



Name of the Faculty: Dr. Alka Singh

Designation: Assistant Professor

Research Areas: Microwave and Millimeter Wave Technology, Microstrip Antenna, Cylindrical Dielectric Resonator Antenna, IoT-based Autonomous Farming, Acoustic signal processing, Electrical transport mechanism semiconductor.

Research Highlights

1. Impact of IoT-based Autonomous Farming Equipment on Crop Culture and Management in the Agricultural Sector, Proceedings of the International Conference on Edge Computing and Applications, 2022.
2. Electrical transport mechanism of aluminum substituted barium hexaferrite magnetic semiconductor, J Mater Sci: Mater Electron (2021) 32:4110–4124.
3. Study of Effective Band Gap in Semiconductor Nano-Solid, Invertis Journal of Renewable Energy 0973:8940 Vol. 4, No.3, 2014; pp. 132-135 UGC S.No. - 28143
4. A critical study on the mechanical behavior of zinc group chalcogenide semiconductor Airo Research Journal, A multidisciplinary, international Research Journal 2320-3714 Volume 7, November 2016 Online UGC S.No. - 63012
5. The Study of Mechanical Properties of Chalcogenide Semiconductor Compound $Zn_{1-x}Cd_xS$ - Under High Pressure International Journal of Innovative Research in Science, Engineering and Technology 2347-6710 Vol. 6, Issue 4, April 2017 UGC S.No. – 2799.
6. Study Of Sound Source Localization Using Music Method In Real Acoustic Environment International Journal of Electronics Engineering Research 0975-6450 Volume 9, Number 4 (2017) pp. 545-556 UGC S.No. - 17669 IF - 2.2
7. Study of Mechanical properties of Chalcogenide Semiconductor compound Alloy $Cd_{1-x}Hg_xS$ under high pressure INTERNATIONAL JOURNAL OF MATERIALS SCIENCES 0973-4589 Volume 12, Number 2 (2017), pp. 273-281 UGC S.No. – 17134.
8. Study of Phase Transitions in Chalcogenide Semiconductor Compounds (ChSCs) - $Cd_{1-x}Hg_xS$ at different Hg composition International Journal of Pure and Applied Physics 0973-1776 Volume 13, Number 1(2017) UGC S.No. – 17461.
9. Study of Microphone Array Characteristics and Noise Reduction International Journal of Applied Engineering Research 0973-4562 Volume 13, Number 12 (2018) UGC S.No. – 6452.
10. The Study of Vander Waals (vdW) coefficients for Chalcogenide Semiconductor compound (ChSCs) International Journal on Recent and Innovation Trends in Computing and Communication 2321-8169 Volume 5, Issue 5, May 2017 UGC S.No. - 49222 IF- 5.8
11. Study of Static Vs Dynamics Methods for Study of High Pressure Behaviour of Solids International Journal for Research in Applied Science and Engineering Technology (IJRASET) 2321-9653 Volume 5, Issue 5, May 2017, Page No. : 1461-1467 UGC S.No. 44342 IF - 6.88
12. Computational Analysis of Many Body Interaction (MBI) Potential in Solids International Journal of Scientific Research in Science and Technology 2395-6011 Volume 3 | Issue 6 | July-August 2017 UGC S.No. - 64011
13. Robust And Most Efficient Hearing Aid Using Microphone Array International Journal of Emerging Technologies and Innovative Research (2349-5162) Vol 6 / Issue 5 / 158 2019 UGC S.No: 63975 IF -6.5