

# Journal of Clean Energy Technologies

## CONTENTS

---

---

### Volume 1, Number 2, April 2013

A Study on the Synchronization Characteristics of Thermoacoustic Laser.....	75
<i>Sung Seek Park, Seung Jin Oh, Won Gee Chun, Kuan Chen, and Nam Jin Kim</i>	
Thermochemical Conversion of Waste Papers to Fuel Gas in a Microwave Plasma Reactor.....	80
<i>Parin Khongkrapan, Nakorn Tippayawong, and Tanongkiat Kiatsiriroat</i>	
Influence of Organic Loading Rates on Aerobic Granulation Process for the Treatment of Wastewater.....	84
<i>B. K. Bindhu and G. Madhu</i>	
An Investigation of Cooling and Heating Degree-Hours in Thailand.....	87
<i>Kriengkrai Assawamartbunlue</i>	
Technology Needs Assessment for Climate Change in Energy Management Sector: The Case of Thailand.....	91
<i>Wongkot Wongsapai</i>	
Financial, Environmental and Energy Analysis of Various Micro-CHP Systems within the UK Domestic Market.....	96
<i>T. S. Doyle, Z. Dehouche, A. Harries, and I. Rizos</i>	
Regional Energy Integration – A System Modeling Approach.....	101
<i>Hosam E. Emara-Shabaik, Gulnur Kalimuldina, and Sarim Al-Zubaidy</i>	
Non-Thermal Plasma Reactor for Decomposition of Propane to Generate CO <sub>x</sub> Free Hydrogen.....	105
<i>I. Aleknaviciute, T. G. Karayiannis, M. W. Collins, and C. Xanthos</i>	
Growth Performance of Microalgae Exposed to CO <sub>2</sub> .....	110
<i>Alessandro Minillo, Hania Cardamoni Godoy, and Gustavo Graciano Fonseca</i>	
Photocatalytic Decomposition of Indoor Air Pollution Using Dye-Sensitized TiO <sub>2</sub> Induced by Anthocyanin and Ru Complexes.....	115
<i>Chiu-Hsuan Lee, Je-Lueng Shie, Ching-Yi Tsai, Yong-Ting Yang, and Ching-Yuan Chang</i>	
Disinfection By-Products Removal by Nanoparticles Sintered in Zeolite.....	120
<i>Kubra Ulucan, Cansu Noberi, Tamer Coskun, Cem Bulent Ustundag, Eyup Debik, and Cengiz Kaya</i>	
Effect of Ozonation on Anaerobic Organic Removal from Membrane Concentrate.....	124
<i>F. Büşra Yaman, Mehmet Çakmakci, Bestamin Özkaya, Doğan Karadağ, Billur Dora, and Vesile Çelebi</i>	
Nonlinear Modeling and Simulation of a Four-phase Switched Reluctance Generator for Wind Energy Applications..	127
<i>F. Messai, M. Makhlof, A. Messai, K. Nabti, and H. Benalla</i>	
Progress of Resources and Environmental Carrying Capacity.....	132
<i>Y. N. Tian and H. Q. Wang</i>	
A Primary Master Plan of Gardens' City- A New City in Egyptian Western Desert (EGCWD).....	136

*Somaya T. Abouelfadl, Khaled A. Ouda, Assmaa A. Atia, and Nada Al-Amir*

Critical Temperature for Fabrication of Ti Metal Electrode Produced by Alkali, Acid and Heat Treatment in N <sub>2</sub> Gas .....	141
<i>A. Valanezhad, S. Yamaguchi, R. Khanna, T. Matsushita, T. Kokubo, T. Ohta, Y. Naruta, and H. Takadama</i>	
High Speed Gas Sampling System for Engine Cylinder Emission Analyses.....	144
<i>Nuri Yucel, Salih Karaaslan, Ender Hepkaya, and Nureddin Dinler</i>	
Estimate of Global Solar Radiation by Using Artificial Neural Network in Qena, Upper Egypt.....	148
<i>Emad A. Ahmed and M. El-Nouby Adam</i>	
Numerical Simulations of Nitric Oxide (NO) Formation in Methane, Methanol and Methyl Formate in different Flow Configurations.....	151
<i>P. N. Kioni, J. K. Tanui, and A. Gitahi</i>	
Modeling the Hydrodynamics and Salinity of El-Burullus Lake (Nile Delta, Northern Egypt) .....	157
<i>A. El-Adawy, A. M. Negm, M. A. Elzeir, O. C. Saavedra, I. A. El-Shinnawy, and K. Nadaoka</i>	