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## **PRINCIPAL AREA OF INTEREST:**

- Heat transfer
- Nanofluids
- Phase change material
- electronic cooling

## **PUBLICATIONS:**

1. Dhanapal, Kalaimegam, Mohan Raman, **R. Kamatchi**, and G. Kumaresan. "Role of method of synthesis on the size of flakes, dispersion stability and thermophysical properties of aqua based reduced graphene oxide nanofluids." Journal of Thermal Analysis and Calorimetry (2020): 1-11.
2. Kannan, K. Gopi, and **R. Kamatchi**. "Augmented heat transfer by hybrid thermosyphon assisted thermal energy storage system for electronic cooling." Journal of Energy Storage 27 (2020): 101146.
3. Kumaresan, G., P. Vijayakumar, M. Ravikumar, **R. Kamatchi**, and P. Selvakumar. "Experimental study on effect of wick structures on thermal performance enhancement of cylindrical heat pipes." Journal of Thermal Analysis and Calorimetry 136, no. 1 (2019): 389-400.
4. Kannan, K. Gopi, **R. Kamatchi**, T. Venkatajalapathi, and A. S. Krishnan. "Enhanced heat transfer by thermosyphon method in electronic devices." Journal homepage: <http://iieta.org/Journals/IJHT> 36, no. 1 (2018): 339-343.
5. **Kamatchi, R.**, and K. Gopi Kannan. "An aqua based reduced graphene oxide nanofluids for heat transfer applications: synthesis, characterization, stability analysis, and thermophysical properties." INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH 8, no. 1 (2018): 313-319.
6. **Kamatchi, R.**, and G. Kumaresan. "Investigations on pool boiling critical heat flux, transient characteristics and bonding strength of heater wire with aqua based reduced graphene oxide nanofluids." Chinese Journal of Chemical Engineering 26, no. 3 (2018): 445-454.
7. Vijayakumar, M., P. Navaneethakrishnan, G. Kumaresan, and **R. Kamatchi**. "A study on heat transfer characteristics of inclined copper sintered wick heat pipe

using surfactant free CuO and Al<sub>2</sub>O<sub>3</sub> nanofluids." Journal of the Taiwan Institute of Chemical Engineers 81 (2017): 190-198.

8. **Kamatchi, R.** "Experimental investigations on nucleate boiling heat transfer of aqua based reduced graphene oxide nanofluids." Heat and Mass Transfer 54, no. 2 (2018): 437-451.
9. **Kamatchi, R.**, Sumant Kumar, and Lalit Narayan Upadhyay. "Synthesis, characterization, stability analysis, and thermophysical properties of reduced graphene oxide-water nanofluids for solar collectors."
10. **Kamatchi, R.**, S. Venkatachalapathy, and C. Nithya. "Experimental investigation and mechanism of critical heat flux enhancement in pool boiling heat transfer with nanofluids." Heat and Mass Transfer 52, no. 11 (2016): 2357-2366.