

# Dr. Rockey Gupta

## Publications from 2018-2023

1. Mohd Javed, Rockey Gupta and Susheel Sharma, IMPLEMENTATION OF LOW VOLTAGE DIGITAL GATES USING BULK-DRIVEN TECHNIQUES, *Industrial Engineering Journal* ISSN: 0970-2555 Volume : 52, Issue 12, No. 2, December 2023.
2. Ayush Tara, Vishal Bharti, Himanshu Dixit, Susheel Sharma, and Rockey Gupta, "Performance evaluation of all-inorganic cesium-based perovskite solar cell with BaSnO<sub>3</sub> as ETL", *Journal of Nano Particle Research (Springer)*, 25: 184 (2023) <https://doi.org/10.1007/s11051-023-05830-2> (IF=2.5)
3. Ayush Tara, Vishal Bharti, Susheel Sharma, and Rockey Gupta, "Harnessing the Role of Charge Transport Layers for Efficient Design of PBDBT/ITIC-OE Based Organic Solar Cell" *Transactions on Electrical and Electronic Materials (Springer)*, <https://doi.org/10.1007/s42341-023-00456-6>, May 2023 (IF=1.9)
4. Ayush Tara, Vishal Bharti, Susheel Sharma, and Rockey Gupta, "Theoretical optimization of defect density and band offsets for CsPbI<sub>2</sub>Br based perovskite solar cells" *Materials Today Communications (Elsevier)*, 33 (2022): 104546, September 2022 (IF=3.8)
5. Ayush Tara, Vishal Bharti, Susheel Sharma, and Rockey Gupta, Computational approach to explore suitable charge transport layers for all inorganic CsGeI<sub>3</sub> perovskite solar cells, *Optical Materials (Elsevier)*, 128 (2022): 112403, April 2022 (IF=3.9)
6. Ayush Tara, Vishal Bharti, Susheel Sharma, and Rockey Gupta, "Device simulation of FASnI<sub>3</sub> based Perovskite Solar cell with Zn(O<sub>0.3</sub>, S<sub>0.7</sub>) as electron transport layer using SCAPS-1D" *Optical Materials (Elsevier)*, 119 (2021): 111362, Accepted in July 2021 (IF=3.9).
7. Roshani Gupta, Rockey Gupta and Susheel Sharma, "A High Speed, Low power, and Area Efficient FGMOS-Based Full Adder" *IETE Journal of Research* published by Taylor & Francis <https://doi.org/10.1080/03772063.2019.1700833> December, 2019. (IF=1.5).
8. Harjeet Kour, Rockey Gupta and Susheel Sharma, "Log Domain Integrator using Quasi Floating Gate MOSFET", *Recent advances in Electrical and Electronic Engineering*, vol. 10, pp. 142-148, 2018. (IF=0.6).
9. Roshani Gupta, Rockey Gupta and Susheel Sharma, "Application of Floating Gate MOSFET in the design of Bulk driven current mirror", *Researcher Journal, University of Jammu*, vol. XIV no. 1, ISSN 2278-9022, pp. 20-32, 2018.

### Papers in conference proceedings:

1. Mohammed Javed, Rockey Gupta, Susheel Sharma, "Bulk-driven inverter configuration and its application for implementing ring oscillator". In 2023 *IEEE*

*International Students' Conference on Electrical, Electronics and Computer Science*  
(SCEECS) 2023 Feb 18 (pp. 1-8)

**Book Chapter:**

1. Ayush Tara, Vishal Bharti, Susheel Sharma, and Rockey Gupta, “Computational Study of  $\text{CH}_3\text{NH}_3\text{PbI}_{3-x}$  perovskite solar cell with record efficiency of 33.19%”, Book chapter in Book titled Smart Energy and Advancement in Power Technologies, select proceedings of ICSEAPT 2021, Volume 2 ISSN: 1876:1100. ISBN: 978-981-19-4974-6