

*Thiagarajar College of Engineering, Madurai-625015*

*Department of Physics*



## **Publications**

### **Journals**

1. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, C. Saranya and M. MAHENDRAN, H<sub>2</sub> Adsorption in Li-Decorated Porous Graphene, Solid State Physics: American Institute of Physics Proceedings; 1665, 050157 (2015) ; <http://dx.doi.org/10.1063/1.4917798>
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3. C. Saranya, S. Vinodh Kumar, S. Seenithurai, R. Kodi Pandyan, P. Munieswaran, and M. MAHENDRAN, Damping studies in Ni-Mn-Fe-Ga / polymer composites, Solid State Physics : American Institute of Physics Proceedings; 1665, 060025 (2015); <http://dx.doi.org/10.1063/1.491786>
4. C. Mahalakshmi, S. Vinodh Kumar, S. Seenithurai and M. MAHENDRAN, Effect of Mn substitution on structural and magnetic properties of ferromagnetic shape memory alloys, Mechanics of Advanced Materials and Structures (2015); DOI:10.1080/15376494.2015.1022638
5. S. Seenithurai, M. MAHENDRAN, P. Munieswaran, R. Kodi Pandyan, S. Vinodh Kumar and C. Saranya, Defected Graphene with Li-decoration for Hydrogen Storage Applications, International Journal of ChemTech Research, 7 (2015) 1219-1222.
6. P.Munieswaran, S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, M. MAHENDRAN, A First Principles Study on the Adsorption of CO Molecule on Rh<sub>4</sub> and Rh<sub>3</sub>X clusters, International Journal of ChemTech Research, 7 (2015) 1223-1229.
7. S. Vinodh Kumar, R.K. Singh, S. Seenithurai, S. Bysakh, M. Manivel Raja and M.MAHENDRAN, Effect of thickness on structural and magnetic properties of Ni-Mn-Ga ferromagnetic shape memory alloy thin film, Materials Research Bulletin, 61 (2015) 95-100.
8. R. Kodi Pandyan, S. Seenithurai, S. Vinodh Kumar and M. MAHENDRAN, Magnesium Hydride Doped On Single Walled Carbon Nanotubes for Hydrogen doped Adsorption, Fullerenes, Nanotubes and carbon Nanostructures, 23 (2015) 175-180.
9. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, C. Saranya, and M. MAHENDRAN, "Al-decorated carbon nanotube as the molecular hydrogen storage medium." International Journal of Hydrogen Energy, 39 (2014) 11990-11998.
10. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, C. Saranya, and M. MAHENDRAN, "Li-decorated double vacancy graphene for hydrogen storage application: A first principles study." International Journal of Hydrogen Energy, 39 (2014) 11016–11026.
11. R. Kodi Pandyan, S. Seenithurai, S. Vinodh Kumar, C. Saranya and M. MAHENDRAN, 'Hydrogen adsorption in scandium hydride doped (5,5) carbon nanotubes', Proceedings of TICAS, ISBN: 978-81-921319-4-8, pp. 124-127 (2014)
12. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, C. Saranya and M. MAHENDRAN, 'Hydrogen adsorption in Yttrium decorated BC<sub>3</sub> sheet', Proceedings of TICAS, ISBN: 978-81-921319-4-8, pp. 119-123 (2014)
13. C. Saranya, S. Vinodh Kumar, S. Seenithurai, R. Kodi Pandyan and M. MAHENDRAN, 'Synthesis and Characterization of Nano- sized Nickel Ferrite Powder by Solid State Reaction Method', Proceedings of TICAS, ISBN 978-81-921319-4-8, pp. 128-132 (2014)

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  15. A. Sajitha Banu, B. Rekha, M. MAHENDRAN, S. Vinodh Kumar, K. Vallal Peruman and S. Seenithurai, Structural Studies of disordered NiMnGa alloy, Proceedings of Technologically Important Crystalline and amorphous Solids (ISBN: 978-81-921319-0-0) pp 102-105 (2013)
  16. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar and M. MAHENDRAN, Electronic Properties of Boron and Nitrogen Doped Graphene. Nano Hybrids, 5 (2013) 65–83
  17. B. Rekha, M. MAHENDRAN , C. Mahalakshmi, A. Sajitha Banu, S. Vinodh Kumar, K. Vallal Peruman and S. Seenithurai, Effect of twin boundary motion in NiMnGa alloy, Proceedings of Technologically Important Crystalline and Amorphous Solida(ISBN:978-81-921319-0-0)160-108(2013)
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  20. R. Senthur Pandi, R. Chokkalingam and M. MAHENDRAN, Thermal and Magnetic studies of Ni–Mn–Ga/PU Polymer Composites, Indian Journal of Physics, 86, (2012) 787-790.
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  26. Vinoth Kumar, K. Vallal Perumam, S. Seenithurai and M. MAHENDRAN, Structural and Magnetic Characterization of martensitic Ni<sub>2</sub>MnGa polycrystalline FSMA, Proceedings of the Recent Advancement in Nanoscale Reasearch (ISBN:979-93-8054700-8),138-143(2012).
  27. Rajathi, S, Sankara Subramanian, N, Ramanathan, K, Senthamiczselvi, M and Shanmugan, S, 2013,’Effect of Substrate Temperature on the Structural, Optical and Surface Properties of Aluminum Doped Cadmium Sulphide Thinfilms’, Asian Journal of Chemistry, vol. 25, pp.S247-S250.
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1. NR Devi, V Gayathri, "Effect of structural defects on the hydrogen adsorption in promising nanostructures", *Computational Materials Science*, Vol. 96, pp. 284-289, 2015
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3. **A.L.Subramaniyan**,J.Sabareswaran,S.Lakshmipriya,M.Kottaisamy,R.Ilangovan, "Alternative Characterization Techniques for stability of nanofluid". Int.J.Chem Tech Research,Vol6,No3,pp2080-2082
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#### **Conferences Proceedings (held abroad)**

#### **Conferences Proceedings (held in India)**

1. S. Seenithurai and **M. Mahendran**, Functionalized Carbon-based Nanomaterials for Hydrogen Storage Applications, 59<sup>th</sup> DAE-Solid State Symposium to be held at VIT University, India, to be held during December 16-20, (TH-131) 2014. (**PhD Thesis accepted for presentation**)
2. S. Seenithurai, R. Kodi Pandyan, S. Vinodh Kumar, C. Saranya, and **M. Mahendran**, Metals-Decorated Defected Graphene for Hydrogen Storage Applications, International Conference on Magnetic Materials and Applications (ICMAGMA-2014), Pondicherry University, Pondicherry, September 15-17, Page-73 (MNM33) 2014.
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9. R. Jesintha Rani, S. Vinodh Kumar, S. Seenithurai and **M. Mahendran**, Martensitic transformation and magnetic properties of Ni<sub>2</sub>MnGa ferromagnetic shape memory alloys, International Union of Material Research Societies - International Conference in Asia (IUMRS -ICA 2013), IISc Bangalore, December 16-20, 2013 (ABS-838a-ICA).
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19. A. Sajitha Bhanu, C. Mahalakshmi, B. Rekha and **M. Mahendran**, Magnetic and structural properties of disordered Ni-Mn-Ga alloys, International Conference, Madurai Kamaraj University, July 15-16, 2013.
20. S. Vinodh Kumar, R. Senthur Pandi, R. K. Singh, R. Kodi Pandyan, S. Seenithurai, C. Saranya, M. Manivel Raja and **M. Mahendran**, Thickness effect on structural and magnetic properties of

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- 21. C. Saranya and **M.Mahendran**, Shape memory effect in ferromagnetic Ni-Mn-Ga nanopowder, International Conference Advanced Materials Processing, Design and Development, Madurai Kamaraj University, July 15-16, 2013.
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