Record Nr. UNINA9910818740903321 **Titolo** Solar energy materials and energy engineering: selected, peer reviewed papers from the 2013 International Conference on Solar Energy Materials and Energy Engineering (SEMEE 2013), September 1-2, 2013, Hong Kong / / edited by Xianahang Feng, Qi Luo and Tianbiao Zhang Pubbl/distr/stampa Durnten-Zurich:,: Trans Tech Publications,, [2014] ©2014 **ISBN** 3-03826-281-1 Descrizione fisica 1 online resource (468 p.) Advanced materials research;; 827 Collana Altri autori (Persone) XianahangFeng LuoQi ZhangTianbiao Solar energy - Materials Soggetti Power (Mechanics) 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 Solar Energy Materials and Energy Engineering: Preface and Organizing Committee; Table of Contents; Chapter 1: Chemical Engineering and Energy Materials: The Study on the Influential Factors of Photocatalytic Performance of Eosin-Sensitized TiO2 Nanoparticles; Molecular Dynamics Simulation of TRIP Steel Residual Austenite Stacking Fault Development; Culn1-xGaxSe2 Thin Films Prepared by Co-Evaporation Technique: Synthesis and Electrochemical Properties of LiFe (PO4)(1x/3)Fx/C as a Cathode Material; Higher Alcohols Synthesis from CO2 Hydrogenation over K2O-Modified CuZnFeZrO2 Catalysts Overview of Bio-Oil Upgrading via Catalytic CrackingElectrochemical Degradation Pathway of Tricyclazole in Aqueous Solution Using Lead Dioxide Anode; Synthesis of Titanium Dioxide in Hydrogen Peroxide Solution and its Photocatalytic Character: Low Cost Electro-Deposition

> of Cuprous Oxide P-N Homo-Junction Solar Cell; Preparation and Application of Light Conversionfilm Forexploiting Solar Energy; Effects of One-Dimensional Photonic Crystal on Thin Film Silicon Solar Cells; Chapter 2: Energy Science and Engineering; A Simple Design Method

for Thermal Performance of Parabolic Troughs Solar Field The Design Method of Extended Range Electric Vehicles Nitrogen Foam Anti-Edge Water-Incursion Technology for Heavy Oil Reservoir with Edge Water: Research on Single-Stage Grid-Connected Photovoltaic System Based on or CAD/PSpice Analog Behavioral Model; Design of Intelligent Home Energy Management for Demand Response Applications: Mesophilic Fermentation of SOMW in a Micro Pilot-Scale Anaerobic Digester; Slaughterhouse Wastes: A Review on Regulations and Current Technologies for Biogas Production The Device of the Automatic Backflow in Solar Water Heater-Temperature Control and Backflow for Pipe of Water HeaterResearch on Parameter Optimization Design of Unstable Water Injection for Heterogeneous Reservoir; Application of HAZOP Study in Key SOP of Oil and Gas Pipelines: Key Technology of Explosion Prevention in Air Injection EOR Process; Broadband Light Harvesting Enhancement in Thin Film Solar Cells with Surface and Back Reflector Grating Nanostructures; Analysis on Solar Energy Application Based on a Nonlinear Optimizing Mathematical Model of Photovoltaic Apartment Application of Coherency Property of Generator to Analysis of Low-Frequency Oscillation in Power SystemA Study of Wave Energy for Electrical Power Generation at Songkla Area in Thailand; Hydrocarbon Prospect of Block VI, East Gobi Basin; Mapping of Offshore Wind Climate and Site Conditions for the Baltic Sea within Latvian Territorial Waters; Application of Integrating Seismic Attribute with Simulation in Volcanic Rock Reservoir; Design of Ellipsoidal Specular Reflectors of 70 kW High-Flux Solar Simulator; Software to Improve Control System in an Ethanol Distillation Process Enhancement of Thermodynamics Property of Gold-Nanofluids Synthesized in Thermal Storage Alkali Chlorate Salt for Concentration Solar Plants

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Solar Energy Materials and Energy Engineering (SEMEE 2013), September 1-2, 2013, Hong Kong. The 81 papers are grouped as follows: Chapter 1: Chemical Engineering and Energy Materials; Chapter 2: Energy Science and Engineering; Chapter 3: Structural Engineering and Building; Chapter 4: Environmental Materials and Engineering; Chapter 5: Management and Planning of Energy.