

Faculty Profile

Basic Details:

Name: Ajay Kumar

Designation: Assistant Professor (Physics)

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Affiliation: Department of Physics, N. A. S. College Meerut.

Educational Qualifications:

- Ph.D. From Gautam Buddha University Greater Noida.
- CSIR-NET in Physics Science
- M. Tech (Nano Science & Technology) From GGSIPU Delhi.
- M.Phil (Physics) From IIT Roorkee.
- M.Sc. Physics From CCS University Meeru.

Other Details:

- Ph.D thesis title “Studies on the Radiation Stability of $A_2B_2O_7$ Types Pyrochlore Under Ion Irradiation”
- M. Tech. dissertation work “Tin Oxide Nano Structure”.
- M.Phil. dissertation work on “First order all pass filter using current conveyer”.
- M.Sc. Specialization in Electronics.

Research Interests:

- Experimental Condense Matter Physics

Academic Experience:

- Presently working as Assistant Professor (Physics) in N. A.S. College Meerut.
- Eight years experience of working as Assistant Professor (Physics) in SRM University NCR Campus Modinagar.

List of Publications/ Conferences

Publications

1. Structural and compositional effects on the electronic excitation induced phase transformations in $Gd_2Ti_{2-y}Zr_yO_7$ pyrochlore, J. Nucl. Mater. 539 (2020) 152278.
<https://doi.org/10.1016/j.jnucmat.2020.152278>.
2. Structural, dielectric and electrical properties of pyrochlore-type $Gd_2Zr_2O_7$ ceramic, J. Mater. Sci. Mater. Electron. 31 (2020) 21959–21970.
<https://doi.org/10.1007/s10854-020-04699-4>.
3. Probing the Short-Range Ordering of Ion Irradiated $Gd_2Ti_{2-y}Zr_yO_7$ ($0.0 \leq y \leq 2.0$) Pyrochlore under Electronic Stopping Regime, J. Nucl. Mater. 564 (2022) 153682.
<https://doi.org/10.1016/j.jnucmat.2022.153682>.

Internationals Conferences

- 1.. Synthesis and Characterization of $Gd_2Zr_2O_7$ Pyrochlore in ICC 2017 2nd International Conference on Condense Matter and Applied Physics Nov. 24-25 2017, Bikane
2. Radiation stability of $Gd_2Ti_{1.2}Zr_{0.8}O_7$ Pyrochlore Under Swift Heavy Ion Irradiation in Indo French Seminar on Radiation Damage In Nuclear Material (RADIUM – 2019), Amity Institute of Nanotechnology, 18 – 20 February 2019
3. Structural and Optical Properties of $Gd_2Ti_{0.8}Zr_{1.2}O_7$ in 3rd International Conference on Science and Engineering of Material (ICSEM - 2019), July 19 -21 ,2019 Sharda University Greater Noida
4. Investigation of electronic excitation induced phase transformation in $Gd_2Ti_{2-y}Zr_yO_7$ pyrochlore by Raman spectroscopy in International conference on Ion Beam in Material Engineering and Characterization IBMEC (2020) Dec. 8-11, 2020

(Ajay Kumar)