**Department of Physics**

**BIT Mesra**

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| **Papers Published** |
| **2021**1. Rohit Mukherjee and **S.Konar** "Electromagnetically Induced Grating and Parity-time Symmetry in Coupled Quantum Wells", **Chinese Physics** **(Accepted, 2021)**
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3. T. K. Mishra, A. Kumar, **S. K. Sinha**, Sliding Wear Behavior of Thermally Sprayed WC-20Cr3C2-7Ni and La2O3 **Composite Coatings,  Emerging Materials Research** **Volume 10 Issue 2,  pp. 1-9, ISSN 2046-0147 | E-ISSN 2046-0155, June 2021** <https://doi.org/10.1680/jemmr.20.00138>
4. **S Konar***,*Parity-time symmetry in photonics with the emphasis to semiconductor quantum wells,**Asian Journal of Physics, Vol 30, No 1, in press (2021)**
5. Rohit Mukherjee, **S. Konar ,** and Puspashree Mishra "Phase-sensitive modulation instability in asymmetric coupled quantum wells" **PHYSICAL REVIEW A 103, 033517 (2021)**
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8. Arpita Singha, Swetapadma Praharaj, **Sanjeeb Kumar Rout**, Rolly Verma, Dibyaranjan Rout,Electric Field and Temperature Induced Abnormal Phase Transitions in 0.78Na0.5Bi0.5TiO3-0.2SrTiO3-0.02K0.5Na0.5NbO3 Lead Free Ceramic Materials **Research Bulletin, Materials Research Bulletin**, (142),( 2021), 111407
9. Sameer Kumar Tiwari, Anterdipan Singh, Pritam Yadav, Bibek Kumar Sonu, Rolly Verma, **S. K. Rout, Ela Sinha**, Structural and dielectric properties of Cu-doped α-ZnMoO4 ceramic system for enhanced green light emission and potential microwave applications, , **Journal of Materials Science: Materials in Electronics,** 32, (2021),12881–12889.
10. Shomaila Khanam, **S K Rout**, Decolorisation of Rhodamine B and Methylene Blue Dyes in the presence of Bismuth Tungstates: A detailed investigation on the effect of grain size, , **Bulletin of Materials Science**, 44(2021)
11. Konar, K., **Bose, K.** & **Paul, R.K.** Revisiting cosmic microwave background radiation using blackbody radiation inversion. **Sci Rep 11, 1008 (2021).**
12. BK Sonu, **E. Sinha,**Structural, thermal stability and electrical conductivity of zirconium substituted barium cerate ceramics, **Journal of Alloys and Compounds     860, 158471 (2021).**
13. **Nishi Srivastava**, D. Vignesh, and N. Saxena, Investigation of Artificial Neural Network Performance in the Aerosol Properties Retrieval, **Journal of Water and Climate Change**, Accepted (2021)
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18. **Pawan K.Tiwari,** Mugdha Sahu, Gagan Kumar, Mohsen Ashourian, A Review on the Pivotal Role of Quantum Dots in the Advancement of Healthcare **ResearchComputational Intelligence and Neuroscience**, Hindawi Publications (communicated), 2021.05.31

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