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Nota di contenuto	Simple Analytical Method for Performance of an Absorber Plate in Flat-Plate Solar Collectors for Two-Dimensional Heat Flow -- Natural Convection Heat Transfer Enhancement Using Cooling Pipes In The Heat Generating Debris Bed -- Numerical Simulation Of Fluid Flow Inside Nozzle Check Valve -- Highly confined flow past a stationary square cylinder.-Design and Numerical Analysis to Visualize the Fluid Flow Pattern Inside Cryogenic Radial Turbine -- Performance Evaluation of Thermoelectric Refrigerator Based on Natural and Forced Mode of Cooling Processes -- Optimization of Electrical Power of Solar Cell of Photovoltaic Module for a Given Peak Power and Photovoltaic Module Area -- Steady state modelling and validation of a thermal power plant -- To Reduce Pollution Due to Burning Of Coal in Thermal Power Plant -- An Analysis of a Duct with Different Vortex Generators for Performance Enhancement of a Solar Air Heater: Computational Fluid Dynamics (CFD) -- Experimental Analysis of Thermal Conductive Properties on Aerogel filled Composite Structure.-Combustion

Simulation of a Four Stroke Single Cylinder S.I Engine for Reducing Emissions -- Dynamics and Control of Thermally Heat Integrated Systems -- Flow of Ferro-fluid in a circular Tube under the Influence of Magnetic Forces.

Sommario/riassunto

This book comprises select proceedings of the International Conference on Future Learning Aspects of Mechanical Engineering (FLAME 2018). The book gives an overview of recent developments in the field of thermal and fluid engineering, and covers theoretical and experimental fluid dynamics, numerical methods in heat transfer and fluid mechanics, different modes of heat transfer, multiphase transport and phase change, fluid machinery, turbo machinery, and fluid power. The book is primarily intended for researchers and professionals working in the field of fluid dynamics and thermal engineering. .