1. Record Nr. UNINA9910299624703321

Titolo	Progress in Sustainable Energy Technologies Vol II : Creating Sustainable Development / / edited by Ibrahim Dincer, Adnan Midilli, Haydar Kucuk
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-07977-8
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (718 p.)
Disciplina	338.927 621.042
Soggetti	Renewable energy resources Sustainable development Energy systems Renewable and Green Energy Sustainable Development Energy Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Energy and Exergy Analyses of an Active Magnetic Refrigerator -- Evaluation of Sustainable Energy Options for Non-Residential Buildings -- Exergoeconomic and Enviroeconomic Analyses of Hybrid Electric Vehicle Thermal Management Systems -- CFD Analysis of a Shell and Tube Heat Exchanger Linking a Supercritical Water-Cooled Nuclear Reactor and a Copper-Chlorine Hydrogen Production Cycle -- Entropy Generation of Hydrogen Flow in a Curved Annular Duct -- Influence of Turbine Inlet Temperature on the Efficiency of Externally Fired Gas Turbines -- Exergy and Exergo-Economic Based Analysis of a Gas Turbine Power Generation System -- Non-Repeating Thermal Bridges and Overall Impact on Heating Energy Consumption in a Typical UK Home -- An Evaluation of Indoor Environment in Deprived Community Housing in Yorkshire and the Humber Region of England, UK -- The Application of Phase Change Materials to Improve the Climate

Resilience of a Low-Energy Prototype House -- Green Jubail Industrial City -- Design of a Nearly Zero Energy One-Family House in North-Centre Italy -- Integrative Approach for Desert Sustainable Ecohouse Design -- Ventilation and Architectural Design Strategies for Cooling Office Buildings in Different Climates of Chile -- Investigations for the Thermal Influence of Glass Patterns on the Building Envelope -- Choosing the Right Technology - Optimized Design of Renewable Supply Systems for Residential Houses -- State of the Art Review: Fuel Cell Technologies in the Domestic Built Environment -- Green Lab: A Strategic Design Framework to Develop Sustainable Research Laboratories -- Integrated System Concept for Energy Efficient Smart Buildings and Cities -- Interoperable ICT Platform for Energy Efficient Smart Buildings -- Software Interoperability for Energy Efficient Building Operations Based on the IFC Data Model Standard -- Virtual Energy Platform for Low Energy Building Operations -- The Studies of Environmental Ionizing Radiation Curriculum Indicators for Taiwan's Elementary and Junior High School -- An Energy Strategy in a Liberalized Environment in Slovakia -- Towards an Integrated Value Optimizing Ecosystem in Natural Gas Liquids Operations and Related Facilities -- Mass Transfer and Bubble Flow Dynamics in Aqueous Solutions for Hydrogen Production Cycles -- Numerical Analysis of the Thermo-Mechanical Behavior of Energy Piles -- An Equivalent-Capacitance Approach for Determining the Performance of a Refrigerant Coil -- Perspectives on Sustainability in Natural-Gas-Liquids Operations through a Cleaner Production Framework -- Energy Savings through Applications of Lean Manufacturing Principles -- Empirical Formulation of Shear Modulus Functions for Tubular Pinewood Specimens under Torsion -- Robust Control Techniques of ASVC-Based Var Flow Compensation -- Thermogravimetric Studies on Co-Combustion Characteristics of Mengxi Coal and Poplar -- High-Performance Recycling System for Waste Plastics Using Raman Identification -- Clean Combustion of Low Quality Fuel in Fluidized Bed Combustor -- Theoretical and Experimental Study of a Novel Film Evaporation Cooling System -- Environmental Friendly Food Smoking Technologies -- Impact of Shape, Occupation and External Parameters in the overall Thermal Performance of Office Buildings in Santiago, Chile -- Multisource Heat Pump System: The Case Study of a New School Building -- Application of Heat Pipe System in Data Center Cooling -- Energy and Exergy Analysis of a Trigeneration Facility with Natural Gas Engine -- Numerical Study of Solidification in Triplex Tube Heat Exchanger -- Computer Simulation of Heat and Mass Transfer in a Cross Flow Parallel-Plate Liquid Desiccant-Air Dehumidifier -- Experimental Study of the Heat Transfer Performance of PCMs within Metal Finned Containers -- Simulation of Double Effect Absorption Refrigeration System.

Sommario/riassunto

This multi-disciplinary volume presents information on the state-of-the-art in the sustainable development technologies and tactics. Its unique amalgamation of the latest technical information, research findings, and examples of successfully applied new developments in the area of sustainable development will be of keen interest to engineers, students, practitioners, scientists, and researchers concerned with sustainability. Problem statements, projections, new concepts, models, experiments, measurements, and simulations from not only engineering and science, but disciplines as diverse as ecology, education, economics, and information technology are included, in order to create a truly holistic vision of the sustainable development field. The contributions feature coverage of topics including green buildings, exergy analysis, clean carbon technologies, waste

management, energy conservation, environmental remediation, energy security, and sustainable development policy.