

LIST OF PUBLICATIONS

Present section discuss about the publication published/ under review relevant to present research work.

Journal publication:

(1) **Jay Patel**, Amit R Patel, “Guidelines to determine the optimum grid numbers for a space and time dependent problem”, Journal of Thermal Analysis and Calorimetry, Springer publication, **2025**. (Under review/ **IF: 4.7**)

(2) **Jay Patel**, Amit R Patel, “Study on the effect of different types of aperture area on the optical performance of solar flat plat reflecting system”, Sustainable Energy Technology and Assessment, Elsevier, 61, 103586, **2024**. <https://doi.org/10.1016/j.seta.2023.103586>. (**IF: 8.00**)

(3) **Jay Patel**, Amit R Patel, Chintan Mulasiya, “Determination of optical and thermal performance of a large - sized flat plate solar reflector unit under azimuthal sun alignment”, Journal of Thermal Analysis and Calorimetry, Springer publication, 148, 8991–9011, **2023**. <https://doi.org/10.1007/s10973-023-12282-2>. (**IF: 4.7**)

Conference publication:

(1) **Jay Patel**, Amit R Patel, “Numerical investigation on the effect of different types of aperture area on the optical performance of solar flat plat reflecting system”, International conference on environmental sustainability (ICES), VJTI, Matunga, Maharashtra, **March 2023**.

(2) **Jay Patel**, Amit R Patel, “Effect of reflector height to base ratio on the optical performance of square shaped aperture area based flat plat solar reflecting system”, International Conference on Recent Advances in (Applied) Sciences & Engineering (RAISE), MSU, Baroda, Gujarat, **April 2023**.

(3) **Jay Patel**, Amit R Patel, “Effect of octagonal shaped aperture area on optical performance of the simple flat plate solar reflecting system”, 1st IEEE international conference on renewable energy and sustainable E- mobility, MNIT, Bhopal, M.P., **May 2023**.

Book chapter:

(1) **Jay Patel**, Amit R Patel, “Recent advancements in large-scale solar flat plate reflecting systems: Their analysis with unique analytical technique, application, scaling up strategies, and economics as they are applied to underdeveloped countries”, Title: The costs of climate change mitigation innovation- A pragmatic outlook, editor: Dr. D. Ting, Dr. J. Stagner, Taylor & Francis publication, **Dec 2023.**

Patent:

(1) **Jay Patel**, Amit R Patel, “Prediction of solar beam ray with use of ray tracing algorithm for flat plate type reflector” (**waiting for approval**).