List of Publications

Articles in International Journals:

1. Investigation of Structural and Magnetic Properties of $Nd_{0.7}Ba_{0.3}Mn_{1-x}Ti_xO_3$ (x = 0.05, 0.15 and 0.25) Manganites Synthesized through a Single-Step Process; **Dinesh Kumar** and A. K. Singh; ***J. Magn. Magn. Mater.*** **469**, 264-273 (2019).
2. Synthesis and Structural Investigations on Multiferroic $Ba_{1-x}Sr_xMnO_3$ Perovskite Manganites; **Dinesh Kumar**, C.B. Singh, N.K. Verma and A.K. Singh; ***Ferroelectrics*** **518**, 191-195 (2017).
3. Effect of Bi^{3+} ion on upconversion-based induced optical heating and temperature sensing characteristics in the Er^{3+}/Yb^{3+} co-doped La_2O_3 nano-phosphor; R.S. Yadav, **Dinesh Kumar**, A.K. Singh, E. Rai and S.B. Rai; ***RSC Advances*** **8**, 34699-34711 (2018).

Conference Proceedings:

4. Evolution of Structural Characteristics of $Nd_{0.7}Ba_{0.3}MnO_3$ Perovskite Manganite as a Function of Crystallite Size; **Dinesh Kumar**, N.K. Verma, C.B. Singh and A.K. Singh; ***AIP Conf. Proc.*** **2009**, 020013-4 (2018).
5. Crystallite Size and Strain Analysis of Nanocrystalline $La_{0.7}Sr_{0.3}MnO_3$ Perovskite by Williamson-Hall Plot Method; **Dinesh Kumar**, N.K. Verma, C.B. Singh and A.K. Singh; ***AIP Conf. Proc.*** **1942**, 050024-4 (2018).
6. Synthesis and Structural studies on Cerium substituted $La_{0.4}Ca_{0.6}MnO_3$ as Solid Oxide Fuel Cell Electrode Material; M. Singh, **Dinesh Kumar** and A.K. Singh; ***AIP Conf. Proc.*** **1942**, 140068-4 (2018).
7. Crystallite Size Effect on Crystallography of $Ba_{1/4}Sr_{3/4}MnO_3$ Layered Perovskite Manganite; **Dinesh Kumar**, M. Singh and A.K. Singh, ***AIP Conf. Proc.*** **1953**, 030185-4 (2018).
8. Synthesis, Structural and Semiconducting Properties of $Ba(Ca_{1/3}Sb_{2/3})O_3$-$PbTiO_3$ Solid Solutions, C.B. Singh, **Dinesh Kumar**, Prashant, N.K. Verma and A.K. Singh; ***AIP Conf. Proc.*** **1953**, 050041-4 (2018).
9. Effect of Grain Size on Structural and Dielectric Properties of Barium Titanate Piezoceramics Synthesized by High Energy Ball Mill; N.K. Verma, S.K.S. Patel, **Dinesh Kumar**, C.B. Singh, and A.K. Singh; ***AIP Conf. Proc.*** **1953,** 050075-5 (2018).

10. Synthesis, Structural and Optical Properties of (ALa)(FeMn)O_6 (A = Ba and Sr) Double Perovskites; **Dinesh Kumar**, V. Sudarshan, A. K. Singh, ***AIP Conf. Proc.* 1953,** 080010-4 (2018).
11. Estimation of Lattice Strain and Optical Properties of Scheelite-Type AWO_4 (A = Ca, Sr, Ba) Nanocrystalline Materials Synthesized by Mechanical Activation; P. Jena, **Dinesh Kumar**, N. K. Verma and A. K. Singh; ***AIP Conf. Proc.*** (2019).
12. Synthesis and Dielectric Characterization of $BaZrNb_2O_8$ High Temperature Piezoelectric ceramics; N. K. Verma, G. Kamde, **Dinesh Kumar**, C. B. Singh and A. K. Singh; ***AIP Conf. Proc.*** (2019).
13. Structural, Dielectric, Semiconducting and Optical Properties of High-Energy Ball Milled $YFeO_3$ Nano-particles; C.B. Singh, **Dinesh Kumar**, N. K. Verma and A. K. Singh; ***AIP Conf. Proc.*** (2019).
14. X-ray Diffraction Analysis of Cu^{2+} Doped $Zn_{1-x}Cu_xFe_2O_4$ Spinel Nanoparticles using Williamson-Hall Plot Method; **Dinesh Kumar**, A. Kumar, R. Prakash and A. K. Singh; ***AIP Conf. Proc.*** (2019).
15. Deposition of Fe/Nb Multilayers and Fe/Nb/Fe Trilayers using HIPIMS: XRR Measurements for Interface Diffusion Study; **Dinesh Kumar**, M. Gupta, D. Kumar and A. K. Singh; ***AIP Conf. Proc.*** (2019).

Unpublished Articles:

16. Effect of Ti doping on Structural and Low-Temperature Magnetic Properties of $Nd_{0.7}Ba_{0.3}Mn_{1-x}Ti_xO_3$ ($0 \leq x \leq 0.3$) Perovskite Manganites; **Dinesh Kumar** and A. K. Singh (**To be communicated: *J. Phys.: Condens. Matter***).
17. Investigation of Structural, Magnetic and Dielectric Properties of $Nd_{0.7}Ba_{0.3}Mn_{1-x}Ti_xO_3$ (x = 0.40 and 0.50) Perovskite Manganites; **Dinesh Kumar** and A. K. Singh (**To be communicated: *J. Chem. Phys.***).
18. Size-dependent Structural and Magnetic Properties of $Nd_{0.7}Ba_{0.3}Mn_{0.90}Ti_{0.10}O_3$ Perovskite Manganites; **Dinesh Kumar** and A. K. Singh (**To be communicated: *Nanotechnology***).
19. Size-dependent Structural and Magnetic Characterizations of $La_{0.6}Ba_{0.4}MnO_3$ Perovskite Manganite; **Dinesh Kumar** and A. K. Singh (**To be communicated: *J. Appl. Phys.***).

20. Effect of Ti-doping on Structural and Magnetic Properties of $La_{0.6}Ba_{0.4}Mn_{1-x}Ti_xO_3$ ($0.02 \leq x \leq 0.08$) Perovskite Manganites; **Dinesh Kumar** and A. K. Singh (**To be communicated: *Acta Materialia***).
21. Signature of Griffiths Singularity in Bulk Ti-doped $La_{0.6}Ba_{0.4}Mn_{1-x}Ti_xO_3$ ($x = 0.20$) Perovskite Manganite; **Dinesh Kumar** and A. K. Singh (**To be communicated: *Appl. Phys. Lett.***).
22. Structural and Magnetic Properties of Ba-site deficient $La_{0.6}Ba_{0.4-\delta}Mn_{1-x}Ti_xO_3$ ($x = 0.10$, $\delta = 0.015$) Perovskite Manganite; **Dinesh Kumar** and A. K. Singh (**Under preparation**).
23. Investigation of Structural, Magnetic and Optical Properties of the New $RBaMnFeO_6$ (R = Nd and Sm) Double Perovskites; **Dinesh Kumar**, V. Sudarshan and A. K. Singh (**To be communicated: *J. Super. Novel Magn.***).
24. Structural, Magnetic and Dielectric Studies on Half-doped $Nd_{0.5}Ba_{0.5}CoO_3$ Perovskite Cobaltite Nanoparticles; **Dinesh Kumar**, P. Jena and A. K. Singh (**To be communicated: *J. Magn. Magn. Mater.***).
25. Disappearance of Charge-Ordering and Appearance of Exchange Bias Effect and Grifiths' Phase in $Nd_{0.4}Sr_{0.6}MnO_3$ Perovskite Manganite; **Dinesh Kumar**, U. Shankar and A. K. Singh (**To be communicated: *Phys. Rev. B***).

List of Conferences/Workshops/Seminars/Symposiums Attended

International Conferences:

1. "**International Conference on Contemporary Advances of Science and Technology**" August 07-09, 2015 organized by Department of Physics, Banaras Hindu University, Varanasi, India (**Poster presentation**).
2. "**International Conference on Multifunctional Materials for Future Applications**" October 27-29, 2015 organized by Department of Chemistry, Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
3. "**International Conference on Nanoscience and Technology**" February 29, 2016 to March 02, 2016 organized by Indian Institutes of Science Education and Research, Pune, India (**Poster presentation**).

4. "**International Conference on Technically Advanced Materials & Asian Meeting on Ferroelectricity**" November 07-10, 2016 organized by Department of Physics, University of Delhi, India (**Poster presentation: Two**).
5. **International Conference on "Advances in Biological Systems and Materials Science in NanoWorld**" February 19-23, 2017 organized by Department of Physics, Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
6. "**2nd International Conference on Condensed Matter and Applied Physics**" November 24-25, 2017 organized by Govt. Engineering College, Bikaner, Rajasthan, India (**Poster presentation: Two**).
7. "**International Conference on Electron Microscopy & Electron Microscopy Society of India**" June 02-04, 2016 organized by Department of Metallurgical Engineering, Indian Institute of Technology (BHU), Varanasi, India (**Participant**).
8. "**International Conference on Advances in Basic Sciences**" February 07-09, 2019 organized GDC Memorial College, Bahal, Bhiwani, Haryana, India (**Oral and poster presentations**).

National Conferences:

9. "**Silver Jubilee Conference on Study of Matters using Intense Radiations & under extreme conditions**" November 03-06, 2016 organized by UGC-DAE-CSR, Indore Centre, Indore, India (**Poster presentation**).
10. "**45th National Seminar on Crystallography**" July 09-12, 2017 organized by School of Materials science and Technology, Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
11. "**62nd DAE Solid State Physics Symposium**" December 26-30, 2017 organized by Bhabha Atomic Research Centre, Mumbai, India (**Poster presentation**).
12. "**National Conference on Advanced Materials and Nanotechnology**" March 15-17, 2018 organized by Jaypee Institute of Information Technology, Noida, India (**Poster presentation**).

National Workshops:

13. "**Advanced Microscopy and Imaging Techniques and hands on training**" August 07-08, 2015 organized by DSS ImageTech & Olympus Medical System in Indian Institute of Technology (BHU), Varanasi (**Workshop: participant**).

14. "**Basics on Electron Backscattered Diffraction, Electron Energy Loss Spectroscopy, and Electron Diffraction in Materials Science**" May 30 to June 01, 2016 organized by Department of Metallurgical Engineering, Indian Institute of Technology (BHU), Varanasi, India (**Workshop: participant**).
15. **GIAN: "NanoChemistry: From Preorganized Molecular Architectures of Functional Materials**" December 19-23 2016 organized by Department of Chemistry, Indian Institute of Technology (BHU), Varanasi, India (**Workshop: participant**).
16. QIP Short term course on "**Geometrical and Mathematical Crystallography with Applications to Structural Studies**" February 14-19, 2017 organized by School of Materials science and Technology, Indian Institute of Technology (BHU), Varanasi, India (**Workshop: participant**).
17. One day workshop on "**LaTex: A software for writing thesis and research papers**" on October 6, 2018 organized by Indian Institute of Technology (BHU), Varanasi, India (IEEE student Branch) [**Workshop: participant**].

Institute level Presentations:

18. **Institute day celebration** during February 26-27, 2015 organized by Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
19. **Institute day celebration** during April 26-27, 2016 organized by Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
20. **Institute day celebration** during February 25-26, 2017 organized by Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).
21. **Institute day celebration** during February 16-18, 2018 organized by Indian Institute of Technology (BHU), Varanasi, India (**Poster presentation**).