, **2** (2011) 1062.
 - 56) Mn substitution effects and associated defects in ZnO nanoparticles studied by positron annihilation. B. Roy, B. Karmakar, P.M.G. Nambissan and **M. Pal**^{*}, *NANO* **6** (2011) 173.
 - 57) Effects of annealing on structure and optical properties of Mn-substituted ZnO nanoparticles, B. Roy, O. Mondal, D. Sen, J. Bahadur, S. Mazumder and **M. Pal**^{*}, *J. Appl. Cryst.* (2011). **44**, 991.
 - 58) Strong and unusual violet blue emission in ring-shaped ZnO nanocrystals. O. Mondal and **M. Pal**^{*}, *J. Mater. Chem*, 2011, **21**, 18354, DOI: 10.1039/C1JM13083H.
 - 59) "Microstructure, Mossbauer and optical characterizations of nanocrystalline -Fe₂O₃ synthesized by chemical route," Abhijit Banerjee, Soumitra Patra, Mahuya Chakrabarti, Dirtha Sanyal, **Mrinal Pal** and Swapan K. Pradhan, *ISRN Ceramics*, doi:10.5402/2011/406094.
 - 60) Adsorption of a Cationic Laser Dye onto Polymer/Surfactant Complex Film Pabitra Kumar Paul; Syed Arshad Hussain; Debajyoti Bhattacharjee ; **Mrinal Pal**, *Chin. J. Chem. Phys.*, **24** (2011) 348
 - 61) Microstructural analysis of chemically prepared nanocrystalline Mn-doped ZnO using modified Rietveld method. B. Roy, O. Mondal, A. Deb, S.P. Sengupta and P. Chatterjee, **M. Pal**^{*}, *NANO*, **6** (2011) 379
 - 62) Enhanced magnetic properties in hydrothermally synthesized Mn doped BiFeO₃ nanoparticles, S. Basu, SK M Hossain, D. Chakravorty and **M Pal**^{*}, *Current Appl. Phys.* **11** (2011) 976.
 - 63) Nanocrystalline GdFeO₃ through solid state reaction route: Structural and Magnetic study, O Mondal, SK M Hossain, B Roy, and **M Pal**^{*}, *Func. Mater. Lett.*, Vol. **4**, No. 3 (2011) 249.

- 64) Nanocrystalline multiferroic materials
S. Sutradhar and **Mrinal Pal***, *Science & Society*, **9**(2) (2011) 9.
- 65) Magnetodielectric properties of nanodisc bismuth ferrite grown within Na-4 mica nanochannels.
P. Hajra , **M. Pal**, A. Datta, D. Chakravorty, V. Meriakri and M. Parkhomenko
J. Appl. Phys., **108** (2010) 114306.
- 66) Superparamagnetic Fluorescent Nickel-Enzyme Nanobioconjugates: Synthesis and characterization of a novel multifunctional biological probe.
Pramod Kumar Verma, Anupam Giri, Nguyen TK Thanh, Le Duc Tung, Oindrila Mondal, **Mrinal Pal**, Samir Kumar Pal, *J. Mater. Chem.*, **20** (2010) 3722.
- 67) Structural characterization of manganese substituted nanocrystalline zinc oxide using small angle neutron scattering and high resolution transmission electron microscope
B. Roy, B. Karmakar, J. Bahadur, S. Mazumder D. Sen and **M. Pal***, *J. Appl. Cryst.* **42** (2009) 1085.
- 68) Mn doping in ZnO nanoparticles: effects investigated by positron lifetime and Doppler broadening studies
B. Roy, B. Karmakar, **M. Pal**, and P.M.G. Nambissan, *J. Phys. Status. Solidi (C)* **6** (11) (2009) 2572.
- 69) Effect of Iron Substitution on Structure and Optical Properties of Nanocrystalline CaTiO₃,
A. Bandyopadhyay, S. Mondal, M. Pal, U. Pal and **M. Pal***, *J. Nano Res.*, **3** (2008) 123.
- 70) Magnetic properties of Hydrothermally synthesized BiFeO₃ Nanoparticles,
S. Basu, **M. Pal** and D. Chakravorty, *Journal of Magnetism and Magnetic Materials*, **320** (2008) 3361.
- 71) Magnetic and Transport Properties of Nanostructured Ferric Oxide Produced by Mechanical Attrition.
P. Bramha, S. Dutta, **M. Pal** and D. Chakravorty., *J. Appl. Phys.* **100** (2006) 044302
- 72) Order-disorder transition of nanocrystalline Ni₃Al prepared by chemical route
S.K. Pradhan, A. Dutta, **M. Pal** and D. Chakravorty, *Physica E*, **31** (2006) 224
- 73) Electrical conductivity in nanostructured magnetite-hematite composites produced by mechanical milling.
S. Dutta, S. K. Manik, **M. Pal**, S. K. Pradhan, P. Bramha and D. Chakravorty, *J. Mag. Mater.*, **288** (2005) 306.
- 74) Nanocrystalline CaTiO₃ prepared by soft chemical route.
S. K. Manik, S. K. Pradhan and **M. Pal.**, *Physica E*, **25** (2005) 421.
- 75) Nanocrystalline Mn-doped ZnO by chemical route.
Manisha Pal and **M. Pal***, *Jpn. J. Appl. Phys.*, **44** (2005) 7901.

- 76) Borate based spintronic materials in bulk form above room temperature.
Manisha Pal and **M. Pal***, *J. Sur. Sc. Tech.*, **21** (2005) 91.
- 77) Synthesis of Nanocomposites Comprising Iron and Barium Hexaferrites
M. Pal, S. Bid, S.K. Pradhan, D. Das and D. Chakravorty, *J. Mag. Mag. Mater.*, **269**(2004) 42.
- 78) Phase Transition of Magnetite by Mechanical Alloying, S.Dutta, **M. Pal**, P.Brahma, S. Pradhan and D.Chakravorty, *Ind. J. Phys.*, **78A** (2) (2004) 201
- 79) Nanocrystalline magnetic alloys and ceramics (Review article)
M. Pal and D. Chakravorty, *Sadhna*, **28** (2003) 283.
- 80) Magnetic Nanocomposites
D. Chakravorty, S. Banerjee, **M. Pal**, P. Brahma, S. Roy, B. Roy and D. Das
Ind. J. Phys., (special issue) 2002, 43-61.
- 81) X-ray Characterization of Nanocrystalline Ni₃Fe
P. Bose, S. Bid, S.K. Pradhan, **M. Pal** and D. Chakravorty, *J. Alloy. Comp.*, **343/1-2** (2002) 192-198.
- 82) Size dependent magnetic properties of Mn_{0.5}Zn_{0.5}Fe₂O₄
K. Mandal, S. Pan Mandal, S. Chakraverty, P. Agudo, **M. Pal**, and D. Chakravorty, *J. Appl. Phys.*, **92** (2002) 501.
- 83) Parameters effect on the crystallization of Nd:YAG laser ablated TiO₂ thin films.
M. Pal, A. Narazaki, T. Sasaki and N. Koshizaki, *J. Mat. Res.*, **16** (2001) 3158.
- 84) Preparation of Pd/TiO₂ Nanocomposite by Magnetron Sputtering
M. Pal*, Takeshi SASAKI and Naoto KOSHIZAKI, *Scripta Materialia*, **44** (2001)1817 .
- 85) A study of Nanocrystalline (Mn-Zn) ferrite in SiO₂ matrix
K. Mandal, S. Pan Mandal, P. Agudo and **M. Pal**, *Appl.Sur.Sc.*, **182** (2001) 386.
- 86) Synthesis of nanocrystalline nickel oxide by controlled oxidation of nickel nanoparticles.
D. Das, **M. Pal**, E. Traversa and D. Chakravorty, *J. Appl. Phys.*, **88** (2000) 6856.
- 87) Preparation and characterization of nanocrystalline YIG.
M. Pal*, and D. Chakravorty, *PHYSICA E* ., **5** (3) (2000) 200.
- 88) Preparation of nanocomposites containing iron and nickel zinc ferrite.
M. Pal, D. Das, S.N. Chintalapudi and D. Chakravorty, *J.Mate.Res.* **15** (2000) 683.
- 89) Preparation of disorder nonocrystalline Ni₃Fe.
A. Datta, **M. Pal** D. Das, S.N. Chintalapudi and D. Chakravorty,
J.Mag.Mag.Mater., **205** (1999) 301.
- 90) Structural study of iron borate glass containing NiO and ZnO.
M. Pal, D. Chakravorty and Ashoke Bhowmik, *J.Mater.Res.*, **13** (1998) 3286.

- 91) AC conductivity in bismuth oxide doped nickel-zinc ferrites.
M. Pal, P. Brahma and D. Chakravorty, *J.Phys.Soc.Jpn.*, **67** (1998) 2847.
- 92) Preparation of Nanocrystalline Barium Hexaferrite in a Glass Medium.
M. Pal, P. Brahma, D. Chakravorty, D. Bhattachariyya and H.S. Maiti,
NanoSTRUCTURE Mater., **8** (1997) 731.
- 93) Structure and physical properties of sodium antimony germanate glasses.
M. Pal*, *J. Mat. Res.* **11** (1996) 1831.
- 94) Nano crystalline nickel-zinc ferrite prepared by glass-ceramic route.
M. Pal, P. Brahma and D. Chakravorty, D. Bhattacharyya and H.S. Maiti,
J. Mag. Mag. Mater., **164** (1996) 256.
- 95) DC conductivity in Barium Hexaferrites Doped with Bismuth Oxide.
M. Pal, P. Brahma, B.R. Chakravorty and D. Chakravorty, *Jpn. J. Appl. Phys.*,
36 (1997) 2163.
- 96) Mixed valency character of bismuth in ferrite lattices.
M. Pal, P. Brahma, D. Chakravorty, B.R. Chakravorty, C. Anandan and S. Bera,
J. Mat. Sci. Lett., **16** (1997) 270.
- 97) Magnetic and electrical properties of nickel-zinc ferrite doped with bismuth oxide.
M. Pal, P. Brahma and D. Chakravorty, *J. Mag. Mag. Mater.* **152** (1996) 370.
- 98) Synthesis of Nanocrystalline Ni₃Cu by Sol-Gel Route.
S.K. Pradhan, A. Dutta, **M. Pal** and D. Chakravorty, *Meta. Mate. Trans*, **27A** (1996)
4213.
- 99) Magnetic properties of barium hexaferrite doped with bismuth oxide.
M. Pal, P. Brahma and D. Chakravorty and D.C. Agrawal, *J. Mag. Mag.Mater.*
147 (1995) 208.
- 100) Relaxation studies on V₂O₅-TeO₂ glasses using heterogeneous conductor model.
M. Pal, S.K. Saha and D. Chakravorty, *Bull. Mater. Sci.* **17** (1994) 411.
- 101) AC Conductivity in Bismuth Substituted Barium Hexaferrites.
M. Pal, P. Brahma and D. Chakravorty, *J. Phys. Soc. Jpn.* **63** (1994) 3356.
- 102) Synthesis, Characterization and Electrical Properties of Nd-doped Nano crystalline
Multiferroic Bismuth Ferrite
S. Basu, A. Murkherjee, SK. M. Houssain and **M. Pal**, *IEEE Explore*, Conference
volume, (2011) 228-231, doi: [10.1109/ICONSET.2011.6167960](https://doi.org/10.1109/ICONSET.2011.6167960).
- 103) Optical and Electrical Properties of Codoped Nanocrystalline Multiferroic BiFeO₃
A. Murkherjee, SK. M. Houssain, S. Basu and **M. Pal**, *AIP Con. Proc.* **1447** (2012) 315.

- 104)** Phase Transformation Study of Nd: YAG Laser Ablated TiO₂ Thin Film.
M. Pal, T. Sasaki and N. Koshizaki, 3rd NIMC International Symposium on Photoreaction Control and Photo functional Materials (PCPM) (2000) 160.
- 105)** Crystallization of laser ablated TiO₂ thin film.
M. Pal, T. Sasaki and N. Koshizaki, 2nd NIMC International Symposium on Photoreaction Control and Photo functional Materials (PCPM) (1999) 185.
- 106)** Electrical and optical properties of Gd-doped bismuth ferrite nanoparticles.
A.Mukherjee, M. Banerjee, S.Basu and **M. Pal**, *AIP Con. Proc.*, **1591** (2014) 1339
- 107)** Nanocomposite based gas sensor for non-invasive monitoring of diabetes from exhale breath.
M. Pal*, *Proc. Of Intl. Con. On Nanotechnology for Better Living*, 2016, Vol 3, No. 1, pp. 249. doi:10.3850/978-981-09-7519-7nbl16-rps-249.
- 108)** Enhanced and ultrafast visible light photo catalytic effect of bismuth ferrite nanoparticles by virtue of molybdenum doping.
Sonam Chakraborty and **Mrinal Pal***, (Submitted)
- 109)** Observation of white light by tailoring defects of pristine ZnO
Sagnik Das , Uttam Kumar Ghorai , Rajib Dey , Chandan Kumar Ghosh , **Mrinal Pal*** (submitted)

Book (chapter contributed)

- 110)** Superplastic Nanoceramics
M. Pal and D. Chakravorty, *Encyclopedia of Nanoscience and Nanotechnology*, American Scientific publishers , **10** (2004) 237.
- 111)** Borate based Nanocrystalline Magnetic Semiconductor above room temperature.
M. Pal*, *Tata McGraw Hill*, (2004) 421.
- 112)** Nanocomposite with core-shell structure,
D. Chakravorty, D. Das K. Chatterjee, S. Banerjee and **M. Pal**, *Inorganic Materials Recent Advances*, Narosa Publishing House, New Delhi, (2004) 316
- 113)** Effect of iron substitution on nanocrystalline CaTiO₃
S. Mondal, H. Dutta, S.K. Pradhan and **M. Pal***, “*Dielectrics and Ferroelectrics: Modern Perspectives*” 2008.

- 114)** Polymer-iron Oxide Based Magnetic Nanocomposites.
M. Pal and A. De, *Hybrid Nanocomposites for Nanotechnology*, Edited by
L. Merhari, **Springer**, 2009, page 455.