1. Record Nr. UNINA9910734899003321 Advances in Fluid and Thermal Engineering [[electronic resource]]: Titolo Select Proceedings of FLAME 2022 / / edited by Basant Singh Sikarwar. Sanjeev Kumar Sharma, Ankur Jain, Krishna Mohan Singh Singapore:,: Springer Nature Singapore:,: Imprint: Springer.. 2023 Pubbl/distr/stampa 981-9923-82-4 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (701 pages) Lecture Notes in Mechanical Engineering, , 2195-4364 Collana 780 Disciplina Thermodynamics Soggetti Heat engineering Heat transfer Mass transfer Energy storage Fluid mechanics Engineering Thermodynamics, Heat and Mass Transfer Mechanical and Thermal Energy Storage **Engineering Fluid Dynamics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references. Plasma Functionalized Wettability Gradient Surfaces for Electronic Nota di contenuto Cooling -- Effect of Porous Plug Shape and Permeability on Convective Heat Transfer Characteristics of Flow through a Mini Channel --Condition Monitoring of Reciprocating Compressor using ANN -- Novel Supercritical Carbon Dioxide Cycle for a Waste Recovery Application --Cross-Recurrence Analysis of Pressure Signals in Intermittent Flow Sub-Regimes -- Effect of Linear Varying Diameter on Thermohydrodynamics of Two-Phase Closed Thermosyphon -- Investigation of Performance and Smoke Characteristics of Diesel Engine Powered by Various Blends of Biodiesels Extracted from Disposed Edible Oil --Effect of Inverting Heat Source Direction on the Melting of Phase Change Material under the Influence of Microgravity Environment --Study of Operating Parameters for a Controllable Water Flash

Evaporation -- Numerical Study of Heat Transfer Fluid Position on

Solidification of PCM in Fin Assisted Thermal Energy Storage System.

Sommario/riassunto

This volume comprises the select proceedings of the 3rd Biennial International Conference on Future Learning Aspects of Mechanical Engineering (FLAME-2022). It aims to provide a comprehensive and broad-spectrum picture of state-of-the-art research and development in thermal and fluid engineering. Various topics covered include flow analysis, thermal systems, flow instability, renewable energy, hydel and wind power systems, heat transfer augmentation, biomimetic/bioinspired engineering, heat pipes, heat pumps, multiphase flow/ heat transfer, energy conversion, thermal hydraulics of nuclear systems, refrigeration, and HVAC systems, computational fluid dynamics, fluid-structure interaction, etc. This volume will prove a valuable resource for those in academia and industry.