

1. Record Nr.	UNINA9910828039803321
Titolo	Energy efficient technologies for sustainability : selected, peer reviewed papers from the International Conference on Energy Efficient Technologies for Sustainability (ICEETS 2013), April 10-12, 2013, Tamilnadu, India // edited by R. Edwin Raj, S. Joseph Sekhar and B.S.S. Daniel
Pubbl/distr/stampa	Durnten-Zurich : , : Trans Tech Publications, , [2013] ©2013
ISBN	3-03826-163-7
Descrizione fisica	1 online resource (424 p.)
Collana	Advanced materials research ; ; 768
Altri autori (Persone)	RajR. Edwin SekharS. Joseph DanielB. S. S
Disciplina	621.042
Soggetti	Energy conservation Renewable energy sources
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 and indexes.
Nota di contenuto	Energy Efficient Technologies for Sustainability; Preface and Committees; Table of Contents; Chapter 1: Utilization of Alternate Energy for Sustainability; Analysis of Three Port Full Bridge and Half Bridge DC-DC Converter Interfacing Renewable Energy System; Comparative Analysis of Solution Methods to Power Electronic Interface Modeling for Renewable Energy Applications; Investigation of PMSG Fed Diode-Clamped Multilevel Inverter for Wind Energy System; Modeling of Photovoltaic Array and Simulation of MPPT Algorithm A Review of Mathematical Models for Performance Analysis of Hybrid Solar Photovoltaic - Thermal (PV/T) Air Heating Systems Structural Analysis of a Wind Turbine Blade; Application of Particle Swarm Optimization Technique for the Design of Maximum Power Point Tracking; Application of Wind Energy Source to Large Scale Desalination System Prefeasibility Analysis-Investigation of Wind Power Potential in Coastal Areas of Tamilnadu; Performance Analysis of Flat Plate Solar Water Heater by Changing the Heat Pipe Material

Effect of Working Pressure on Structural, Electrical and Optical Properties of CIGS Thin Film Deposited by PLD Modelling and Simulation of 3-phase Transformerless Split Inductor Multilevel Inverter for Grid Connected Photovoltaic System; Implementation of a Low Cost Resonant Boost Converter Connected Photo Voltaic System; Three Phase Hybrid 7-Level Inverter with 60 Degree PWM Scheme for PV Applications; Performance Studies on Solar Photovoltaic Thermal System for Crop Drying; Development of Computational Technique for Better Utilization of Renewable Energy  
Influence of Source - Substrate Distance of Cu<sub>4</sub>SnS<sub>4</sub> Thin Films Grown by Co-Evaporation Simulation and Hardware and Implementation of Directly Coupled Four Phase Interleaved Boost Converter for Fuel Cells; Development and Field Test Performance of a Non-Conventional Unidirectional Co-Axial Two Series Rotors Micro Wind Turbine; Maximum Power Point Tracking Based on Look Up Table Approach; Sensorless Control of PMSG Wind Turbine Using ANFIS; Design and Modeling of Photovoltaic System Fed Brushless DC Motor; Cost Effective Wind Energy Conversion Scheme Using Self-Excited Induction Generator  
Performance Evaluation and Exhaust Emission Analysis of a CI Engine Fuelled with Pongamia Pinnata Biodiesel and its Blends Experimental Analysis of Energy Recovery from an Internal Combustion Engine Exhaust Using Rankine Cycle; Experimental Investigation of Nano Particles Blended with Water on Solar Flat Plate Collector; Chapter 2: Energy Efficient Automotive Technologies; Spray Characteristics of Diesel and Biodiesel in Direct Injection Diesel Engine; Experimental Study on the Spray Characteristics of Diesel and Biodiesel (Jatropha Oil) in a Spray Chamber  
Effect of DEE Injection in Pongamia Pinnata Biodiesel Filled CI Engine Using Hydrogen as Secondary Fuel

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## Sommario/riassunto

Energy is the major driving force for the economy of any nation. The challenge for continuous generation of power to meet the ever growing demand is a daunting task, especially due to limited resources. This collection of peer reviewed papers contains original research articles in different areas of energy efficient technologies such as: Alternate Energy, Building Technologies, Automotive Technologies, Modeling and Design, Manufacturing Systems and Power Systems. We hope that the novel ideas presented in these papers will trigger more application oriented research in relation with latest techn

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