# LIST OF PUBLICATIONS

1. Vaishali Sharma, Hardik L Kagdada, Prafulla K Jha, Piotr Śpiewak, Krzysztof J Kurzydłowski, "Thermal transport properties of boron nitride based materials: A review", *Renew. Sustain. Energy Rev* **120**, 109622 (2020).
2. Vaishali Sharma, Hardik L Kagdada, Prafulla K Jha, "Four-fold enhancement in the thermoelectric power factor of germanium selenide monolayer by adsorption of graphene quantum dot", *Energy* **196,** 117104 (2020).
3. Ravi Vithalani, Dikin S Patel, Chetan K Modi, Vaishali Sharma, Prafulla K Jha, "Graphene Oxide Supported Oxovanadium (IV) Complex for Catalytic Peroxidative Epoxidation of Styrene: An Eye-Catching Impact of Solvent", *Appl. Organomet. Chem.* E5500 (2020). Doi: https://doi.org/10.1002/aoc.5500
4. Vaishali Sharma, Narayan N Som, Sharad Babu Pillai, Prafulla K Jha, "Utilization of doped GQDs for ultrasensitive detection of catastrophic melamine: A new SERS platform", *Spectrochim. Acta A* **224**, 117352 (2020).
5. Vaishali Sharma, Hardik L Kagdada, Dheeraj K Singh, Prafulla K Jha, "Trapping Melamine with Pristine and Functionalized Graphene Quantum Dots: DFT and SERS Studies", *In: Singh D., Das S., Materny A. (eds) Advances in Spectroscopy: Molecules to Materials. Springer Proceedings in Physics, vol 236. Springer, Singapore* (2019).
6. Vaishali Sharma and Prafulla K. Jha, "Enhancement in power conversion efficiency of edge-functionalized graphene quantum dot through adatoms for solar cell applications", *Sol Energy Mater Sol Cells*, **200**, 109908, (2019).
7. Narayan N. Som, Vaishali Sharma, Venu Mankad, M. L. C. Attygalle, Prafulla K. Jha, "Role of CuAlO2 as an absorber layer for solar energy converter", *Solar Energy* **193**, 799-805 (2019).
8. Vaishali Sharma, Hardik L. Kagdada, Jinlan Wang and Prafulla K. Jha, "Hydrogen Adsorption on Pristine and Platinum Decorated Graphene Quantum Dot: A First Principle Study", *Int. J. Hydrog. Energy* (2019).
   Doi: https://doi.org/10.1016/j.ijhydene.2019.09.021
9. Vaishali Sharma, Hardik L Kagdada, Prafulla K Jha, Piotr Śpiewak and Krzysztof Jan Kurzydłowski, "Halogenation of SiGe monolayer: Robust change in electronic and thermal transports", *Phys. Chem. Chem. Phys*. **21**, 19488-19498 (2019).
   Doi: https://doi.org/10.1039/C9CP03822A
10. Ujjawal Krishnam, Vaishali Sharma and Prafulla K. Jha, "The Reynolds number modulated low frequency dynamical modes of aqueous medium embedded spherical virus and implications to detecting and killing viruses", *J Biomol Struct Dyn.,* (2019). Doi: https://doi.org/10.1080/07391102.2019.1648320

11. Chetna Tiwari, Vaishali Sharma, Prafulla K Jha, Arun Pratap, "Effect of aqueous medium on low-frequency dynamics, chemical activity and physical properties of a spherical virus", *J Biomol Struct Dyn.*, (2019). Doi: https://doi.org/10.1080/07391102.2019.1626286
12. Vaishali Sharma, Narayan Som, Shweta D. Dabhi and Prafulla K. Jha, "Tailoring the Electronic and Magnetic Properties of Peculiar Triplet Ground State Polybenzoid "Triangulene"", *ChemistrySelect*, **3**, 2390-2397, (2018).

## FULL PAPERS IN CONFERENCE PROCEEDINGS

1. Narayan N. Som, Basant Roondhe, Vaishali Sharma, Prafulla K. Jha. "First Principles Study of the Structural and Electronic Properties of Hetero-Structure Silicene/SnSe2: Using Lattice Match Model", *AIP Conference Proceedings* **2115**, 030367, (2019).
2. Vaishali Sharma, Shweta D. Dabhi, Satyam Shinde and Prafulla K. Jha, "Tuning electronic properties of graphene nanoflake polyaromatic hydrocarbon through molecular charge-transfer interactions", *AIP Conference Proceedings* **1961**, 030031, (2018).
3. Vaishali Sharma, Som Narayan, Shweta D Dabhi, Satyam Shinde and Prafulla K Jha, "Sensing behavior of a graphene quantum dot phenalenyl towards toxic gases", *AIP Conference Proceedings* **1942**, 050047, (2018).
4. Venu Mankad, Vaishali Sharma and Prafulla K Jha, "Low Frequency Study of $Te_2$ Cluster and CdSeTe Nanoparticles Embedded in Borosilicate Glass", *Journal of Metastable and Nanocrystalline Materials* **28**, 120-124, (2016).

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