

SOLAR ENERGY

The Official Journal of the International Solar Energy Society®

Volume 84, Issue 7, 2010

CONTENTS

Performance of Anidolic Daylighting Systems in tropical climates – Parametric studies for identification of main influencing factors	1085	F. Linhart (Switzerland), S.K. Wittkopf (Singapore) and J.-L. Scartezzini (Switzerland)
Influence of store dimensions and auxiliary volume configuration on the performance of medium-sized solar combisystems	1095	M. Lundh (Sweden), K. Zass, C. Wilhelms, K. Vajen and U. Jordan (Germany)
Dynamic simulation of a solar-driven carbon dioxide transcritical power system for small scale combined heat and power production	1103	Y. Chen (Sweden), W. Pridasawas (Thailand) and P. Lundqvist (Sweden)
Toward integrated PV panels and power electronics using printing technologies	1111	C. Ababei, S. Yuvarajan and D.L. Schulz (USA)
Design of isolated renewable hybrid power systems	1124	E.S. Sreeraj, K. Chatterjee and S. Bandyopadhyay (India)
Internal thermal coupling in direct-flow coaxial vacuum tube collectors	1137	J. Glembin, G. Rockendorf and J. Scheuren (Germany)
Mass and heat transfer model of Tubular Solar Still	1147	A. Ahsan (Malaysia) and T. Fukuhara (Japan)
Photocatalytic treatment of water soluble pesticide by advanced oxidation technologies using UV light and solar energy	1157	A.T. Shawaqfeh and F.A. Al Momani (Jordan)
Development of a new flat stationary evacuated CPC-collector for process heat applications	1166	F. Buttinger, T. Beikircher, M. Pröll and W. Schölkopf (Germany)
Direct power control of grid connected PV systems with three level NPC inverter	1175	J. Alonso-Martínez, J. Eloy-García and S. Arnaltes (Spain)
p-Cu ₂ O/n-ZnO heterojunction applied to visible light Orange II degradation	1187	N. Helaïli, Y. Bessekhouad, A. Bouguelia and M. Trari (Algeria)

(Continued on inside back cover)

(Published 18 June 2010)

INDEXED IN EIC Intelligence, Current Contents, Elsevier BIOBASE / Current Awareness in Biological Sciences, BIOSIS Database, Engineering Index Monthly & Author Index, Environmental Periodicals Bibliography, Applied Science & Technology Index. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.

For further information about *Solar Energy* or other Elsevier products, why not access the COMPLETE ELSEVIER CATALOGUE via the INTERNET? WWW: <http://www.elsevier.com>



0038-092X(201007)84:7;1-R



Available online at www.sciencedirect.com

ISSN 0038-092X



Decontamination of industrial cyanide-containing water in a solar CPC pilot plant	1193	A. Durán, J.M. Monteagudo, I. San Martín and M. Aguirre (Spain)
A suitable deposition method of CdS for high performance CdS-sensitized ZnO electrodes: Sequential chemical bath deposition	1201	H. Chen, W. Li, H. Liu and L. Zhu (China)
Influence of substrates on photoelectrochemical performance of sprayed n-CdIn ₂ S ₄ electrodes	1208	R.R. Sawant, S.S. Shinde, C.H. Bhosale and K.Y. Rajpure (India)
Night-time naturally ventilated offices: Statistical simulations of window-use patterns from field monitoring	1216	G.Y. Yun (Republic of Korea) and K. Steemers (UK)
A generalized window energy rating system for typical office buildings	1232	C. Tian, T. Chen, H. Yang and T.-m. Chung (China)
Optimization of a solar cooling system with interior energy storage	1244	C. Sanjuan, S. Soutullo and M.R. Heras (Spain)
Comparative analysis of environmental impacts of maize–biogas and photovoltaics on a land use basis	1255	M. Graebig (UK), S. Brinzeu (Germany) and R. Fenner (UK)
Ambient temperature modelling with soft computing techniques	1264	I. Bertini, F. Ceravolo, M. Citterio, M. De Felice, B. Di Pietra, F. Margiotta, S. Pizzuti and G. Puglisi (Italy)
Optimization of a photovoltaic pumping system based on the optimal control theory	1273	A. Betka and A. Attali (Algeria)
Electricity storage for grid-connected household dwellings with PV panels	1284	G. Mulder, F. De Ridder and D. Six (Belgium)
Study the performance of photogalvanic cells for solar energy conversion and storage: Rose Bengal-d-Xylose–NaLS system	1294	K.M. Gangotri and M.K. Bhimwal (India)
Forecasting photovoltaic array power production subject to mismatch losses	1301	D. Picault, B. Raison, S. Bacha (France), J. de la Casa and J. Aguilera (Spain)
Photovoltaic solar system connected to the electric power grid operating as active power generator and reactive power compensator	1310	F.L. Albuquerque, A.J. Moraes, G.C. Guimarães, S.M.R. Sanhueza and A.R. Vaz (Brazil)
Insolation-oriented model of photovoltaic module using Matlab/Simulink	1318	H.-L. Tsai (Taiwan, ROC)
Effect of soiling in CPV systems	1327	M. Vivar, R. Herrero, I. Antón, F. Martínez-Moreno, R. Moretón, G. Sala (Spain), A.W. Blakers and J. Smeltink (Australia)