

Personal Profile



Name: Dr. Jitendra Singh

Designation: Assistant Professor

Department: Physics.

Highest Qualification: Ph.D. NET-JRF

Mail ID: jitendras.physics@gmail.com

Date of Joining: 18/07/2022

Dr. Jitendra Singh has completed his Ph.D. in Physics and continue his research as a Post-Doctoral Fellow in NTUST & NCU University of Taiwan. During his Doctoral and Post-Doctoral tenure, he has published many papers in reputed journals which represents his deep-rooted knowledge about the concerned subject. Presently he has joined in U.N.P.G. College as an Assistant Professor in Department of Physics.

List of Publications

A. Published papers

- i) “*Prospects of Metal-Free Perovskites for Piezoelectric Applications*” Hang Song Wu; Bayu Tri Murti, **Jitendra Singh**, Po Kang Yang, Meng-Lin Tsai **Advanced Science** (2022), 9, 2104703 <http://doi.org/10.1002/advs.202104703> **Impact Factor-17.5**
- ii) “*Full-Color Perovskite Quantum Dots/Cellulose Nanocrystals Enhancement Films with Excellent Stability*” Li Kun-You, **Jitendra Singh**, Chiang Chih-Hao, Li Ting-You, Tsai Meng-Lin. **Advanced Engineering Materials** (2021), 23, 2100424 <https://doi.org/10.1002/adem.202100424> **Impact Factor-4.1**
- iii) “*Signature of strong localization and crossover conduction processes in doped ZnO thin films: synergetic effect of doping fraction and dense*” Himanshi Gupta, **Jitendra Singh**; G R Umapathy, Vijay Soni, S Ojha, Soumen Kar, and Fouran Singh, **Journal of Physics: Condensed Matter** (2021) 33 315701 <https://doi.org/10.1088/1361-648X/ac0208>. **Impact Factor-2.7**
- iv) “*Swift heavy ion irradiation induced negative differential resistance and transport of charge carriers in conducting polymer-metal oxide hybrids*” **Jitendra Singh**, R G Singh, Subodh K. Gautam, Himanshi Gupta, S. Ojha, and Fouran Singh, **Radiation Physics and Chemistry** 179 (2021) 109211. <https://doi.org/10.1016/j.radphyschem.2020.109211> **Impact Factor-2.8**
- v) “*A versatile multifaceted resistive switching memory activated by light and ion irradiation in poly (3-octylthiophene)-zinc oxide hybrids*” **Jitendra Singh**, R G Singh, Subodh K. Gautam, Himanshi Gupta, and Fouran Singh **Organic Electronics** 87 (2020) 105932. <https://doi.org/10.1016/j.orgel.2020.105932>, **Impact Factor-3.7**
- vi) “*Radiation stability and reliability of Cu–ZnO/P3OT hybrid heterostructures under swift heavy ion irradiations*”. **Jitendra Singh**, Himanshi Gupta, Ashish Kumar, R G Singh, and Fouran Singh, **Materials Science in Semiconductor Processing** 108 (2020) 104885; <https://doi.org/10.1016/j.mssp.2019.104885>, **Impact Factor-3.9**
- vii) “*Photoluminescence quenching and photo-induced charge transfer processes in poly(3-octylthiophene) polymer based hybrid nanocomposites by ion irradiation for possible optoelectronic applications*” **Jitendra Singh**, Himanshi Gupta, R G Singh, S. Ojha, P. Kulriya, and Fouran Singh, **Journal of Electronic Materials** 50, (2020) 85-91 <https://doi.org/10.1007/s11664-020-08545-5>, **Impact Factor-2.1**
- viii) “*Defects induced photoluminescence from gallium doped zinc oxide thin films: Influence of doping and energetic ion irradiation*” Himanshi Gupta, **Jitendra Singh**, R. N. Dutt, Sunil Ojha, Soumen Kar, Ravi Kumar, V. R. Reddy, and Fouran Singh, **Physical Chemistry Chemical Physics** 21 (2019), 15019 <https://doi.org/10.1039/C9CP02148E>, **Impact Factor-3.6**
- ix) “*In situ Study of Radiation Stability and Associated Conduction Mechanisms of Nb-Doped TiO₂/p-Si Heterojunction Diode under Swift Heavy Ion Irradiation*” Subodh K. Gautam **Jitendra Singh**, R G Singh, Naina Gautam, Priyanka Trivedi and Fouran Singh, **IEEE**

Transactions on Electron Devices 66 (2019), 1475-1481
<https://doi.org/10.1109/TED.2019.2893886>, **Impact Factor-2.9**

- xi) “*Photo-induced inter-chain and interfacial charge transfer in Cu–ZnO/ poly (3-octylthiophene) hybrid nanocomposites*” **Jitendra Singh**, R G Singh, Himanshi Gupta, Sunil Ojha, and Fouran Singh, **Optical Materials** 94 (2019), 316-321; <https://doi.org/10.1016/j.optmat.2019.06.013>, **Impact Factor-3.7**
- xii) “*Multifunctional hybrid diode: study of fast photoresponse and ultra-high responsivity including charge injection mechanisms at low temperatures*” **Jitendra Singh**, R G Singh, Subodh K. Gautam and Fouran Singh, **Journal of Applied Physics** 123, 174503 (2018); <https://doi.org/10.1063/1.4999670>, **Impact Factor-2.3**
- xiii) “*Reversible phase transformation phenomenon in titanium dioxide films: evidence beyond interface-nucleation and dissolution-precipitation kinetics*” Subodh K. Gautam, **Jitendra Singh**, D. K. Shukla, E. Pippel, P.Poddar and Fouran Singh, **Acta Materialia** 146 (2018), 253-264; <https://doi.org/10.1016/j.actamat.2017.12.050>, **Impact Factor-8.2**