

1. Peer reviewed International Journals (*published*)

- (i) **G. K. Gupta** and A. Dixit, "Effect of precursor and composition on the physical properties of the low-cost solution processed $\text{Cu}_2\text{ZnSnS}_4$ thin film for solar photovoltaic application," J. Renew. Sustain. Energy, vol. 9, no. 1, p. 13502, 2017. <http://dx.doi.org/10.1063/1.4974341>
- (ii) **G.K. Gupta**, A. Garg, A. Dixit, Electrical and impedance spectroscopy analysis of sol-gel derived spin coated $\text{Cu}_2\text{ZnSnS}_4$ solar cell, J. Appl. Phys. 13101 (2018) 0-11. <https://doi.org/10.1063/1.5002619>
- (iii) **G. K. Gupta** and A. Dixit, "Theoretical studies of single and tandem $\text{Cu}_2\text{ZnSn}(\text{S}/\text{Se})_4$ junction solar cells for enhanced efficiency," Optical Materials vol. 82, no. April, pp. 11-20, 2018. <https://doi.org/10.1016/j.optmat.2018.05.030>
- (iv) **G. K. Gupta**, R. Chaurasiya, and A. Dixit, "Theoretical Studies on Structural, Electronic and Optical Properties of Kesterite and Stannite $\text{Cu}_2\text{ZnGe}(\text{S}/\text{Se})_4$ Solar Cell Absorbers", Computational Condensed Mater, 2018 <https://doi.org/10.1016/j.cocom.2018.e00334>
- (v) **G. K. Gupta**, V. R Reddy, and A. Dixit, "Impact of excess and disordered Sn sites on $\text{Cu}_2\text{ZnSnS}_4$ absorber material and device performance: A ^{119}Sn Mössbauer study" Materials Chemistry and Physics, 2019, 225, 410-416. <https://doi.org/10.1016/j.matchemphys.2018.12.078>

2. Peer reviewed International Conference proceedings

- (i) **G. K. Gupta** and A. Dixit, "Room temperature electrical properties of solution derived p-type $\text{Cu}_2\text{ZnSnS}_4$ thin films," vol. 1728, no. 1, p. 20678, 2016. <http://dx.doi.org/10.1063/1.4946729>
- (ii) **G. K. Gupta** and A. Dixit, "Intrinsic p-type $\text{Cu}_2\text{ZnSnS}_4$ thin film for hetero-structure solar photovoltaic device application" (*in press*).

3. Conference without proceedings

- (i) **G. K. Gupta** and A. Dixit, "Device grade $\text{Cu}_2\text{ZnSnS}_4$ thin film on low cost stainless steel substrate using Co-electrodeposition and post-annealing", International Conference on Nanomaterials & Nanotechnology, March 01-03, 2017 at the Vinoba Bhave Research Institute, Saidabad, Allahabad, India.
- (ii) **G. K. Gupta** and A. Dixit, "II-S (II = Cd, Zn) buffer layer impact in $\text{Cu}_2\text{ZnSnS}_4$ heterostructure for solar photovoltaic performance", International Conference on

4. Miscellaneous work

- (i) **G. K. Gupta**, R. Chaurasiya, and A. Dixit, "Thermodynamic stability and optoelectronic properties of Cu(Sb/Bi)(S/Se)₂ ternary chalcogenides: Promising ultrathin photoabsorber semiconductors"
<https://doi.org/10.1016/j.solener.2018.11.064>.
- (ii) Lokesh Saini, Yojana Janu, Manoj Kumar Patra, Raj Kumar Jani, **Goutam Kumar Gupta**, Ambesh Dixit, and Sampat Raj Vadera "Dual Band Resonance in Tetragonal BaTiO₃/NBR Composites for Microwave Absorption Applications," J. Am. Ceram. Soc., vol. 99, no. 9, pp. 3002–3007, 2016. [DOI: 10.1111/jace.14284](https://doi.org/10.1111/jace.14284)
- (iii) Lokesh Saini, Manoj Kumar Patra, Raj Kumar Jani, **Goutam Kumar Gupta**, Ambesh Dixit & Sampat Raj Vadera "Tunable Twin Matching Frequency (fm1/fm2) Behavior of Ni_{1-x}Zn_xFe₂O₄/NBR Composites over 2–12.4 GHz: A Strategic Material System for Stealth Applications" Scientific Reports | 7:44457 | [DOI: 10.1038/srep44457](https://doi.org/10.1038/srep44457).
- (iv) Lokesh Saini, Manoj Kumar Patra, Manoj Kumar Dhaka, Raj Kumar Jani, **Goutam Kumar Gupta**, Ambesh Dixit, Sampat Raj Vadera "Ni/Graphitic Carbon Core-Shell Nanostructured based Light Weight Elastomeric Composites for Ku-Band Microwave Absorbing Applications" CrystEngComm, 2018,20, 4630-4640. [DOI:10.1039/C8CE00620B](https://doi.org/10.1039/C8CE00620B)