

Curriculum vitae

PERSONAL INFORMATION



DR. NARESH KUMAR

Assistant Professor,
Department of Physics,
Motilal Nehru National Institute of Technology (MNNIT) Allahabad
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<http://mnnit.ac.in/index.php/department/sciences/physics/physicsfp>

Date of birth 05/05/1977

Nationality Indian

PROFESSIONAL EXPERIENCE

- 18/01/2008–Present Assistant Professor
Department of Physics, MNNIT Allahabad
www.mnnit.ac.in
Nature of work:
- Teaching Physics to First Year Engineering Undergraduates & Doctoral Students
- Ph.D. Supervision
- Administrative support to the Institute in various capacities
- 24/05/2014–30/05/2014 Visiting Scientist
Centre INRS-EMT (Énergie, Matériaux, Télécommunications)
1650, boulevard Lionel-Boulet Varennes (Québec), J3X 1S2 Varennes
Canada
<http://www.inrs.ca/english/homepage>
Nature of work: Research
- 01/12/2006–15/01/2008 Post –Doctoral Researcher
Department of Physics Inha University 100 inharo, Nam-gu Incheon,
22212 Incheon South Korea
<http://www.inha.ac.kr/>
Nature of work:
- Post Doctoral Research
- Supervision to Undergraduate and graduate students
- 01/08/2005–28/11/2006 Lecturer
Birla Institute of Technology and Science (BITS)
333031 Pilani (Rajasthan) (India)
www.bits-pilani.ac.in
Nature of work:
- Teaching to engineering undergraduates & Master of Science students
- Research & Support to Institute Administration

EDUCATIONAL QUALIFICATIONS

- 01/01/2000–25/07/2005 Ph.D. in Physics
Indian Institute of Technology (IIT) Bombay
Powai, 400076 Mumbai (India)
www.iitb.ac.in
- 01/07/1997–01/06/1999 M. Sc. Physics
Meerut College Meerut (Ch. Charan Singh University Meerut), Meerut (India)
- Main Subjects: Physics (specialization in solid state physics)
- Passed with 1st division
- 01/07/1994–01/06/1997 B.Sc.
D. N. College Meerut (Ch. Charan Singh University Meerut), Meerut (India)
- Main Subjects: Physics, Chemistry and Mathematics
- Passed with 1st Division

ACADEMIC ACHIEVEMENTS

- [1] Successfully completed the Continuing Education Program (CEP) certification course on Advanced Programming organized by IIT Bombay.
- [2] Qualified, the Graduate Aptitude Test in Engineering (GATE), an all India examination conducted by the National Coordinating Board - GATE, Department of Education, Ministry of Human Resources Development (MHRD), Government of India, in Physics.

RESEARCH EXPERTISE

- [1] Extensive experience with synthesis of bulk, nanoparticles, and thin films of functional oxide materials and their characterizations.
- [2] Extensive experience of different characterization techniques such as X-Ray diffraction (XRD), vibrating sample magnetometer (VSM), ferromagnetic resonance (FMR), and thickness profilometer

SETTING UP RESEARCH A LABORATORY

Contributed in the establishment and development of the **Centre for Interdisciplinary Research (CIR)** at Motilal Nehru National Institute (MNNIT) Allahabad INDIA, as **Convener** of Core & Technical Committee with an objective to provide best research and analytical facilities, in the institute for its entire undergraduate, postgraduate, research scholars and faculty members. As a Convener various research facilities for the synthesis and characterizations namely Pulsed Laser Deposition, Sputtering, Thermal Coating Unit, Spin Coater, X-ray Diffraction, Atomic Force Microscope, Scanning Electron Microscopy, Scanning Tunnelling Microscopy, Physical Quantity Measurement System, Ellipsometer, Semiconductor Parameter Analyzer, Electrochemical Workstation, Photoluminescence Spectrometer, and Particle Size Analyzer, , Vibrating Sample Magnetometer, Manual Probe Station, UV-Vis-NIR Spectrometer have been installed and are functional.

Curriculum vitae

PH.D. SUPERVISION

Total: 06 Nos
04 Awarded
01 Submitted
01 Ongoing

- [1] Dr. Richa Bhargava (2011)
Title of the Ph.D. Thesis: *Synthesis and Characterization of Undoped and Transition Metal Doped ZnO Nanostructures*
- [2] Dr. Sushant Singh (2015)
Title of the Ph.D. Thesis: *Investigations on Magnetodielectric Effect in BaTiO₃/AFe₂O₄ [A=Zn²⁺, Fe²⁺] Core/Shell Nanoparticles and Studies of PLD grown Zinc Ferrite Thin Films*
- [3] Dr. Mohit Sahni (2015)
Title of the Ph.D. Thesis: *Studies on the Effect of Doping on Dielectric, Magnetic and Magnetodielectric properties of Bismuth Ferrite*
- [4] Dr. Hariom Gupta (2016)
Title of the Ph.D. Thesis: *Study of Dehydroascorbic Acid Coated Ferrite Nanomaterials for Enhanced Magnetic Resonance Imaging and their Separation Ability* [Joint supervisor]
- [5] Mr. Aashish Jha (Thesis submitted 2016)
Title of the Ph.D. Thesis: *Studies on the effect of various process parameters on the structural and magnetic properties of pulsed laser deposited cobalt and zinc ferrite thin films* [Joint supervisor]
- [6] Mr. Amit Srivastava (Open Seminar Delivered)
Title of the Ph.D. Thesis: *Synthesis of functional oxide nanostructures and thin films synthesized by PLD and sputtering for biomedical sensing applications*

RSEARCH PROJECTS

Total Cost
INDIAN Rupees (INR)
~ 6 Million

- [1] **Funding Agency:** Department of Science & Technology (DST) Govt. of India (Under Fast Track Scheme for young scientists)
Title of the Project: *Study of magnetodielectric effect in BaTiO₃/Fe₃O₄ core/shell nanostructures.*
Duration: 2009-2012; **Status:** Completed; **Amount:** INR 2.03 Million (~₹20 Lakhs)
- [2] **Funding Agency:** DST , Govt. of India
Title of the Project: *Effect of magnetic field on the laser ablated plasma plume and on the growth of oxide thin films for the various applications*
Duration: 2010-2013; **Status:** Completed; **Amount:** Indian INR 3.42 Million (~₹34 Lakhs)
- [3] **Funding Agency:** Technical Education Quality Improvement Programme (TEQIP)- Phase II (A world bank project).
Title of the Project: *Synthesis and study of laser ablated magnetic/ metallic/ semiconducting nanostructures*
Duration: 2013-2014; **Status:** Completed; **Amount:** Indian Rupees 0.44 Million (~₹4 Lakhs)

ADMINISTRATIVE EXPERIENCE

Institute Level

- [1] **Convener, Core & Technical Committee**, Centre for Interdisciplinary Research (CIR) since Jan 2012 till date.
- [2] **Deputy Dean [Academic]** MNNIT Allahabad since August 07, 2014 - August 06, 2016.
- [3] **Member, Working Group**, Central Library MNNIT Allahabad till date.
- [4] **Faculty In-charge [Examinations]** of MNNIT Allahabad April 2013 to September 08, 2014.
- [5] **Associate Faculty In-charge, [Examinations]** MNNIT Allahabad Sept. 2011 - April, 2013
- [6] **Warden of Tagore Hostel**, MNNIT Allahabad since 2008 to February 2015.
- [7] **Deputy Centre In-charge** at MNNIT Allahabad for joint counselling for B.Tech programmes in various IITs/ISM/NITs/IITs/GFTIs for Central Seat Allocation Board (**CSAB**) for the year 2015 and 2016.
- [8] **Deputy Centre In-charge** at MNNIT Allahabad for Centralized Counselling for for M.Tech./M.Arch./M.Plan. programmes, in various National Institute of Technology NITs across the country and some Centrally Funded Technical Institutions for the year 2013 and 2014.
- [9] **Officer-in-charge**, Institute Time Table, MNNIT Allahabad May 2011 to July 2013.
- [10] **Faculty Co-ordinator** in the Institute Festivals "Aviskar 2008, 2009, and 2010", "Gnosiomania 2009", "Annual Athletic Meet 2009 and 2010" at MNNIT.
- [11] **Faculty coordinator** for BITSAT 2006 a Computer based online test for Admission to Integrated First Degree Programmes of BITS Pilani Campuses in Pilani, Goa and Hyderabad.

Departmental Level

- [1] **Convener**, Departmental Doctoral Program Committee (DDPC) 2013 to 2015.
- [2] **Officer In-Charge**, Post Graduate Laboratory 2013 to 2015.
- [3] **Convener**, Departmental Under Graduate Committee (DUGC) Since July 2012 - July 2013 & 2008 -2011.
- [4] **Officer-in-charge** for the B.Tech First year Physics Laboratory at MNNIT Allahabad since Feb 2008 till May 2010.
- [5] **Instructor-in-Charge** of B.Tech IInd Year Laboratory Course at BITS Pilani from July 2006 to Nov 2006

ORGANIZATION OF CONFERENCES ETC.

Conferences/Seminars/ Workshops

- [1] Organized an *International Conference on Multifunctional Materials, Structures and Applications (ICMMSA - 2014)*" as one of the **Organizing Secretary** during December 22-24, 2014, at MNNIT Allahabad.
- [2] Organized Technical Education Quality Improvement Programme-II (TEQIP-II) Sponsored two days Hands-On Training as **Coordinator**

Curriculum vitae

on "Multiphysics simulation using various modules of COMSOL" during September, 18-19 2014.

- [3] Organized a self financed short term course on "*Synthesis, Characterization and Applications of Nanomaterials*" as one of the **Coordinator** during July 7-12, 2014 at MNNIT Allahabad.
- [4] Organized two days workshop on '*Scientific Contributions of Acharya Prafulla Chandra Ray and Dr Jagdish Chandra Bose*', funded by TEQIP - II and INSA in collaboration with University of Allahabad and Harish Chandra Research Institute, Allahabad, at MNNIT Allahabad as one of the **Coordinator** during December 23-24, 2013.
- [5] Organized one day Workshop on "*Multiphysics Simulation Using COMSOL*" as one of the **Coordinator** on January 08, 2014 at MNNIT Allahabad.
- [6] Organized Self financed Short Term Course on "*Advanced Materials Characterization Techniques-AMCT 2013*" as one of the **Coordinator** during June 03-07, 2013 at MNNIT Allahabad.
- [7] Organized one day workshop "*Workshop on Basic Sciences: A Building Block For Engineering*" as one of the **Coordinator** on **September 03, 2011** at MNNIT Allahabad.

Short term course attended

- [1] Attended one week short term on "*Physics Lab. Organization & updating*" during 21-25 July 2014 at NITTTR Chandigarh
- [2] Attended one week short term course on "*The Role of Basic Science in Engineering Education*", during June 12-16, 2013 at MNNIT Allahabad.

Invited talks/expert Lectures

- [1] Delivered an **Invited Talk** in a self financed short term course on "*Nanostructures in Diagnostics*" organized by Department of Biotechnology MNNIT Allahabad during May 16-20, 2016.
- [2] Delivered an **Invited Talk** in "*Motivational Science Learning Camp*" supported by National Council of Science and Technology Communication, Department of Science and Technology (DST), Govt. of India and organized by Voluntary Institute for Community Applied Science [VICAS] in association with Motilal Nehru National Institute of Technology Allahabad during February 17-21, 2016.
- [3] Delivered an **Invited Talk** in a self financed short term course on "*Nanobiotechnology*" organized by Department of Biotechnology MNNIT Allahabad during January 23-29, 2015.
- [4] Delivered a **Lecture** on "*Low temperature growth of magnetic oxide thin films by pulsed laser deposition*" on May 30, 2014 at Centre INRS-EMT (Énergie, Matériaux, Télécommunications) in Varennes (Greater Montreal) Canada
- [5] Delivered an **Expert Lecture** in a Self financed Short Course on "*Modeling, Simulation, Processing and Characterization of Polymer Nanocomposite*" during July 09-13, 2013 organized by the Mechanical Engineering Department of MNNIT Allahabad.
- [6] Delivered an **Expert Lecture** in Self financed Short Course "*Advances in Materials Science and Engineering 0 AMSE 2013*" jointly organized

by the Mechanical Engineering and Physics Departments of MNNIT, Allahabad during July 15–21, 2013.

- [7] Delivered an **Expert Lecture** in Self financed Short Course "Micromanufacturing: Materials, Processes and Systems (MMPS-2013)" during July 08-12, 2013 organized by Mechanical Engineering Department and Applied Mechanics Department MNNIT Allahabad.
 - [8] Delivered an **Invited Talk** in "14th International conference-International Academy of Physical Sciences(CONIAPS-XIV) on Physical Sciences Interface with Humanity", during December 22-24, 2011 at SVNIT, Surat INDIA
 - [9] Delivered an **Invited Talk** on in "4th International Conference "INDIAS: 2010", held during September 19-20, 2010 at Nanotechnology Application Centre, University of Allahabad, Allahabad, India.
- Session Chair**
- [1] Served as Session Chair in "2nd Student's Conference on Engineering and Systems" held during April 12-14, 2013 at MNNIT Allahabad.

LIST OF PUBLICATIONS

Research papers
published in
Journals/Proceedings
49 Nos

- [1] *HRP modified pulse laser ablated ZnO nanostructure for H₂O₂ sensing*
Amit Srivastava and **Naresh Kumar**
Advanced Materials Proceedings (2016) (Accepted)
The International Association of Advanced Materialas, ISSN : 2002-4428
- [2] *Transient reflection spectra in topological nanocrystals of Bi₂Se₃, Bi₂Te₃, Bi₂Te₂Se*
Faizan Ahmad, Rashmi Singh, Rachna Kumar, Mukesh Jewariya, Chandra Shekhar, **Naresh Kumar**, Pramod Kumar
Adv. Mater. Lett. (2016) (Accepted)
Impact factor 1.46, The International Association of Advanced Materia
ISSN : 0976-3961
- [3] *Characterizing the phase purity of nanocrystalline Fe₃O₄ thin films using Verwey transition*
Murtaza Bohra, K. Eswar Prasad, Ravi Bollina, S.C. Sahoo, **Naresh Kumar**
Journal of Magnetism and Magnetic Materials 418, 137-142 (2016).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [4] *Effects of substrate temperature, oxygen pressure and laser fluence on structural and magnetic properties of pulsed laser deposited cobalt ferrite thin films*
Aashish Jha, **Naresh Kumar**, Sanjay Chaubey and Mohit Sahn
Journal of Superconductivity and Novel Magnetism 29 (3) 855-862 (2016).
Impact factor 0.909 Springer ISSN: 1557-1947
- [5] *Anomalous magnetoresistance in topological insulator Bi₂Te₃*
Pramod Kumar, Rashmi Singh, Faizan Ahmad, Chandra Shekhar, **Naresh Kumar** and Rachana Kumar
Advanced Materials Proceedings, 21-24, (2016)
ISBN:978-91-88252-01-2
- [6] *Study of pulsed laser deposited nanocrystalline cobalt ferrite thin films,*
Aashish Jha, **Naresh Kumar**, S Chaubey
Proceedings of 41st IRF International Conference, 18-21 (2016)
ISBN: 978-93-86083-00-5

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- [7] *Study of magnetic, dielectric and magnetodielectric properties of BaTiO₃/Fe₃O₄ core/shell nanocomposite*
Sushant Singh, **Naresh Kumar**, Aashish Jha, Mohit Sahni, Kil-dong Sung, J. H. Jung, and S. Chaubey
Journal of Materials Science: Materials in Electronics 26, 32-36, (2015).
Impact factor 1.569 Springer ISSN: 1573-4803
- [8] *One Pot Synthesis of Water-Dispersible DHA Coated Fe₃O₄ Nanoparticles under Atmospheric Air: Blood Cell compatibility and Enhanced Magnetic Resonance Imaging*
Hariom Gupta, P. Paul, **Naresh Kumar**, Seema Baxi and Dipti P. Das
Journal of Colloid and Interface Science 430 221-228, (2014).
Impact factor 3.368 Elsevier ISSN: 1089-7550
- [9] *Switching in structural, optical, and magnetic properties of self-assembled Co-doped ZnO: effect of Co-concentration*
R. Bhargava; P. K Sharma, S. Singh, M. Sahni, A. C Pandey, **Naresh Kumar**
Journal of Materials Science: Materials in Electronics 25 552-559 (2014).
Impact factor 1.569 Springer ISSN: 1573-4803
- [10] *Influence of Mn doping on structural, electrical and magnetic properties of (0.90) BiFeO₃(0.10) BaTiO₃ composite*
Mohit Sahni,, **Naresh Kumar**, Sushant Singh, Aashish Jha, S Chaubey, Manoj Kumar, M K Sharma
Journal of Materials Science: Materials in Electronics 25 2199-2209 (2014).
Impact factor 1.569 Springer ISSN: 1573-4803
- [11] *Effect of Sr substitution on structural, dielectric, magnetic and magnetoelectric properties of rapid liquid sintered BiFe_{0.8}Ti_{0.2}O₃ ceramics*
Mohit sahni, **Naresh Kumar**, Manoj Kumar, Sushant Singh
Journal of Materials Science: Materials in Electronics 25 4743-4749 (2014).
Impact factor 1.569 Springer, ISSN: 1573-4803
- [12] *Conduction Mechanism and Bandgap Engineering in Pulsed Laser Deposited Cd_{1-x}Pb_xS Films*
S. Kumar, A. Kumar, **Naresh Kumar**, Amarjyoti Goswami and Ramesh Chandra
Journal of Applied Physics 116 073504, 1-6 (2014).
Impact factor 2.183 AIP Publishing, ISSN: 0021-8979
- [13] *Magnetodielectric effect in BaTiO₃/ZnFe₂O₄ core/shell nanoparticles*
S. Singh, **Naresh Kumar**, R. Bhargava, M. Sahni, Kil-dong Sung, J H Jung
Journal of Alloys and Compounds 587 437-441 (2014).
Impact factor 2.999 Elsevier ISSN: 0925-8388
- [14] *Effect of Annealing Temperature on the Physical Properties of Zn-ferrite Nanoparticles*
S. Singh, **Naresh Kumar**, A. Jha, M. Sahni, R. Bhargava, A. Chawla, R Chandra, S. Kumar, S Chaubey
Journal of Superconductivity and Novel Magnetism 27 821-826 (2014).
Impact factor 0.909 Springer US, ISSN: 1557-1947
- [15] *Synthesis and Characterization of DHA/ZnO/ZnFe₂O₄ Nanostructures for Biomedical Imaging Application*
Hariom Gupta, P Paul and **Naresh Kumar**
Procedia Materials Science 5 198-203 (2014).
Elsevier ISSN: 2211-8128
- [16] *Influence of substrate temperature and oxygen Pressure on the structural and morphological properties of PLD grown ZnFe₂O₄ thin films*
Sushant Singh, **Naresh Kumar**, Mohit Sahni, Aashish Jha, Amit Srivastava, S. Chaubey
- [17] *Proceedings of the International Conference on Multifunctional Materials, Structures and Applications, 181-184 (2014).*
ISBN-13: 978-93-392-2019-8

- [18] *Catalyst free growth of ZnO nanorods using pulsed laser deposition*
Amit Srivastava, Ashish Jha, Sushant Singh & Naresh Kumar
Proceedings of the International Conference on Multifunctional Materials, Structures and Applications, 185-188 (2014).
ISBN-13: 978-93-392-2019-8
- [19] *Growth induced magnetic anisotropy in nanocrystalline cobalt ferrite thin films deposited by PLD*
Aashish Jha, Sushant Singh, Amit Srivastava, S. Chaubey and **Naresh Kumar**
Proceedings of the International Conference on Multifunctional Materials, Structures and Applications, 196-199 (2014).
ISBN-13: 978-93-392-2019-8
- [20] *Low Temperature Magnetization Studies of Nanocrystalline Zn-Ferrite Thin Films*
Murtaza Bohra, Prasad Shiva, N. Venkataramani, S C Sahoo, **Naresh Kumar**, R Krishnan
Magnetics, IEEE Transactions on 49 4249-4252, (2013).
Impact factor 1.213 IEEE, ISSN: 0018-9464
- [21] *Enhancement of magnetic and dielectric properties in chemically modified multiferroic (0.90)BiFe_{1-x}Cr_xO₃-(0.10) BaTiO₃ nanocomposite*
M Sahni, S Singh, R Bhargava, Amit K Chawla, R Chandra, A Dalvi, N Gupta, S. Kumar, **Naresh Kumar**
Journal of superconductivity and novel magnetism 26 397-402, (2013).
Impact factor 0.909 Springer US, ISSN: 1557-1947
- [22] *Synthesis and Lasing Action in ZnO Hexahedrons*
R. Bhargava, A K Singh, K Kumar, A C Pandey, **Naresh Kumar**
Journal of Nanoengineering and Nanomanufacturing 3 (4), 317-320, (2013).
American Scientific Publishers ISSN: 2157-9334
- [23] *Narrow ferromagnetic resonance linewidth polycrystalline Zn-ferrite thin films*
M. Bohra, S. Prasad, N. Venkataramani, **Naresh Kumar**, S C Sahoo, R. Krishnan
Magnetics, IEEE Transactions on 47 345-348, (2011).
Impact factor 1.213 IEEE, ISSN: 0018-9464
- [24] *Polar and longitudinal magneto-optical spectroscopy of bismuth substituted yttrium iron garnet films grown by pulsed laser deposition*
M. Veis, E. Lišková, R. Antoš, Š. Višňovský, **Naresh Kumar**, D S Misra, N Venkataramani, S Prasad, R. Krishnan
Thin Solid Films 519 8041-8046, (2011)
Impact factor 1.867 Elsevier, ISSN: 0040-6090
- [25] *Raman investigations of Zn_{1-x}Co_xO nanocrystals: role of starting precursors on vibrational properties*
R. Bhargava, P K Sharma, S Kumar, A C Pandey, **Naresh Kumar**
Journal of Raman Spectroscopy 42 1802-1807, (2011).
Impact factor 2.519 Wiley, ISSN: 1097-4555
- [26] *Variation in structural, optical and magnetic properties of Zn_{1-x}Cr_xO (x = 0.0, 0.10, 0.15, and 0.20) nanoparticles: role of dopant concentration on non-saturation of magnetization*
R. Bhargava, P K Sharma, A K Chawla, S. Kumar, R. Chandra, A C Pandey, **Naresh Kumar**
Materials Chemistry and Physics 125, 664-671, (2011).
Impact factor 2.129 Elsevier, ISSN: 0254-0584
- [27] *High temperature powder diffraction study of (Zn,Cd)S and ZnCdS nano powders*
Sanjeev Kumar, Amit K Chawla, Naresh Kumar and Ramesh Chandra
RSC Advances 1 1078-1082, (2011).
Impact factor 3.708 The Royal Society of Chemistry, ISSN 2046-2069

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- [28] *Differential susceptibility of Escherichia coli cells toward transition metal-doped and matrix-embedded ZnO nanoparticles*
R K Dutta, P K Sharma, R Bhargava, **Naresh Kumar**, A C Pandey
The Journal of Physical Chemistry B 114 5594-5599, (2010).
Impact factor 3.377 ACS Publications, ISSN 1520-6106
- [29] *Influence of Co-doping on the thermal, structural, and optical properties of sol-gel derived ZnO nanoparticles*
R. Bhargava, P K Sharma, R K Dutta, S Kumar, A C Pandey, **Naresh Kumar**
Materials Chemistry and Physics 120 393-398, (2010).
Impact factor 2.129 Elsevier, ISSN: 0254-0584
- [30] *In-plane magnetization with high coercivity in terbium iron garnet thin films deposited on Pt/Si substrate by PLD*
Naresh Kumar, R Bhargava, S Kumar, A K Chawla, R Chandra, M Bohra
Journal of Magnetism and Magnetic Materials 322 1727-1730, (2010).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [31] *Consequence of doping mediated strain and the activation energy on the structural and optical properties of ZnO: Cr nanoparticles*
R. Bhargava, P K Sharma, S Kumar, A C Pandey, **Naresh Kumar**
Journal of Solid State Chemistry 183 1400-1408, (2010).
Impact factor 2.2 Elsevier, ISSN: 0022-4596
- [32] *Zinc based Indian traditional drug (Yashad Bhasma): Preparation, characterization and its bacterial response*
R Bhargava, **Naresh Kumar**, R K. Dutta, A C. Pandey, N K. Singh and S Kumar
Natural Product: An Indian Journal 6, 4 Pg 1-9, (2010).
Trade Science Inc. ISSN 0974 - 7508
- [33] *Magnetic properties of magnetite thin films close to the Verwey transition*
M Bohra, S Prasad, N. Venketaramani, **Naresh Kumar**, S C Sahoo, R Krishnan
Journal of Magnetism and Magnetic Materials 321 3738-3741, (2009).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [34] *Preparation and characterization of zinc based ayurvedic medicine: Yashad Bhasma*
Richa Bhargava, Godwin Newton, A K Pal, S. Chaubey, and **Naresh Kumar**
Proceedings of the Symposium on Safety Profile of Rasaushadhies. Organized by the Department of Rasa Shastra, held at BHU Varanasi, 55-57 (2009).
- [35] *The influence of substrate temperature and annealing on the properties of pulsed laser-deposited YIG films on fused quartz substrate*
Naresh Kumar, S Prasad, D S Misra, N Venkataramani, M Bohra, R Krishnan
Journal of Magnetism and Magnetic Materials 320 2233-2236, (2008).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [36] *Epitaxial growth of terbium iron garnet thin films with out-of-plane axis of magnetization*
Naresh Kumar, N G Kim, Y A Park, N Hur, J H Jung, K J Han, K J Yee
Thin Solid Films 516 7753-7757, (2008).
Impact factor 1.867 Elsevier, ISSN: 0040-6090
- [37] *Epitaxial Growth and Magnetodielectric Properties of Terbium-Iron-Garnet Thin Films*
Naresh Kumar, N G Kim, Y A Park, N Hur, J H Jung, Y H Jo, M H Jung
Journal of Korean Physical Society 52 112, (2008).
Impact factor 0.425 Korean Physical Society, ISSN: 1976-8524
- [38] *Application of magnetic fields for a low temperature growth of high-quality SrRuO₃ thin films*
N G Kim, **Naresh Kumar**, Y A Park, N Hur, C U Jung, J H Jung
Journal of Physics D: Applied Physics 41 125005, (2008).
Impact factor 2.521 IOP Publishing, ISSN: 1361-6463

- [39] *Study of pulsed laser deposited magnetite thin film*
M. Bohra, N Venkataramani, S Prasad, **Naresh Kumar**, D S Misra, S C Sahoo, R Krishnan
Journal of Magnetism and Magnetic Materials 310 2242-2244, (2007).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [40] *RF sputter deposited nanocrystalline (110) magnetite thin film from alpha-Fe₂O₃ target*
M. Bohra, N Venkataramani, S Prasad, **Naresh Kumar**, D S Misra, S C Sahoo, R Krishnan
Journal of nanoscience and nanotechnology 7, 2055-2057, (2007).
Impact factor 1.339 American Scientific Publishers, ISSN: 1533-4899
- [41] *Large room temperature magnetization in nanocrystalline zinc ferrite thin films*
M. Bohra, N Venkataramani, S Prasad, **Naresh Kumar**, D S Misra, S C Sahoo, R Krishnan
Applied physics letters 88 262506-262506-3, (2006).
Impact factor 3.515 AIP Publishing, ISSN: 1077-3118
- [42] *Growth of Cobalt Ferrite Thin Film by Pulsed Laser Ablation*
Murtaza Bohra, N. Venkataramani, Shiva Prasad, **Naresh Kumar**, D. S. Misra, S. C. Sahoo, and R. Krishnan
Proceedings of the DAE Solid State Physics (India) 51,477 (2006).
ISBN 81-8372-030-7
- [43] *Sputter deposition of Fe₃O₄ thin films using α -Fe₂O₃ target,*
Murtaza Bohra, N. Venkataramani, Shiva Prasad, **Naresh Kumar**, D. S. Misra, S. C. Sahoo, and R. Krishnan
Proceedings of the DAE Solid State Physics (India) 50, 481(2005).
ISBN 81-8372-019-5
- [44] *Magnetic properties of pulsed laser ablated YIG thin films on different substrates*
Naresh Kumar, D S Misra, N Venkataramani, S Prasad, R Krishnan
Journal of Magnetism and Magnetic Materials 272 E899-E900, (2004).
Impact factor 1.826 Elsevier, ISSN: 0304-8853
- [45] *Electron diffraction study of pulsed laser deposited thin films using YIG target*
Naresh Kumar, D. S. Misra and Shiva Prasad, I. Samajdar and N. Venkataramani
Proceedings of the 9th International Conference on Ferrites (ICF-9) 27, 183- 188, (2004).
ISBN: 978-1-57498-218-3
- [46] *Oriented Strontium Ferrite Thin Films Deposited by Pulsed Laser Deposition*
Naresh Kumar, **D. S. Misra**, **N. Venkataramani**, Shiva Prasad and R. Krishnan
Proceedings of the DAE Solid State Physics, (India) 49, 516 (2004).
ISBN 81-8372-000-5
- [47] *Study of Bi-Doped YIG Thin Films Grown by Pulsed Laser Deposition*
Naresh Kumar, **D. S. Misra**, **N. Venkataramani**, Shiva Prasad and R. Krishnan
Proceedings of the DAE Solid State Physics, Amritsar (India) 49, 490 (2004).
ISBN 81-8372-000-5
- [48] *Deposition of Fe₃O₄ thin films at low temperature by using Pulsed Laser Deposition*
Murtaza Bohra, **Naresh Kumar**, **D. S. Misra**, **N. Venkataramani**, **Shiva Prasad** and **R. Krishnan**
Proceedings of the DAE Solid State Physics, (India) 49, 518 (2004).
ISBN 81-8372-000-5
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