

## List of Publication

### Journals:

| Sr. No. | Publication Details   | Impact Factor |
|---------|---|---------------|
| 1       | Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, <b>Manoj Kumar</b> , Investigating the charge transport kinetics in poly-crystalline silicon solar cells for low-concentration illumination by impedance spectroscopy, <i>Solar Energy Materials and Solar Cells</i> 133 (2015) 105-112. DOI: 10.1016/j.solmat.2014.10.031.  | 5.03          |
| 2       | Brijesh Tripathi, Parth Bhatt, Chandra Kanth P, Pankaj Yadav, Bhakti Desai, Manoj Kumar Pandey, <b>Manoj Kumar</b> , Temperature Induced Structural, Electrical and Optical Changes in Solution Processed Perovskite Material: Application in photovoltaics, <i>Solar Energy Materials &amp; Solar Cells</i> 132 (2015) 615–622. DOI: 10.1016/j.solmat.2014.10.017. | 5.03          |
| 3       | Brijesh Tripathi, Pankaj Yadav, Kavita Pandey, Pooja Kanade, Manjeet Kumar, <b>Manoj Kumar</b> , Investigating the role of graphene in the photovoltaic performance improvement of dye-sensitized solar cell, <i>Materials Science and Engineering B</i> 190 (2014) 111–118. DOI: 10.1016/j.mseb.2014.09.016.   | 2.12          |
| 4       | Pooja Kanade, Pankaj Yadav, <b>Manoj Kumar</b> , Brijesh Tripathi*, Plasmon induced photon manipulation by Ag nanoparticle coupled graphene thin-film: Light trapping for photovoltaics, <i>Plasmonics</i> (2014) DOI: 10.1007/s11468-014-9790-4.   | 2.74          |
| 5       | Brijesh Tripathi, Pankaj Yadav, <b>Manoj Kumar</b> , Charge Transfer and Recombination Kinetics in Dye-Sensitized Solar Cell using Static and Dynamic Electrical Characterization Techniques, <i>Solar Energy</i> 108 (2014) 107-116. DOI: 10.1016/j.solener.2014.06.037. ISSN: 0038-092X.  | 3.541         |
| 6       | Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, <b>Manoj Kumar</b> , Recombination kinetics in silicon solar cell under low-concentration: Electro-analytical characterization of space-charge and quasi-neutral regions, <i>Phys. Chem. Chem. Phys.</i> 16 (2014) 15469-15476 DOI:10.1039/C4CP01115E. ISSN: 1463-9076.  | 3.829         |
| 7       | Pankaj Yadav, Brijesh Tripathi, Kavita Pandey, <b>Manoj Kumar</b> , Effect of varying concentration and temperature on steady and dynamic parameters of low concentration photovoltaic energy system, <i>International Journal of Electrical Power &amp; Energy Systems</i> 61 (2014) 101-110. DOI: 10.1016/j.ijepes.2014.03.016. ISSN: 0142-0615.                  | 3.432         |

- 8 Brijesh Tripathi, Pankaj Yadav, Siddharth Rathod, **Manoj Kumar**, Performance analysis and comparison of two silicon material based photovoltaic technologies under actual climatic conditions in Western India, *Energy Conversion and Management* 80 (2014) 97-102. DOI: 10.1016/j.enconman.2014.01.013. ISSN: 0196-8904. 3.59
- 9 Brijesh Tripathi, Pankaj Yadav, **Manoj Kumar**, Indrajit Mukhopadhyay, Plasmon Enhanced Light Trapping to Improve Efficiency of Dye-Sensitized Solar Cell, *Journal of Nanoscience and Nanotechnology* (JNN), 14 (2014) 2624-2629. ISSN: 1533-4880 (Print); EISSN: 1533-4899 (Online) 1.339
- 10 Brijesh Tripathi, Pankaj Yadav, **Manoj Kumar**, Theoretical upper limit of short-circuit current density of TiO<sub>2</sub> nanorod based dye-sensitized solar cell, *Results in Physics* 3 (2013) 182-186. NA
- 11 Pankaj Yadav, Brijesh Tripathi, **Manoj Kumar**, Exergy, Energy, and Dynamic Parameter Analyses of Indigenously Developed Low-Concentration Photovoltaic System, *International Journal of Photoenergy*, Volume 2013, Article ID 929235 (2013). ISSN: 1110-662X. 2.66
- 12 Pankaj Yadav, Brijesh Tripathi, Siddharth Rathod, **Manoj Kumar**, Real-time analysis of low-concentration photovoltaic systems: A review towards development of sustainable energy technology, *Renewable and Sustainable Energy Reviews* 28 (2013) 812-823. ISSN: 1364-0321. 5.51
- 13 Brijesh Tripathi, Pankaj Yadav, **Manoj Kumar**, Effect of varying Illumination and Temperature on Steady State and Dynamic Parameters of Dye-Sensitized Solar Cell using AC Impedance Modeling, *International Journal of Photoenergy*, Volume 2013, Article ID 646407 (2013). ISSN: 1110-662X 2.66
- 14 Brijesh Tripathi, **Manoj Kumar**, Application of Metal Nano-particle Embedded Dielectric Thin-Film to Improve Efficiency of dye-Sensitized Solar Cell, *Journal of Nano Energy and Power Research*, 2 (2013) 48-53. ISSN: 2153-6740 NA
- 15 Brijesh Tripathi, **Manoj Kumar**, Effect of nanorod diameter on the short-circuit current density of Dye-sensitized solar cell, *J. Comput. Theor. Nanosci.* 10 (2013) 2361-2365. ISSN: 1546-1955 (Print); EISSN: 1546-1963 (Online) 1.032
- 16 Brijesh Tripathi, Pankaj Yadav, **Manoj Kumar**, Plasmon-Enhanced Light Trapping to Improve Efficiency of TiO<sub>2</sub> Nanorod-Based Dye-Sensitized Solar Cell, *Plasmonics* 8 (2013) 1501-1507; DOI:10.1007/s11468-013-9564-4. [ISSN: 1557-1955 (print version) ISSN: 1557-1963 (electronic version)] 2.738

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| 17 | Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, <b>Manoj Kumar</b> , Estimation of steady state and dynamic parameters of low concentration photovoltaic system, <i>Solar Energy Materials and Solar Cells</i> , 112 (2013) 65-72. [ISSN: 0927-0248]                         | 5.03 |
| 18 | Pankaj Yadav, Brijesh Tripathi, Makarand Lokhande, <b>Manoj Kumar</b> , Effect of temperature and concentration on commercial silicon module based low-concentration photovoltaic system, <i>Journal of Renewable and Sustainable Energy</i> 5 (2013) 013113 [ISSN: 1941-7012]. | 1.51 |
| 19 | “Study of Dielectric and Pyroelectric Properties of Sol-Gel Derived BST Thin Films” <b>Manoj Kumar</b> , Somnath C. Roy, Seema Agarwal, M.C. Bhatnagar & G.L. Sharma, <i>Ferroelectrics</i> 329(2005)33.  | 0.5  |
| 20 | “Structure, Ferroelectric and Gas Sensing Properties of Sol-gel Derived (Ba,Sr)(Ti,Zr)O <sub>3</sub> Thin Films” <b>Manoj Kumar</b> , Sanju Rani, M.C. Bhatnagar & S. C. Roy, <i>Mat. Chem. &amp; Phys.</i> 107 (2008)399.  | 2.3  |
| 21 | “Structural, Dielectric and Ferroelectric Properties of (Ba, Sr)(Zr <sub>x</sub> Ti <sub>1-x</sub> )O <sub>3</sub> Ceramics by sol- gel method”. <b>Manoj Kumar</b> , A. Garg, Ravi Kumar and M.C. Bhatnagar, <i>Physica B: Condensed Matter</i> . 403(2008)1819.               | 1.4  |

### **Book Chapter:**

Brijesh Tripathi and Manoj Kumar, Metal Nanoparticle Induced Light-Trapping for Solar Photovoltaic Application, in: *Intelligent Light Harvesting Nanomaterials*, Edited by Surya Prakash Singh, Bentham Science Publishers (2014) pp. 3-20. (ISBN: 978-1-60805-959-1)