

## List of SCI Paper Publications

1. **Vinod Kumar Sharma, E. Anil Kumar**, “Effect of measurement parameters on hydrogen storage and thermodynamic properties of La – based metal hydrides”, **International Journal of Hydrogen Energy**, 39 (2014) 5888-5898. Elsevier (Impact factor – 4.94)
2. **Vinod Kumar Sharma, E. Anil Kumar, M. Prakash Maiya, S. Srinivasa Murthy**, “Experimental and theoretical studies on static and dynamic pressure – concentration isotherms of  $MmNi_{5-x}Al_x$  ( $x = 0, 0.3, 0.5$  and  $0.8$ ) hydrides”, **International Journal of Hydrogen Energy**, 39 (2014) 18940-18951. Elsevier (Impact factor – 4.94)
3. **Vinod Kumar Sharma, E. Anil Kumar**, “Measurement and analysis of reaction kinetics of La – based hydride pairs suitable for metal hydride – based cooling systems”, **International Journal of Hydrogen Energy**, 39 (2014) 19156-19168. Elsevier (Impact factor – 4.94)
4. **Vinod Kumar Sharma, E. Anil Kumar, S. Srinivasa Murthy**, “Influence of dynamic operating conditions on the performance of metal hydride based solid sorption cooling systems”, **International Journal of Hydrogen Energy**, 40 (2015) 1108-1115. Elsevier (Impact factor – 4.94)
5. **Vinod Kumar Sharma, E. Anil Kumar**, “Studies on La – based intermetallic hydrides to determine their suitability in metal hydride – based cooling systems”, **Intermetallics**, 57 (2014) 60-67. Elsevier (Impact factor – 3.42)
6. **Vinod Kumar Sharma, E. Anil Kumar**, “Thermodynamic analysis of novel multi stage multi effect metal hydride based thermodynamic system for simultaneous cooling heat pumping and heat transformation”, **International Journal of Hydrogen Energy**, 42 (2017) 437-447. Elsevier (Impact Factor – 4.94)

7. **Vinod Kumar Sharma**, “Static and dynamic measurement based thermodynamic analysis of solid sorption refrigeration system”, **International Journal of Energy Research**, 41 (2017) 553-564. **Wiley & Sons (Impact factor – 3.74)**
8. **Vinod Kumar Sharma**, E. Anil Kumar, “Metal hydrides for energy applications – Classification, PCI characterization and Simulation”, **International Journal of Energy Research**, 41 (2017) 901-923. **Wiley & Sons (Impact factor – 3.74)**
9. I.S. N. V. R. Prashant, D. V. Ravishankar, M Manzoor Hussain, Chandra Mouli Badiganti, **Vinod Kumar Sharma**, Sunil Pathak, “Investigations on performance characteristics of GFRP composites in milling”, **The International Journal of Advanced Manufacturing Technology**, 99 (2018) 1351-1360. **(Impact Factor – 2.06)**
10. **Vinod Kumar Sharma**, E. Anil Kumar, “Thermodynamic simulation of hydrogen based solid sorption heat transformer”, **International Journal of Thermal Sciences**, 125 (2018) 74-80. **(Impact Factor – 4.08)**
11. Man Mohan, **Vinod Kumar Sharma**, “Performance investigation of novel multi stage multi effect sorption thermodynamic system for heating and cooling applications”, **Applied Thermal Engineering**, 161 (2019) 114097. **(Impact Factor – 3.7)**
12. Man Mohan, **Vinod Kumar Sharma**, “Studies on thermodynamic performance of three stage sorption heat transformer”, **Applied Thermal Engineering**, 154 (2019) 228-237. **(Impact Factor – 3.7)**
13. Man Mohan, Maitray Sharma, **Vinod Kumar Sharma**, E Anil Kumar, A Satheesh, P Muthukumar, “Performance analysis of metal hydride based simultaneous cooling and heat transformation system”, **International Journal of Hydrogen Energy**, 44 (2019) 10906-10915. **(Impact Factor – 4.94)**

14. Sheetal Kumar Dewangan, **Vinod Kumar Sharma**, Priyanka Sahu, Vinod Kumar, "Synthesis and characterization of hydrogenated novel AlCrFeMnNiW high entropy alloy", **International Journal of Hydrogen Energy**, 45 (2020) 16984-16991. (**Impact Factor – 4.94**)
15. Shajiullah Naveed Syed, **Vinod Kumar Sharma**, E. Anil Kumar "Thermodynamic and heat-hydrogen transfer analyses of novel multistage hydrogen-alloy sorption heat pump", **International Journal of Energy Research**, 44 (2020) 2925-2940. **Wiley & Sons (Impact Factor – 3.74)**
16. Manoj S. Choudhari, **Vinod Kumar Sharma**, "Performance investigations on hydrogen-based thermochemical energy storage system through finite volume method and thermodynamic simulation", **International Journal of Energy Research**, DOI: 10.1002/er.7093. (**Impact Factor – 3.74**).
17. Manoj S. Choudhari, **Vinod Kumar Sharma**, Manikant Paswan "Metal hydrides for thermochemical energy storage applications", **International Journal of Energy Research**, volume 45, Issue 10, August 2021, Pages 14465-14492, DOI: 10.1002/er.6818. (**Impact Factor – 3.74**)
18. **Vinod Kumar Sharma**, Satheesh A., Anil Kumar E., "Performance investigation of a two-stage sorption hydrogen compressor", **International Journal of Hydrogen Energy**, 46 (2021) 17282-17294. (**Impact Factor – 4.94**)
19. Shajiullah Naveed Syed, **Vinod Kumar Sharma**, "Performance comparison between H<sub>2</sub>-metal hydrides and CO<sub>2</sub>-adsorbents-based sorption refrigeration systems", **International Journal of Energy Research**, 45 (2021) 7851-7869. (**Impact Factor – 3.74**)
20. Sanjay Gupta, **Vinod Kumar Sharma**, "Characterisation of La<sub>0.9</sub>Ce<sub>0.1</sub>Ni<sub>5</sub> alloy for the development of single-stage thermally driven sorption hydrogen compressor", **International Journal of Energy Research**, 45 (2021) 5710 – 5729. (**Impact Factor – 3.74**)

- 21.Sanjay Gupta, **Vinod Kumar Sharma**, “Performance investigation of a multi-stagesorption hydrogen compressor”, **International Journal of Hydrogen Energy**, 46 (2021) 1056-1075. (**Impact Factor – 4.94**)
- 22.Manoj S. Choudhari, **Vinod Kumar Sharma**, “Thermodynamic simulation of hydrogen based thermochemical energy storage system”, **International Journal of Hydrogen Energy**, 46 (2021) 16440 – 16452. (**Impact Factor – 4.94**)
- 23.Sanjay Gupta, **Vinod Kumar Sharma**, “Design and analysis of metal hydride reactor embedded with internal copper fins and external water cooling”, **International Journal of Energy Research**, 45 (2021) 1836-1856. (**Impact Factor – 3.74**)
- 24.Manoj S. Choudhari, Prem Chaurasiya, Mukesh Thakur, Manikant Paswan, **Vinod Kumar Sharma**, “Performance investigations of the hydrogen-based energy storage system employing high-pressure metal hydride pair”, **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, DOI: <https://doi.org/10.1080/15567036.2021.2000070>. (**Impact Factor – 3.44**) ISSN: 15567230, 15567036.
- 25.Chaurasiya PK, Rajak U, Singh SK, Nath Verma T, **Vinod Kumar Sharma**, Kumar A, Shende V, “A review of techniques for increasing the productivity of passive solar stills”, **Sustainable Energy Technologies and Assessments**, 52 (2022) 102033. DOI: 10.1016/j.seta.2022.102033. (**Impact Factor – 5.353**) ISSN: 2213-1388.