

DETAILED INFORMATION

RESEARCH PUBLICATIONS

INTERNATIONAL JOURNALS :

- 1.) **M. Manzar Malik**, M. Zulfequar & M. Hussain
Electrical Conductivity of a-Ga₃₀Se_{70-x}M_x
Physics Letters A 158, PP.475(1991).
- 2.) Arvind Kumar, **M. Manzar Malik**, M. Zulfequar, A,Kumar & M. Hussain
Electrical conductivity and thermoelectric power in Se_{80-x}Te₂₀In_x
Solid State Communication, 14, pp699 (1991).
- 3.) M. Hussain, Alka Batra, Arvind Kumar & **M. Manzar Malik**.
Correlation between X-Ray Absorption Edge Shift and Fermi Energy
Revista Mexicana de Fisica, 37, pp197 (1991).
- 4.) **M. Manzar Malik**, M. Zulfequar, Arvind Kumar, & M. Hussain
Effect of Indium Impurity on the electrical properties of a-Ga₃₀Se₇₀
Journal of Physics: Condensed Matter, 4 ,pp 8331 (1992).
- 5.) **M. Manzar Malik**, A N Nigam, & M. Hussain
X-Ray K-Absorption edge studies in a- Ga₃₀Se_{70-x}In_x
X-Ray Spectrometry, 21, pp193(1992).
- 6.) **M. Manzar Malik** & M. Hussain
Effect of silver on the X-Ray K-absorption edge of a-Ga₃₀Se₇₀.
Journal of Non Crystalline Solids, 170, pp312 (1994).
- 7.) Z.H.Khan, **M. Manzar Malik**, M. Zulfequar, & M. Hussain
Electrical Conduction mechanism in a-Se_{80-x}Te_xGa_x films (0<x<80).
Journal of Physics: Condensed Matter 7, pp8979 (1995).
- 8.) Z.H.Khan, **M. Manzar Malik**, M. Zulfequar, & M. Hussain
Electrical Transport Properties of Thin films of a-Se_{80-x}Ga₂₀Bi_x
Material Science and Technology, 13 ,pp 435(1997).
- 9.) Z.H.Khan, **M. Manzar Malik**, M. Zulfequar, & M. Hussain
Effect of Sb on Transport properties of Thin Films of a-Se_{80-x}Ga₂₀Sb_x
Japanese Journal of Appl. Physics 37, pp23 (1998).
- 10.) Shreyas S Pitale; Suchinder K Sharma; R.N.Dubey; M.S.Qureshi; **M. M. Malik**,
“Thermoluminescence glow curve analysis of UV irradiated long persistent CaS: Pr³⁺
phosphor through computerized glow curve deconvolution technique”, Nuclear
Instruments and Methods in Physics Research Section B: Beam Interactions with

Materials and Atoms, (**NIM-B**), **Elsevier Publishers**, Volume 266, Issue 9, , pp2027-2034 (2008). Impact Factor 2.3

- 11.) Shreyas S Pitale; Suchinder K Sharma; R.N.Dubey; M.S.Qureshi; **M. M. Malik**; TL and PL studies on defect assisted green Luminescence from Doped Strontium Sulfide Phosphor”. Journal of Luminescence, Elsevier Publishers, Volume 128, Issue 10, , pp 1587-1594 (2008).
- 12.) Suchinder K. Sharma; Shreyas S. Pitale; **M. M. Malik**; R.N.Dubey; M.S.Qureshi, “Synthesis and detailed kinetic analysis using computerized glow-curve deconvolution technique of nanocrystalline Sr₃Al₂O₆:Pr³⁺ - A new phosphor for UV applications” Physica Status Solidii (A), Wiley Publishers, Volume 205, Issue 11, pp 2695 – 2703 (2008).
- 13.) Suchinder K. Sharma; Shreyas S. Pitale; **M. M. Malik**; R. N. Dubey; M. S. Qureshi, “Synthesis and Detailed Kinetic Analysis of Sr₄Al₁₄O₂₅:Eu²⁺ Phosphor under Black Light Irradiation”, Radiation Effects and Defects in Solids, Taylor & Francis Publishers, Volume 163, Issue 9, pp 767-777 (2008).
- 14.) Suchinder K Sharma, Shreyas S Pitale, **M. M. Malik**; R. N. Dubey, M.S.Qureshi; “Luminescence studies on the blue–green emitting Sr₄Al₁₄O₂₅:Ce³⁺ phosphor synthesized through solution combustion route”, Journal of Luminescence, Elsevier Publishers, Volume 129, Issue 2, , pp 140-147 (2009).
- 15.) Shreyas S Pitale; Suchinder K Sharma, R.N.Dubey, M.S.Qureshi, **M. M. Malik**; “Luminescence behavior of SrS:Pr³⁺ micron-sized phosphor fabricated through chemical co-precipitation route and post-annealing processes”. Optical Materials, Elsevier Publishers, Volume 31, Issue 6, , pp 923-930 (2009).
- 16.) Lubna Hashmi, M.S.Qureshi, R.N.Dubey, **M.M.Malik**, Ishrat Alim, A.H.Siddiqui, Spectroscopic Analysis and Synthesis of Wide Band Gap CdS Quantum Dots Using Colloidal Synthesis Technique at low temperature Advanced Materials Research Trans Tech Publications, Switzerland Vol. 67 pp 191-196 (2009) ISBN: 978-0-87849-328-9. Impact Factor: 0.85
- 17.) Suchinder K Sharma, Shreyas S Pitale, **M Manzar Malik**; R N Dubey, M.S.Qureshi, “Spectral and Kinetic Characterization of Orange-Red Emitting Sr₃Al₂O₆:Eu³⁺/Sm³⁺ Phosphor”, Journal of Alloys and Compounds, Elsevier Publishers, Volume 482, Issues 1-2, 12, pp 468-475 (2009).
- 18.) Suchinder K. Sharma , Shreyas S. Pitale, **M. Manzar Malik**, R.N. Dubey, M.S. Qureshi, Siddharth Ojha “ Influence of fuel/oxidizer ratio on lattice parameters and morphology of combustion synthesized ZnO powders”. Physica ‘B’, Elsevier Publishers, 405 pp866-874 (2010). Impact Factor : 1.28

- 19.) Shreyas S. Pitale, Suchinder K. Sharma, R.N. Dubey, M.S. Qureshi, **M.M. Malik**, “Spectral and kinetic characterization of CaS:Pr³⁺ phosphor synthesized through chemical co-precipitation route and post annealing process”, *Optical Materials*, Elsevier Publishers, Volume 32, Issue 3, pp 461-468 (2010).
- 20.) Prabha Sana, **M. M Malik**, M.S. Qureshi Synthesis and Characterization of Mn²⁺ doped ZnS Nanoparticles Capped with Thio Glycolic Acid”. . *American Institute of Physics*, Volume 1276, 2010, pp. 76-81 doi: 10.1063/1.3504345
- 21.) Prabha Sana, **M. M Malik**, M.S. Qureshi “Raman Scattering of Surface Functionalized Manganese Doped ZnS Colloidal Quantum Dots”. *American Institute of Physics - Volume 1313*, , pp. 209-211 (2010)doi: 10.1063/1.3530492
- 22.) Suchinder K Sharma, Shreyas S Pitale, **M Manzar Malik**; T K Gundu Rao, Santa Chawla, R N Dubey, M S Qureshi; “Spectral and Defect Analysis of Cu Doped Combustion Synthesized New SrAl₄O₇ Phosphor”. *Journal of Luminescence*, Elsevier Publishers, Volume 130, Issue 2, Pages 240-248(2010).
- 23.) Synthesis and Characterization Of Silver Sulfide Nanoparticles Of Various Morphologies Using Chitosan As Stabilizer Lubna Hashmi , **M.M.Malik** , M.S.Qureshi , R.N. Dubey, Ishrat Alim and A.H. Siddiqui Published in *American Institute of Physics* Vol. 1276 pp 62 – 69 (2010).doi: 10.1063/1.3504343, **ISSN**: 15517616, H Index: 25
- 24.) Sonal Shrivastava, **M.M.Malik** and K.R.Pardasani, SVM Model for identification of Human GPCRs *Journal of Computing*, Vol 2 Issue2 pp1-4(2010) **ISSN**: 25159617
- 25.) Suchinder Sharma & **M.Manzar Malik**, Single step synthesis of Ce³⁺ doped CaAl₂O₄ and CaAl₄O₇ systems *Materials Letter* (Elsevier). Vol 65(10)pp1451-1453 (2011) doi :10.1016/j.matlet.2011.02.033
- 26.) Achamma George, Suchinder Sharma , Santa Chawla, M.S.Qureshi & **M.M.Malik** “X-ray Diffraction and photoluminescence studies of Ce doped ZnO nanocrystals. *Journal of Alloys & Compounds*. 509 pp5942-5946 (2011).
- 27.) Sonali Saha, **M.M.Malik**, M.S.Qureshi “Structural studies of silver nano particle using ocimum leaf extract via green synthesis” *International Journal of Applied Engineering* Eureka Press, Vol.2 pp148-152 (2012).
- 28.) Sonali Saha, **M.M.Malik**, M.S.Qureshi, Characterisation and synthesis of silver nano particle using leaf extract of epipremnum aureum” *International Journal of Nanomaterials and Biostructures* Vol. 2 (1), pp 1-4- (2012).

- 29.) Lubna Hashmi, Prabha Sana , **M.M.Malik**, A.H. Siddiqui , M.S.Qureshi, “Novel Fork Architectures of Ag₂S Nanoparticles Synthesized Through In-Situ Self-Assembly Inside Chitosan Matrix” Journal of Nano Hybrids, Trans Tech Publications, Switzerland Vol. 1, pp 23-43 (2012) ISSN:1687-4110
- 30.) Prabha Sana , Lubna Hashmi, **M.M.Malik**, M.S.Qureshi, R.N.Dubey, “Luminescence and Morphological Kinetics of Functionalized ZnS Colloidal Nanocrystals” International Scholarly Research Network ISRN Optics Article ID 621908, pp 1-8 (2012). ISSN: 2090-7826
- 31.) Pragya Ojha, **M.M.Malik**, M.S.Qureshi, “XRD Studies on Magnetoelectrets using Type-E Orientation Pattern” **IEEE** Journal of Transactions on Dielectrics and Electrical Insulation. Vol. 19, No. 4, pp. no.1299-1304 (2012) ISSN 1070-9878 Impact factor:1.36
- 32.) Pragya Ojha, **M.M.Malik**, M.S.Qureshi, Magnetoelectret state of porous polypropylene and Investigation on Surface charge Characteristics” , IOSR Journal of Applied Physics ,Vol.1, Issue 1, pp 131-136 (2012) ISSN 2278-4861 Impact factor:1.345
- 33.) Oroosa Subohi, G S Kumar, **M M Malik**, Rajnish Kurchania,”Dielectric properties of Bismuth Titanate(Bi₄Ti₃O₁₂) synthesized by solution combustion technique” Physica B: Physics of Condensed Matter, 407(18), (2012), 3813-3817. Elseviers Publications ISSN : 0921-4526 Impact factor:1.32
- 34.) Pragya Ojha, **M.M.Malik**, M.S.Qureshi, “Magnetoelectret Behaviour of porous Polytetrafluoroethylene under uniform and nonuniform magnetic field” Middle-East Journal of Scientific Research Vol.13 (10) pp1399-1405, (2013) WASJ (World Applied Sciences of Journals, ISI Journal- IDOSI Publication) ISSN 1990-9233
- 35.) Sonali Saha, **M.M.Malik**, M.S.Qureshi, Microwave synthesis of silver nano particles , NanoHybrid, Transtec Publications Vol 4 pp99-112 (2013).
- 36.) Saransh Srivastava, Oroosa Subohi, **M M Malik** “ Ferroelectric Properties of strontium bismuth titanate (SrBi₄Ti₄O₁₅) synthesized using solution combustion technique” Nano Hybrids, 3, 67-79(2013). Trans Tech Publications ISSN : 2234-9871
- 37.) Oroosa Subohi, G S Kumar, **M M Malik** “ Optical properties and preparation of Bi₁₂TiO₂₀ using combustion synthesis technique” Optik- International Journal For Light and Electron Optics 124 2963– 2965 (2013) Elseviers Publications ISSN : 0030-4026 Impact factor:0.52
- 38.) Lokesh Shastri , **M.M.Malik** M.S.Qureshi Photoluminescence Study Of ZnO-SiO₂ Nanostructures Grown In Silica Matrix Obtained Via Sol Gel MethodJournal of

- Physics and Chemistry of Solids 74(4) pp595–598 (2013) ISSN 1536-125X, Impact Factor 1.41
- 39.) Prabha Sana, Shammi Verma, K. C. Praveen, and **M. M. Malik** “In-Situ I-V Measurements of ZnS:TiO₂/p-Si Quantum Dots Hetero-Junction Photodiode under 120 MeV Au⁹⁺ Ions” **IEEE** Journal of transaction on Quantum Electronics, Vol. 49,(9), pp 770-776 (2013) ISSN. 0018-9197, Impact Factor 1.83, SCI journal
- 40.) Prabha Sana, Shammi Verma, **M. M. Malik** In Situ I-V Measurements of Ultraviolet Enhanced ZnS:TiO₂/ITO Quantum Dots Hetero-Junction Photodiode under 120 MeV Au⁹⁺ Ions”, Asian Journal of Chemistry; Vol. 25, pp. S293-S296 (2013), SCI Journal ISSN. 0970-7077,
- 41.) Prabha Sana, Shammi Verma and **M.M. Malik**, In-situ I-V measurements of ultraviolet enhanced ZnS:TiO₂/n-Si quantum dots hetero-junction photodiode under 120 MeV Au⁹⁺ Ions” **IEEE** journal of Transaction on Device and Material Reliability, No. 3, Vol 13, , pp. 407-412 (2013) ISSN: 1530-4388. Impact Factor 1.516
- 42.) M Trihotri, D Jain, UK Dwivedi, FH Khan, **MM Malik**, MS Qureshi
Effect of silver coating on electrical properties of sisal fibre-epoxy composites
Polymer bulletin 70 (12), 3501-3517
- 43.) Oroosa Subohi, Lokesh Shastri G S Kumar, **M M Malik**, Rajnish Kurchania “Study of Maxwell–Wagner (M–W) relaxation behavior and hysteresis observed in bismuth titanate layered structure obtained by solution combustion synthesis using dextrose as fuel” Materials Research Bulletin 49 651-656 (2014) Elseviers Publications ISSN : 0025-5408 Impact factor:2.141
- 44.) Oroosa Subohi, G S Kumar, **M M Malik**, Rajnish Kurchania “Synthesis of bismuth titanate with urea as fuel by solution combustion route and its dielectric and ferroelectric properties” Optik- International Journal For Light and Electron Optics 125 (2014) 820– 823 Elseviers Publications ISSN : 0030-4026 Impact factor:0.52
- 45.) Prabha Sana, Shammi Verma and **M. M. Malik**, Effect of Heavy Ion Irradiation on Self Assembled Pr³⁺ doped ZnS/TiO₂ Nanocrystals” Mater. Res. Express IOP Vol.1 pp (1-11)(2014) doi: 10.1088/2053-1591/1/1/015027 ISSN No. 2053-1591 SCI Journal
- 46.) Prabha Sana, Shammi Verma, **M.M. Malik**, and M. Ramrakhiani “High Field Conductivity and Brightness Measurements of Pr³⁺ Doped ZnS/ TiO₂ Core-Shell Nanocrystals”, **IEEE** journal of Transaction on Nanotechnology Issue 99,13(2) 254-260. , (2014) ISSN 1536-125X, Impact Factor 1.80,

- 47.) Niraj Kumar Singh, Lubna Hashmi and **M.M. Malik** Nitrogen doped p-type ZnO nanostructures: synthesis and characterization Accepted for Publication in International Journal of Latest Trends in Engineering and Technology Vol. 3 issue 4 pp145-153 (2014) ISSN No 2278-621X. Impact Factor: 0.7
- 48.) V Kabra, L Aamir and **M M Malik** Low cost, p-ZnO/n-Si, rectifying, nano heterojunction diode: Fabrication and electrical characterization Beilstein Journal of Nanotechnology 5 (1), 2216-2221 (2014)
- 49.) Prabha Sana, Shammi Verma and **M. M. Malik** ,Optical and Structural Investigations of Manganese Doped ZnS/SiO₂ Core-Shell Nanostructure”, International Journal of Nano Science, 14 (3), 1-7 (2015).
- 50.) Oroosa Subohi, G S Kumar, **M Manzar Malik**, Rajnish Kurchania Study of influence of fuel on dielectric and ferroelectric properties of bismuth titanate ceramics synthesized using solution based combustion technique" Mater. Res. Express Vol.2 IOP publishing 2 (3), 036302 (2015) .
- 51.) O Subohi, R Singh, GS Kumar, **M M Malik**, R Kurchania
Impedance analysis and dielectric properties of Ce modified bismuth titanate lead free ceramics synthesized using solution combustion route
Journal of Materials Science: Materials in Electronics 26 (11), 9122-9133 (2015)
- 52.) S Kumar, R Purohit, **M M Malik**
Properties and Applications of Polymer Matrix Nano Composite Materials Materials Today: Proceedings 2 (4), 3704-3711 (2015) .
- 53.) V Kabra, L Hashmi, **M M Malik** Fabrication and Characterization of Solution Processed n-ZnO/p-Si Nano Heterojunction Diode
Materials Today: Proceedings 2 (9), 4544-4549 (2015) .
- 54.) M Shafeeq, GK Gupta, Hirshikesh, **M M Malik**, OP Modi
Effect of milling parameters on processing, microstructure and properties of Cu–Al–Ni–Ti shape memory alloys.
Powder Metallurgy 58 (4), 265-272 (2015).
- 55.) M Trihotri, UK Dwivedi, FH Khan, **M M Malik**, MS Qureshi Effect of curing on activation energy and dielectric properties of carbon black–epoxy composites at different temperatures. Journal of Non-Crystalline Solids 421, 1-13 (2015) .
- 56.) P Ojha, MS Qureshi, **MM Malik**
Magnetolectrets prepared by using temperature gradient method
AIP Advances 5 (5), 057116 (2015).

- 57.) O Subohi, GS Kumar, **MM Malik**, R Kurchania
Study of electrical and ferroelectric properties of Bi₃. 4Ce₀. 6Ti₂. 4Zr₀. 6O₁₂ ceramics
Journal of Materials Science: Materials in Electronics 26 (12), 9342-9349 (2015).
- 58.) SK Sharma, **MM Malik**
Temperature dependent emission characteristics of monoclinic YBO 3: Eu 3+/Tb 3+ phosphor
Journal of Luminescence 173, 231-236 (2016).
- 59.) P K Patel, **MM Malik**, T Gupta
Optimization Techniques for High Performance 9T SRAM Cell Design. Proceedings of First International Conference on Information and Communication Technology for Intelligent System ,
Springer International Publishing Vol.(1) 269-279 (2016).
- 60.) O Subohi, GS Kumar, **MM Malik**, R Kurchania Effect of B-site isovalent doping on electrical and ferroelectric properties of lead free bismuth titanate ceramics
Journal of Physics and Chemistry of Solids 93, 91-99 (2016).
- 61.) O Subohi, CR Bowen, **MM Malik**, R Kurchania Dielectric spectroscopy and ferroelectric properties of magnesium modified bismuth titanate ceramics
Journal of Alloys and Compounds 688, 27-36 (2016).
- 62.) M Shafeeq M, GK Gupta, **M M Malik**, V Sampath, OP Modi
Influence of Quenching Methods on Martensitic Transformation and Mechanical Properties of P/M Processed Cu-Al-Ni-Ti Shape Memory Alloys
Powder Metallurgy 59 (4) 271-280 (2016).
- 63.) M Trihotri, UK Dwivedi, FH Khan, M M Malik, MS Qureshi
Study of low weight percentage filler on dielectric properties of MCWNT-epoxy nanocomposites Journal of Advanced Dielectrics, 6(3) (2016)
- 64.) V Koutu, L Shastri, M. M. Malik
Effect of NaOH concentration on optical properties of zinc oxide nanoparticles.
Materials Science Poland, 34(4) 819-827 (2016)
- 65.) Vinita Pandey, Neha Singh, MM Malik, Fozia Z Khan
SnO₂, SnO₂: Mg and SnO₂: Ni Nanoparticles Based Luminescence Ammonia Sensors, Materials Focus 6(3) 359-363 (2017).
- 66.) Nitu Singh, Vinita Pandey, Neha Singh, **M. M. Malik**, Fozia Z. Haque Application of TiO₂/SnO₂ nanoparticles in photoluminescence based fast ammonia gas sensing.
Journal of Optics Volume 46, Issue 3, pp 199–203 (2017).

- 67.) Sunil Kumar, MM Malik, Rajesh Purohit
Synthesis Methods of Mesoporous Silica Materials, *Materials Today (proceedings)* 4(2) 350-357 (2017)
- 68.) V Koutu, L Shastri, M. M. Malik
Effect of temperature gradient on zinc oxide nano particles synthesized at low reaction temperatures, *Materials Research Express*, 4(3) (2017).
- 69.) UK Dwivedi, M Trihotri, SC Gupta, FH Khan, **MM Malik**, MS Qureshi
Effect of carbon nanotubes implantation on electrical properties of sisal fibre–epoxy composites
Composite Interfaces, 24(2) 111-123 (2017).
- 70.) Pramod Kumar Patel, **MM Malik and Tarun gupta**
Low Leakage CNTFETs Based 9T SRAM Cells Using Dual-Chirality and Multi-Vt Technology. *J. Nanoelectronics and Optoelectronics* Vol.13(1) pp45-54 (2018).
- 71.) Pramod Kumar Patel, **MM Malik and Tarun gupta**
Reliable high-yield CNTFET-based 9T SRAM operating near threshold voltage region. *Journal of Computational Electronics* 17 (2), 774-783 (2018).
- 72.) Siddiqui Hafsa, Para Mohammad Ramzan, Qureshi M S, **Malik M M**, Haque Fozia Z
Studies of structural, optical, and electrical properties associated with defects in sodium-doped copper oxide (CuO/Na) nanostructures. *Journal of Materials Science* 53 (12), 8826–8843 (2018)
- 73.) H Siddiqui, MR Parra, **MM Malik**, FZ Haque
Structural and optical properties of Li substituted CuO nanoparticles.
Optical and Quantum Electronics 50 (6), 260 (2018)
- 74.) V Koutu, O Subohi, L Shastri, **MM Malik**
Study the effect of dip in reaction temperature on thermal and electrical properties of ZnO nanoparticles *Advanced Powder Technology* 29 (9), 2061-2069 (2018)
- 75.) S Kumar, S Rajawat, R Purohit, **MM Malik**
Optical studies of MWCNT doped boron carbon oxynitride (BCNO) nano composite phosphor material *Optik* (Accepted)

Book Chapters :02

1. Advances in Material Science , The Effect of A-site and B-site Isovalent doping in Bismuth Titanate Ceramics on its Dielectric and Ferroelectric Properties , Volume 29, pp 237-259 (2017).
2. Synthesis, Properties, and Advanced Applications, Effect of Concentration and Temperature on ZnO Nanoparticles Prepared by Reflux Method” in “Polymeric and Nanostructured Materials” Padinjakkara. (ISBN: 9781771886444); Apple Academic Press, NJ, USA (in production). Accepted June (2017)

Book : 01

1. Silver Nanoparticles: Properties, Synthesis techniques, Characterizations, Antibacterial and Anticancer studies. ASME Press, New York, USA (2018)

Patents : 02

1. Method of Biological Synthesis of Zinc Oxide (ZnO) Nanoparticles Patent Application No. 201721023873 , **published on 22.09.2017 Patent office journal issue no. 38/2017.**
2. Method for Synthesis of Metal-Oxide Nanoparticles by Temperature Gradient Co-Precipitation Technique Patent Application No. 201721023712 (Applied 2017, controller Genral of Patents & Trade Mark , Intellectual Property India)

Ph.D. Thesis Supervision/Guidance**Ph.D GIUED**

S.No.	Name of Student	Title	Year of Award
1	Mr. Shreyas Pitale	Luminescence Mechanism of Pr ³⁺ Doped Alkaline Earth Based Phosphors	2009
2	Mr. Suchinder Sharma	Studies on Spectral and Defect Aspects of Combustion Synthesized Sr-Al-O Systems	2010
3	Ms. Lubna Hashmi	Synthesis & Characterization of Functionalized Semiconductor nanocrystals of Silver Based Chalcogenides	2011
4	Mr. M.A.Rizvi	Enhancing routing efficiency using Agents	2011
5	Ms. Achamma George	Investigation on Morphological and optical properties of oxide based semiconductor nanomaterials	2012
6	Mr. Ravi Kant Kapoor	Performance Analysis of various routing mechanism with varying load balance	2012
7	Ms. Prabha Sana	Investigations on Swift heavy ions irradiated ZnS colloidal nanocrystals for photodevices.	2013
8	Ms. Pragya Ojha	Investigations on magnetoelectrets of porous polypropylene and polytetrafluoroethylene	2013
9.	Mr. Lokesh Shastri	Synthesis and characterization of ZnO nanostructures for various engineering applications.	2015
10	Ms. Sonali Saha	Biosynthesis and characterization of Ag and Cu nano particles	2015
11	Ms. Oroosa Subohi	Synthesis and characterization of Bismuth layer structured ferroelectrics	2015
12	Mr. Vaibhav Koutu	Solution Based Synthesis of ZnO Nanoparticles For Optoelectronic and Bio-Medical Applications	2017
13	Mr. Muhamed Shafeeq M.	Influence of Processing Parameters and Chemical Composition on the Properties of Cu-Al based Shape Memory Alloys	2017

M.Tech.Thesis Supervision/Guidance

Details of the M.Tech. (Nanotechnology) Thesis Guided:

S.NO.	Title	Name of Student	Year of Award
1.	Synthesis and Characterization of Copper Decorated Multiwalled Carbon Nanotubes	Deepa Kumari	2008
2.	Synthesis and Characterization of Nickel Decorated Multiwalled Carbon Nanotubes	Sadia Nouman	2008
3.	Synthesis, Characterization and Decoration of Multiwalled Carbon Nanotubes	Arshali Sasi	2008
4.	Fabrication and Characterization of Organic Semiconductor Based Solar Cells and Gas Sensors	Pratik Athe	2009
5.	Grafting of Organic Mono/Multilayers on Silicon for Molecular Electronics	Pushpraj Tanwar	2009
6.	X-Ray Diffraction and Morphological Studies of Combustion Synthesized Pristine ZnO	Siddharth Ojha	2009
7.	Structural Study of Nanoaprticle-Protein Complexes as Characterized by Neutron Scattering Technique	Sharad Kumar	2009
8.	CdS Quantum Dot Organic Light Emitting Diode	Deepti Shrivastava	2010
9.	Dispersion Characteristics of Ceramics Nanoparticles in Transformer Oil	Priyanka Bandwar	2010
10.	Synthesis and Characterization of <i>p</i> -Type ZnO Nanoparticles	Niraj Kumar Singh	2012
11.	Synthesis and Characterization of Ag@TiO ₂ core-shell Nanoparticles	Jyoti Prakash Jwala	2012
12.	Fabrication of Plasmonic Solar Cell using Ag ₂ S with Silver Nanoparticles	Rahul Shrivatava	2012
13.	Synthesis and Characterization of Tungsten Oxide Nanoparticles	Satyarth Tiwari	2012
14.	Synthesis of Tungsten Oxide Nanoparticles	Anuj Jain	2012
15.	Synthesis and Characterization of Mangnese Dioxide	Niraj Singh	2012
16.	Preparation and Study of TiO ₂ Nanoparticles Filled (Chitosan:PVA)-NH ₄ SCN Composite Gel Electrolytes	Ashutosh Khare	2012
17.	Synthesis and Characterization of Ag ₂ S/Ag Core-Shell Nanoparticles	Piyush Jain	2012

18.	Ag@WO ₃ core-shell nanoparticles: Synthesis, Characterization and application in solar cell	Khushdeep Singh Prajapati	2013
19.	TiO ₂ /Ag ₂ S Quantum Dot sensitized Solar Cell	Ganpati Pawar	2013
20.	ZnO@Ag ₂ S Core-shell nanostructures for Photovoltaic applications	Sreejith S.	2013
21.	Plasmonic Enhanced Ag@TiO ₂ core-shell Nanostructure based solar cell	Devesh Kumar Sharma	2013
22.	Synthesis Characterization and Fabrication of ZnO@Ag ₂ S	Bharat Bhushan Deori122105108	2014
23.	Synthesis and Characterization of Silver Iodide NanoParticles for Cloud Seeding	Ajit Kumar Singh 122105115	2014
24.	Synthesis Characterization and Application of Silicon Quantum Dots / Nanoparticles in sensitized Solar Cell	Anshul Bhaskar 122105116	2014
25.	Fabrication and Characterization of Solution Processed ZnO Based Nano Homo junction and Hetro Junction Diode	Vinay kabra 122105117	2014
26.	Investigation on n-WO ₃ and p-Ag-WO ₃ Solution processed Hetero Junction Diodes and Solar cell	Akash Gupta 122105121	2014
27.	Front end generation and Validation of Mixed Single IPs Throgh IPGEN	Arpit Gupta 122105122	2014
28.	Investigation of Role of MgO in developing Transparent Nd doped NdYAG ceramics	Neelesh Kumar Jain 132105116	2015
29.	Evaluation and Deployment of Standalone Memory Characterization solutions for Timings and IR Drop Views	Surabhee Gupta 132105102	2015
30.	SSO Simulation of High Speed IO's using IBISV5.0 Model	Anurag Dwivedi 132105105	2015
31.	Development of Standard Cell Library in DSM Technology	Animesh Kumar 132105119	2015
32.	Standard Cell Chracterization and Methodologies	Yashwant Goswami 132105104	2015
33.	CNT's Based Flexibile NO ₂ Gas Sensor for Asthma detection using Exhaled Breath	Daya Shankar Sharma 142126105	2016
34.	Low Cost STM32 based GSM controlled Smart Solar Street Light	Utkarsh Shrivastava 142126116	2016
35.	Synthesis and Characterization of TiO ₂ : Ag ₂ O Nano Composites	Rajesh Dhakar 142126106	2016
36.	Synthesis and Characterization of Al doped ZnO Thin Films	Leela Nidhi Shukla 142126108	2016

37.	Synthesis and Characterization of Praseodymium doped strontium Bismuth Titanate ($\text{SrBi}_4\text{Ti}_4\text{O}_{15}$)	Abhishek Chourasia 152126114	2017
38.	Synthesis of porous SiO_2 doped BCNO Phosphor nanomaterial for luminescence applications	Pavan Kumar Varma 152126112	2017
39.	Synthesis and Characterization of cerium doped sodium Bismuth Titanate ($\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$)	Harshit Nema 152126110	2017
40.	Synthesis and Characterization of CNT Doped BCNO Phosphor Nanomaterial	Narendra Kushwaha 152126108	2017
41.	Synthesis and Characterization of Iron doped ZnO	Shubham Yadav 162126114	2018
42.	ZnO and SnO_2 nanomaterial based gas sensors for electronic noise application	Nitin R Linge 162126103	2018
43.	Synthesis and Characterization of Cobalt based ZnO	Aishwarya Singh 162126107	2018

Sponsored projects/ Consultancy undertaken

S. No.	Sponsoring agency	Title of the project	Investigators	Period	Amount in lacs	Brief mention of progress
1	Grant in Aid MHRD	Surface Morphological Investigations of Nanomaterials Using Atomic Force Microscopy	Principal Investigator : Dr.M.M.Malik Co-investigator: Dr. Rajnish Kurchania	06 months	Rs. 51.75	Completed

Consultancy

S.No.	Name of the Project	Project Investigator(s)	Funding agency	Amount in lacs	Progress
1	Fire Fighting and Interior Design of PTDC Building	Consultants: Prof. M. M. Malik, Prof. K. K. Dhote & Prof. R. K. Nema	MPMKVVCL Bhopal	Rs. 8.35	Completed