

Research papers published in Refereed Journals

1. B. Keshav Rao and **Mohan L. Verma**, Modeling of ionic charge density, *Chemical Physics*, doi.org/10.1016/j.chemphys.2016.04.017.
2. B. Keshav Rao and **Mohan L. Verma**, First principle study of 0.75AgI:0.25AgCl: A density functional approach, *J. Chemical Physics Letters*, 661:157–160, 2016.
3. **Mohan L. Verma** and Homendra D Sahu, Ionic conductivity and dielectric behavior of PEO-based silver ion conducting nanocomposite polymer electrolytes, *J. of Ionics*, 21: 3223-3231 2015.
4. Nirbhay K Singh, **Mohan L. Verma** and Ajay Taide, Capacitor with PEO/Activated Carbon Based Electrode and Nano-composited Polymer as Electrolyte, *Applied Science and Advanced Materials International Vol. 1 (4-5)*, May 2015.
5. Amar Bahadur, **Mohan L. Verma** and Madhukar Mishra, First principle study of structural, electronic and magnetic properties of silicon doped zigzag boron nitride nanoribbon, *Eur. Phys. J. B.* 88:79 2015.
6. Anjali Oudhia, Youman Kumar Sahu, Aarti Chaudhary and **Mohan L. Verma**, A first principle study of electronic structure of ZnO nanoribbon, *IJAERS*, 4: 294-295 2015.
7. Upma, **Mohan L. Verma** and Rachna Singh, Ab initio studies on electronic structure and charge density of potato starch, *IJAERS*, 4: 291-293 2015.
8. Durga Verma, R.P.Patel, **Mohan L. Verma**, Preparation of Eu-activated Sr₂SiO₄ phosphor by a combustion method and its optical properties, *IJAERS*, 4: 271-272 2015.
9. **Mohan L. Verma**, Manickam Minakshi Sundaram and Nirbhay K. Singh, *Structural and electrochemical properties of nanocomposite polymer electrolyte for electrochemical devices*, *Industrial Engineering Chemistry Research*, 53: 14993-15001 2014.
10. **Mohan L. Verma**, Manickam Minakshi Sundaram and Nirbhay K. Singh, *Synthesis and Characterization of Solid Polymer Electrolyte based on Activated Carbon for Solid State Capacitor*, *Electrochemical Acta*, 137: 497–503 2014.
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12. **Mohan L. Verma** and B. Keshav Rao, *Modeling of ionic diffusion by space charge depolarization*, International Journal of Ionics 20: 697-701 2014.
 13. **Mohan L. Verma** and B. Keshav Rao, *A density functional approach for the conductivity*, CSVTU research journal 6: 13-16 2013.
 14. **Mohan L. Verma** and B. Keshav Rao, *Modeling of ionic charge current density*, CSVTU research journal 6: 17-20 2013.
 15. **Mohan L. Verma** and Nirbhay K. Singh, *AC impedance spectroscopic of nano size Al₂O₃ Filler in PEO : AgI polymer electrolyte*, Material Science Research India 9(1):139-146 2012.
 16. **Mohan L. Verma** and Nirbhay K. Singh, *AC Impedance Analysis on PEO:AgI Polymer Electrolyte for Capacitor Application*, CSVTU Research Journal 5: 22-26 2012.
 17. **Mohan L. Verma** and Nirbhay K. Singh, *Ultrabattery, fuel cell and supercapacitor based HEV a comparative study of performance*, International Journal of Theoretical and Applied Physics 2: 113-124 2012.
 18. **Mohan L. Verma** and B. Keshav Rao, *Modeling of Ag⁺ mobility in AgI by space charge depolarization process*, International Journal of Ionics 17: 323-329 2011.
 19. **Mohan L. Verma** & Arti Verma *Structural and morphological characterization of Ag⁺ ion conducting nanocomposite polymer electrolyte membrane(1-x) [70 PEO:30 Ag₂SO₄]:x Fe₂O₃ by hot press technique*, International journal of Pure and Applied Physics 7: 7-12 2011.
 20. **Mohan L. Verma** and Arti Verma, *Investigation on solid polymer electrolyte (SPE) membrane of composition [(1-x) PEO: x AgCl] prepared by hot press technique*, Material Science Research India, 2011.
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24. **Mohan L. Verma** and Arti Verma, *Study of membrane morphology of SEM image of polymer nanocomposite membrane by digital Image processing*, International Journal of Engg. Science and Technology 1: 1332-1336 2011.
25. **Mohan L. Verma**, R.C. Agrawal and Mimi Mukherjee, *Space Charge Depolarization of Wurtzite or Zinc Blend Structured Silver Iodide: Modeling of Preliminary Studies*, Radiation effects & Defects in solids 161: 225-233 2006.
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