Record Nr. UNINA9910789474203321 Energy efficient technologies for sustainability: selected, peer reviewed **Titolo** 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 Description based upon print version of record. Note generali 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 SystemsStructural 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

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Performance Evaluation and Exhaust Emission Analysis of a CI Engine Fuelled with Pongamia Pinnata Biodiesel and its BlendsExperimental 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 Fulled CI Engine Using Hydrogen as Secondary Fuel

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