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## AUTHOR'S RELEVANT PUBLICATIONS

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### Journals:

1. **Yogesh Kumar**, Hemant Kumar, Gopal Rawat, Chandan Kumar, Bhola Nath Pal, and Satyabrata Jit. "Spectrum Selectivity and Responsivity of ZnO Nanoparticles Coated Ag/ZnO QDs/Ag UV Photodetectors", *IEEE Photonics Technology Letters*, 30 (12), 1147-1150, 2018.
2. **Yogesh Kumar**, Hemant Kumar, Gopal Rawat, Chandan Kumar, Anand Sharma, Bhola Nath Pal, and Satyabrata Jit. "Colloidal ZnO Quantum Dots Based Spectrum Selective Ultraviolet Photodetectors." *IEEE Photonics Technology Letters*, 29(4):361–364, 2017.
3. **Yogesh Kumar**, Hemant Kumar, Bratindranath Mukherjee, Gopal Rawat, Chandan Kumar, Bhola Nath Pal, and Satyabrata Jit. "Visible-blind Au / ZnO Quantum dots based Highly Sensitive and Spectrum Selective." *IEEE Transactions on Electron Devices*, 64(7), 2017.

### Conferences/Workshops/Symposium:

1. **Yogesh Kumar**, Hemant Kumar, Chandan Kumar, Bhola N Pal and S Jit," Mg Doping Effects on Optical and Electrical Properties of Solution-Processed ZnO Quantum Dots Based Thin Film Devices", Proc. 2017 Spring Meeting and Exhibit, Phoenix, Arizona, USA.
2. **Yogesh Kumar**, Hemant Kumar, Chandan Kumar, Bhola N Pal and S Jit," Electrical and optical characteristics of Pd/ZnO Quantum dots based Schottky

Photodiode on n-Si", Proc. 2016 IEEE International Symposium on Nanoelectronic and Information Systems (iNIS), ABV-IITM Gwalior.

3. **Yogesh Kumar**, Hemant Kumar, Kunal Singh, Bhola N Pal and S Jit," Optical Characterization of Sol-Gel deposited Zinc Oxide Thin Film", 4th international conference on current developments in atomic, molecular optical and nano physics with applications (CDAMOP-2015), Delhi.
4. **Yogesh Kumar**, Hemant Kumar, Gopal Rawat, Chandan Kumar, Bhola N Pal and S Jit," Fabrication and Characterization of Photo junction Field Effect Transistor", International Conference on Signal processing and Communication 2018, JIIT Noida.

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1. Hemant Kumar, **Yogesh Kumar**, Gopal Rawat, Chandan Kumar, Bratindranath Mukherjee, Bhola Nath Pal, and Satyabrata Jit. "Heating Effects of Colloidal ZnO Quantum Dots (QDs) on ZnO QDs/CdSe QDs/MoO<sub>x</sub> Photodetectors." *IEEE Transactions on Nanotechnology*, 16(6):1073-1080, 2017.
2. Hemant Kumar, **Yogesh Kumar**, Kunal Singh, Sanjay Kumar, Gopal Rawat, Chandan Kumar, Bhola Nath Pal, and Satyabrata Jit. "Kink Effect in TiO<sub>2</sub> Embedded ZnO Quantum Dot based Thin Film Transistors." *Electronics Letters*, 53(4):15–16, 2017.
3. Hemant Kumar, **Yogesh Kumar**, Gopal Rawat, Chandan Kumar, Bratindranath Mukherjee, Bhola Nath Pal, and Satyabrata Jit. "Electrical and Optical Characteristics of Solution processed MoO<sub>x</sub> and ZnO QDs Heterojunction". *MRS Communications*, 7(3), 607-612, 2017.
4. Hemant Kumar, **Yogesh Kumar**, Bratindranath Mukherjee, Gopal Rawat, Chandan Kumar, Bhola Nath Pal, and Satyabrata Jit. "Electrical and Optical Characteristics of Self- Powered Colloidal CdSe Quantum Dot-Based Photodiode." *IEEE Journal of Quantum Electronics*, 53(3):1-8, 2017.
5. Hemant Kumar, **Yogesh Kumar**, Gopal Rawat, Chandan Kumar, Bratindranath Mukherjee, Bhola Nath Pal, and Satyabrata Jit. "Colloidal CdSe Quantum Dots and PQT-12 Based Low-Temperature Self-Powered Hybrid Photodetector." *IEEE Photonics Technology Letters*, 29(20):1715-1718, 2017.
6. Hemant Kumar, **Yogesh Kumar**, Bratindranath Mukherjee, Gopal Rawat,

- Chandan Kumar, Bhola Nath Pal, and Satyabrata Jit. “Effects of Optical Resonance on the Performance of Metal (Pd, Au)/CdSe Quantum Dots (QDs)/ ZnO QDs Optical Cavity Based Spectrum Selective Photodiodes.” *IEEE Transactions on Electron Devices*, (under review), 2018.
7. Gopal Rawat, Hemant Kumar, **Yogesh Kumar**, Chandan Kumar, Divya Somvanshi, and Satyabrata Jit. “Effective Richardson Constant of Sol-Gel Derived TiO<sub>2</sub> Films in n-TiO<sub>2</sub> / p-Si Heterojunctions.” *IEEE Electron Device Letters*, 38(5):633-636, 2017.
  8. Chandan Kumar, Gopal Rawat, Hemant Kumar, **Yogesh Kumar**, Smriti Ratan, Rajiv Parakash, and Satyabrata Jit. “Poly (3, 3’)-dialkylquaterthiophene) Based Flexible Nitrogen Dioxide Gas Sensor.” *IEEE Sensor Letters*, 2(1), 2018.
  9. Shivalini Singh ,**Yogesh Kumar**, Hemant Kumar, Sumit Vyas, Chinnamuthan Periasamy, Parthasarathi Chakrabarti, Satyabrata Jit, and Si-Hyun Park. “A Study of Hydrothermally Grown ZnO Nanorod-Based Metal-Semiconductor-Metal UV Detectors on Glass Substrates.” *Nanomaterials and Nanotechnology*, 7:1-5, 2017.
  10. Gopal Rawat, Divya Somvanshi, Hemant Kumar, **Yogesh Kumar**, Chandan Kumar, and Satyabrata Jit. “Ultraviolet Detection Properties of p-Si/n – TiO<sub>2</sub> Heterojunction Photodiodes Grown by Electron-Beam Evaporation and Sol-Gel Methods: A Comparative Study.” *IEEE Transactions on Nanotechnology*, 15(2):193–200, 2016.
  11. Shivalini Singh ,Pramod Kumar Tiwari, Hemant Kumar, **Yogesh Kumar**, Gopal Rawat, Sanjay Kumar, Kunal Singh, Ekta Goel, S Jit, and Si-Hyun Park. “Theoretical and Experimental Study of UV Detection Characteristics of Pd/ZnO Nanorod Schottky Diodes.” *Nano*, 12: 1750137(8), 2017.

12. Chandan Kumar, Gopal Rawat, Hemant Kumar, **Yogesh Kumar**, Rajiv Prakash, and Satyabrata Jit. “Electrical and Ammonia Gas Sensing Properties of Poly ( 3 , 3” – dialkylquaterthiophene ) Based Organic Thin Film Transistors Fabricated by Floating-Film Transfer Method.” *Organic Electronics*, 48:53-60, 2017.
13. Chandan Kumar, Gopal Rawat, Hemant Kumar, **Yogesh Kumar**, Rajiv Prakash, and Satyabrata Jit. “Flexible poly (3, 3”- dialkylquaterthiophene) based interdigitated metal-semiconductor-metal ammonia gas sensor.” *Sensors & Actuators: B. Chemical* 255(part 1):203–209, 2017.
14. Gopal Rawat, Divya Somvanshi, **Yogesh Kumar**, Hemant Kumar, Chandan Kumar, and Satyabrata Jit. “Electrical and Ultraviolet-A Detection Properties of E-Beam Evaporated n-TiO<sub>2</sub> Capped p-Si Nanowires Heterojunction Photodiodes.” *IEEE Transactions on Nanotechnology*, 16(1):49–57, 2017.
15. Gopal Sankar, Piyali Maity, **Yogesh Kumar**, Hemant Kumar, Vinod K Gangwar, Sandip Chaterjee, Satyabrata Jit, Anup K Ghosh, and Bhola N. Pal. “Single Quantum Dot Rectifying Diode With Tunable Threshold Voltage.” *RSC-Journal of Materials Chemistry C*, 5(37): 9792-9798, 2017.