

List of Publications in Papers in National/ International Journals:

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| 1. | Current-voltage characteristics of Pd ₂ Si based Schottky diodes on p-type (111) silicon and evaluation of their barrier heights. Subhash Chand and Jitendra Kumar Solid State Electronics 38 , (1995) 1103-1104. |
| 2. | Current-voltage characteristics and barrier parameters of Pd ₂ Si/p-Si(111) Schottky diodes in a wide temperature range. Subhash Chand and Jitendra Kumar Semiconductor Science & Technology 10 , (1995) 1680-1688. |
| 3. | Current-transport in Pd ₂ Si/n-Si(100) Schottky barrier diodes at low temperatures. Subhash Chand and Jitendra Kumar Applied Physics A 63 , (1996) 171-178. |
| 4. | On the Existence of a barrier heights distribution in Pd ₂ Si/Si Schottky diodes. Subhash Chand and Jitendra Kumar Journal of Applied Physics 80 , (1996) 288-294 |
| 5. | Evidence for the double distribution of barrier heights in Pd ₂ Si/n-Si Schottky diodes from I-V-T measurements. Subhash Chand and Jitendra Kumar Semiconductor Science & Technology 11 , (1996) 1203-1208 |
| 6. | Electron transport and barrier inhomogeneities in palladium silicide Schottky diodes. Subhash Chand and Jitendra Kumar Applied Physics A 65 , (1997) 497-503 |
| 7. | Simulation and analysis of current-voltage characteristics of Schottky diodes containing barrier inhomogeneities. Subhash Chand and Jitendra Kumar Semiconductor Science & Technology 12 , (1997) 899-906 |
| 8. | Effects of barrier height distribution on the behavior of a Schottky diode. Subhash Chand and Jitendra Kumar Journal of Applied Physics 82 , (1997) 5005-10 |
| 9. | Origin of non-linear current-voltage characteristics of metal-semiconductor contacts: A numerical study Subhash Chand Indian Journal of Engineering and Materials Sciences 7 , (2000) 268-273 |
| 10. | An accurate approach for analyzing inhomogeneous Schottky diodes with a Gaussian distribution of barrier heights. Subhash Chand Semiconductor Science & Technology 17 , (2002) L36-L40 |
| 11. | On intersecting behaviour of current-voltage characteristics of inhomogeneous Schottky diodes at low temperatures. Subhash Chand Semiconductor Science & Technology 19 , (2004) 82-86 |

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| 12. | Analysis of current-voltage characteristics of inhomogeneous Schottky diodes at low temperatures. Subhash Chand and Saroj Bala Applied Surface Science 252 (2005) 358-363 |
| 13. | A comparative study of numerical and analytical approaches of simulating inhomogeneous Schottky diodes characteristics Subhash Chand and Saroj Bala Semiconductor Science & Technology 20 , (2005) 1143-1148 |
| 14. | Theoretical evidence for random variation of series resistance of elementary diodes in inhomogeneous Schottky contacts Subhash Chand Physica B 373 (2006) 284-290. |
| 15. | Simulation studies of current transport in metal-insulator-semiconductor Schottky barrier diodes Subhash Chand and Saroj Bala Physica B 390 , (2007) 179-184. |
| 16. | Synthesis and Electrical Characterization of Self-Supported Conducting Polypyrrole-Poly(vinylidene fluoride) Composite Films Manish Taunk, Atul Kapil and Subhash Chand The Open Macromolecules Journal, 2 (2008) 74-79. |
| 17. | Preparation and characterization of chemically synthesized poly(N-methylaniline) Atul Kapil, Manish Taunk and Subhash Chand Synthetic Metals 159 , (2009) 1267. IF=2.109 |
| 18. | Low Temperature Charge Transport Study in p-Toluenesulfonic Acid Doped Polyaniline Atul Kapil, Manish Taunk and Subhash Chand Asian Journal of Chemistry Vol. 21 , No. 10 (2009), S138-142 IF= 0.27 |
| 19. | Preparation and charge transport studies of chemically synthesized polyaniline Atul Kapil, Manish Taunk and Subhash Chand J Mater Sci: Mater. Electron. 21 , 399-404 (2010). IF= 1.486 ISSN: 0957-4522 (print version) ISSN: 1573-482X (electronic version) |
| 20. | Hopping and tunneling transport over a wide temperature range in chemically synthesized doped and undoped polypyrrole Manish Taunk, Atul Kapil, Subhash Chand Solid State Communication 150 (2010) 1766-1769 IF= 1.941 |
| 21. | Chemical synthesis and low temperature electrical transport in polypyrrole doped with sodium bis(2-ethylhexyl) sulfosuccinate. Manish Taunk, Atul Kapil and Subhash Chand J Mater Sci: Mater. Electron. 22 (2011)p136-142 IF= 1.486 |
| 22. | Study of Synthesis and Temperature Dependence of DC Conductivity in the Low Temperature Range for Poly(N-Methylaniline) Atul Kapil, Subhash Chand Journal of Electronic Materials 40 (2011) 1364-1368 IF=1.635 |
| 23. | Effect of inverse doped surface layer in Schottky barrier modification: A numerical study Subhash Chand , Priyanka Kaushal and Jozef Osvald |

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| | Journal of Electronic Materials, 41 (12) 3387-92. Print ISSN 0361-5235 Online ISSN 1543-186X | IF=1.635 |
| 24. | Current voltage characteristics of Schottky diode simulated using semiconductor device equations Priyanka Kaushal, Subhash Chand and Jozef Osvald International Journal of Electronics, 100 (2013) 686-96. ISSN 0020-7217 (Print), 1362-3060 (Online) | IF=0.509 |
| 25. | Numerical simulation study of Schottky diode characteristics with inverse doped surface layer Subhash Chanda , Priyanka Kaushala and Jozef Osvald Materials Science in Semiconductor Processing, 16 (13) 454-60. ISSN: 1369-8001 | IF=1.338 |
| 26. | Bias and temperature dependent charge transport in flexible polypyrrole devices Journal of Applied Physics 115, 074507 (2014) Manish Taunk, Subhash Chand ISSN: 0021-8979, E-ISSN: 1089-7550 | |
| 27. | Electrical characterization of Ni/n-ZnO/p-Si/Al heterostructure fabricated by pulsed laser deposition technique Journal of Alloys and Compounds 613 (2014) 395–400 Subhash Chand and Rajender Kumar ISSN: 0925-8388 | |
| 28. | Growth and temperature dependent characterization of pulsed laser deposited Ag/n-ZnO/p-Si/Al heterojunction. J Mater Sci: Mater Electron 25 (2014) 4531–4537 Rajender Kumar and Subhash Chand ISSN: 0957-4522 (print version) ISSN: 1573-482X (electronic version) | |
| 29. | Oxygen vacancy induced dielectric relaxation studies in Bi ₄₂ xLa _x Ti ₃ O ₁₂ (x 5 0.0, 0.3, 0.7, 1.0) ceramics Sumit Bhardwaj, Joginder Paul, Subhash Chand , K. K. Raina and Ravi Kumar J Mater Sci: Mater Electron 25 (2014) 4568–4576 Impact Factor 1.798 ISSN: 0957-4522 (print version) ISSN: 1573-482X (electronic version) | |
| 30. | Structural, optical and electrical characterization of Al/n-ZnO/p-Si/Al heterostructures. Rajender Kumar and Subhash Chand Journal of Electronic Materials 44 (2015) 194-201. Print ISSN 0361-5235 Online ISSN 1543-186X | |

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| 31. | <p>Chemical synthesis and charge transport mechanism in solution processed flexible polypyrrole films Manish Taunk and SubhashChand Materials Science in Semiconductor Processing, 39 (2015) 659-664 ISSN: 1369-8001 Impact Factor: 1.955 5-Year Impact Factor: 1.806</p> |
| 32. | <p>Tailoring the structural and optical properties of ZnO by doping with Cd N. Rana, Subhash Chand and Arvind K. Gathania Ceramics International 41(2015)12032–12037 Impact Factor: 2.605 5-Year Impact Factor: 2.540 ISSN: 0272-8842</p> |
| 33. | <p>Band gap engineering of ZnO by doping with Mg N Rana, Subhash Chand and Arvind K Gathania Physica. Scripta. 90 (2015) 085502 (6pp) 2014 Impact factor = 1.126 Print ISSN: 0031-8949 Online ISSN: 1402-4896</p> |
| 34. | <p>Structural, Electrical and Red Emission Properties of Pd/n-ZnO/p-Si/Al Heterostructures Rajender Kumar and Subhash Chand Electron. Mater. Lett. 11 (973-981) 2015 DOI: 10.1007/s13391-015-4348-y 2014 Impact factor = 1.980 ISSN: 1738-8090 (print version) ISSN: 2093-6788 (electronic version)</p> |
| 35. | <p>Electroactive Phase Induced Bi₄Ti₃O₁₂–Poly(Vinylidene Difluoride) Composites with Improved Dielectric Properties Sumit Bhardwaj, Joginder Paul, Subhash Chand, K.K. Raina, and Ravi Kumar Journal of Electronic Materials, 44, (3710-3723) 2015 DOI: 10.1007/s11664-015-3848-8 Impact Factor 1.491 Print ISSN 0361-5235 Online ISSN 1543-186X</p> |
| 36. | <p>Numerical analysis of inhomogeneous Schottky diode with discrete barrier height patches Priyank Kaushal and Subhash Chand International Journal of Electronics 103, (937-949) 2016 DOI: 10.1080/00207217.2015.1082201 2014 Impact factor = 0.459 Impact Factor: 0.414 ©2016 ISSN 0020-7217 (Print), 1362-3060 (Online)</p> |

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| 37. | <p>Journal of Materials Science: Materials in Electronics</p> <p>Synthesis and characterization of flower-like ZnO structures and their applications in photocatalytic degradation of Rhodamine B dye.</p> <p>N. Rana, Subhash Chand and Arvind K. Gathania</p> <p>J Mater Sci: Mater Electron (2016) 27:2504–2510</p> <p>DOI 10.1007/s10854-015-4051-7</p> <p>Impact Factor 1.798</p> <p>ISSN 0957-4522</p> |
| 38. | <p>Green synthesis of zinc oxide nano-sized spherical particles using Terminalia chebula fruits extract for their photocatalytic applications</p> <p>N. Rana, Subhash Chand, and Arvind K. Gathania</p> <p>Int Nano Lett 6 (91–98)2016</p> <p>DOI 10.1007/s40089-015-0171-6</p> <p>ISSN Print : 2008-9295, e-ISSN : 2228-5326</p> |
| 39. | <p>Fabrication and electrical characterization of nickel/p-Si Schottky diode at low temperature</p> <p>Rajender Kumar, Subhash Chand</p> <p>Solid State Sciences 58 (2016) 115-121</p> <p>10.1016/j.solidstatesciences.2016.06.003</p> <p>Impact Factor: 2.041 5-Year Impact Factor: 1.916</p> <p>ISSN 1293-2558</p> |