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Soggetti	Renewable energy sources Power resources Energy policy Solar energy Sustainability Thermodynamics Heat engineering Heat - Transmission Mass transfer Renewable Energy Natural Resource and Energy Economics Energy Policy, Economics and Management Solar Thermal Energy Engineering Thermodynamics, Heat and Mass Transfer
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Facing Environmental Issues and Challenges on Archipelagic Countries -- Energy Issues and Challenges on Archipelagic Countries -- Emissions and Nuisance by Idling Vehicles in Public Places -- Net-Zero Energy and Low Carbon Footprint in Residential Buildings in Tropical Regions -- Solar Energy Potential Assessments in Rain-dominated Tropical Monsoon Climates -- Impact of Surface Temperature of a Photovoltaic Solar Panel on Voltage Production -- Effect of Supplementary Cementitious Materials and Curing Conditions on

Compressive Strength of Green Self-consolidating Concrete -- Plastic Waste Issue in Malaysia: Where are We? -- A critical review on waste plastic into value-added hydrocarbons and fuels -- Microwave pyrolysis of plastic waste materials into Hydrogen and Carbon -- Use of Heterojunction Catalysts for Improved Catalytic Pyrolysis of Biomass and Synthetic Wastes -- Biomass Gasification for Sustainable Power Production in Tropical Countries -- The Effect of Alcohol Additives on Engine Performance and Emission Characteristics for Biodiesel-Diesel Blend Fuel in Compression Ignition Engine -- The Biogas Technology Development in Ethiopia: The Status, and the Role of Private Sectors, Academic Institutions, and Research Centers -- Environment Friendly Production of Coconut Shell Charcoal through Pyrolysis -- Thermal Comfort Attainment by Personal Vortex Tube Cooling Device -- Urban Heat Island Phenomenon in Tropical Countries: Analysis of the Wake Flow behind Slender High-Rise Building -- Natural Ventilation in Traditional Malay House: A Study of Flow Pattern by an Enhanced Smoke Wire Technique -- The Importance of Ventilation in Vehicle Cabin on Air Quality -- Indoor Carbon Dioxide Levels in a Typical Wooden House in Northern Borneo -- A Review for Sustainable Electrification of Ethiopia with Hydropower Energy -- Numerical Modelling and Performance Optimization of a Vertical Axis Wind Turbine -- Heat Transfer Enhancement in Stirling Engines Using Fins with Different Configurations -- The Feasibility of Tidal Energy in the United Arab Emirates.

Sommario/riassunto

The tropical zones are dominated by developing countries, which mainly face problematic environmental issues. Different than four-season countries, tropical countries have a continuous summer-like season and therefore they are rich in clean energy sources like solar and biomass. Hence, the mitigations of environment and energy issues in the tropics would require specific understanding and different approach to solutions. This book offers an assortment of studies on scenarios of environment as well as energy demand and power generation technologies in the tropics. Many of the countries within the tropics are highly populated, and this results in various problems related to the environment and energy. The demand for energy in these countries keeps increasing but concurrently there are also environmental issues that require serious attention. As the global concern on the environment is alarming today, the choice of power generation should be of the cleanest possible resource. This various reports on research activities carried out in the tropics on the aspect of environment and energy presented in this book are highly beneficial for those who like to see an improvement in the tropics with regard to environment and energy systems.
