1. Record Nr. UNINA9910299592703321

Titolo	Application of Thermo-fluid Processes in Energy Systems : Key Issues and Recent Developments for a Sustainable Future / / edited by M. Masud K. Khan, Ashfaque Ahmed Chowdhury, Nur M. Sayeed Hassan
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-0697-0
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XII, 280 p. 123 illus.)
Collana	Green Energy and Technology, , 1865-3529
Disciplina	621.042
Soggetti	Energy systems Fluid mechanics Fluids Energy Systems Engineering Fluid Dynamics Fluid- and Aerodynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Energy Technologies -- Utilization of Nanofluid in Various Clean Energy and Energy Efficiency Applications -- Gaseous and Particle Emissions from a compression Ignition Engine Fulled with Biodiesel-Diesel Blends. - Correlation between physicochemical properties and quality of biodiesel -- A Review of Micro-algal Biofuels, Challenges and Future Directions -- Performance assessment of an electrostatic precipitator of a coal fired power plant – A case study for collecting smaller particles -- Thermofluid Process Applications -- Experimental Investigation and Molecular-Based Modeling of Crude Oil Density at Pressures to 270 MPa and Temperatures to 524 K -- Heat Transfer Enhancement in a Baffled Attic Shaped Space -- Enhanced Thermo-Fluid Dynamic Modelling Methodologies for Convective Boiling -- A method of three dimensional thermo-fluid simulation of the receiver of a standard parabolic trough collector -- Enhancement of confined air jet impingement heat transfer using perforated pin fin heat sinks -- Multiphase Flow in Porous Media: Cake Formation During Extreme Drilling Processes -- Optimising Pyrolysis Conditions for Thermal

	Conversion of Beauty Leaf Tree (Calophyllum inophyllum L.) Press Cake.
Sommario/riassunto	This book provides essential information on and case studies in the fields of energy technology, clean energy, energy efficiency, sustainability and the environment relevant to academics, researchers, practicing engineers, technologists and students. The individual chapters present cutting-edge research on key issues and recent developments in thermo-fluid processes, including but not limited to: energy technologies in process industries, applications of thermo-fluid processes in mining industries, applications of electrostatic precipitators in thermal power plants, biofuels, energy efficiency in building systems, etc. Helping readers develop an intuitive understanding of the relevant concepts in and solutions for achieving sustainability in medium and large-scale industries, the book offers a valuable resource for undergraduate, honors and postgraduate research students in the field of thermo-fluid engineering.