



The scientific program will start on Wednesday 20 June 2012 at 11:00 AM, although there will be a registration period from 9:00 to 11:00 AM (in any case, attendees will be able to register at the secretariat desk at any time during the conference). The conference will finish on Friday 22 June 2012 around 7:00 PM.

Oral presentations will take place according to the following general structure in three different halls (HALL1, HALL2, HALL 3) inside the conference venue ("Palacio de Congresos y Exposiciones Costa del Sol-Torremolinos" (Torremolinos Congress Center))

	WEDNESDAY, 20 JUNE 2012	THURSDAY, 21 JUNE 2012	FRIDAY, 22 JUNE 2012
HALL 1	<ul style="list-style-type: none"> • Energy production from Biomass – Biofuels I 	<ul style="list-style-type: none"> • Solar Energy I 	<ul style="list-style-type: none"> • Solar Energy II • Fuel Cells
HALL 2	<ul style="list-style-type: none"> • Nuclear Energy and Materials • Energy Production from Fossil Fuels 	<ul style="list-style-type: none"> • Energy production from Biomass – Biofuels II • Hydrogen • Energy Harvesting Materials • Wave, Tidal and Hydropower 	<ul style="list-style-type: none"> • Energy Transmission, Distribution and Storage • Energy Saving and Sustainability • Energy-Efficient Buildings • Advances in Lighting Materials • Other topics
HALL 3			<ul style="list-style-type: none"> • Wind Power – Wave, Tidal and Hydropower

Poster presentations There will be 5 poster sessions at the EXHIBITION HALL of conference venue (Torremolinos Congress Center), according the following schedule:

POSTER PRESENTATIONS SCHEDULE		
Day	Time	Sessions
Wednesday, 20 June	From 17:15 to 18:30	<ul style="list-style-type: none"> • Energy production from Biomass – Biofuels • Nuclear Energy and Materials • Energy Production from Fossil Fuels
Thursday, 21 June	From 10:45 to 11:30	<ul style="list-style-type: none"> • Solar Energy • Hydrogen • Energy Harvesting Materials
	From 17:15 to 18:00	
Friday, 22 June	From 10:45 to 11:30	<ul style="list-style-type: none"> • Fuel Cells • Energy Transmission, Distribution and Storage • Energy Saving and Sustainability • Energy-Efficient Buildings • Advances in Lighting Materials • Wind Power - Geothermal Energy • Other topics
	From 16:30 to 17:15	

Posters are expected to be posted during the whole day assigned:

- Wednesday, 20 June: from 09:00 or 10:00 AM to 20:00 PM approximately
- Thursday, 21 June: from 09:00 or 10:00 to 19:00 PM approximately
- Friday, 22 June: from 09:00 or 10:00 to 19:00 PM approximately

Presenters are expected to be available for discussion of their posters during the corresponding sessions

ORAL PRESENTATIONS

WEDNESDAY, 20 JUNE (HALL 1)	
9:00-11:00	REGISTRATION & COFFEE (Registration can also be done at any time during the Conference)
Chair: Dr. Paula Costa (LNEG, Portugal)	
11:00-12:00	PLENARY LECTURE From Nanometers to Terawatts. Pending Revolutions in Materials Science Pedro Gómez-Romero Research Center on Nanoscience and Nanotechnology (CIN2) (CSIC-ICN). Vice-Director of MATGAS Research Center. Barcelona, Spain
Energy production from Biomass - Biofuels	
12:00-12:15	H₂ production by glycerol steam reforming using CoRh/mixed oxide catalysts Leidy Marcela Martinez Tejada
12:15-12:30	Novel Techniques (Sonochemistry and Microwave) for the preparation of Biodiesel and Bioethanol Aharon Gedanken
12:30-12:45	The influence of metal loading and calcination temperature on the behavior of the Pt/SAPO-31 catalyst in the hydroconversion of sunflower oil Marina Smirnova
12:45-13:00	Synthesis of DME from (H₂+CO₂). Effect of feed composition on catalyst Deactivation Irene Sierra
13:00-13:15	ILs for applications in biomass conversion and reprocessing Iliev Boyan
13:15-13:30	Preparation of electrospun carbon nanofibers with increased specific surface area utilizing low cost lignin by-product Lew Christopher
13:30-14:45	LUNCH BREAK (Lunch Area)
Chair: Prof. Lew Christopher (South Dakota School of Mines & Technology, USA)	
14:45-15:00	Investigations into combustion characteristics of fuels (Biomass) and influences on ceramic materials, to prevent heat exchanger/heat pipe corrosion Sokesimbone Ncube
15:00-15:15	Cultivation of microalgae with diluted primary olive mill wastewater for bio-fuel production Naim Najami
15:15-15:30	Advanced biofuels – bioethanol and biodiesel from lignocellulosic substrates Kahr Heike
15:30-15:45	Bioenergy in Sweden Wennan Zhang

15:45-16:00	A comparison of the use of dilute aqueous <i>p</i>-toluenesulfonic acid and sulfuric acid in single step pretreatment - saccharification of biomass Ananda Amarasekara
16:00-16:15	Role of intra-cellular and extra-cellular cues in triggering the switch from acidogenesis to solventogenesis in <i>Clostridium acetobutylicum</i> Manish Kumar
16:15-16:30	Numerical identification of design parameters enhancing a mini hybrid system of energy renewable “solar – biomass” for the electricity generation Guyh Dituba Ngoma
16:30-16:45	Hydrogenation of animal fat and waste vegetal oils to biofuels production Paula Costa
16:45-17:00	Trace elements in biogas production – Influence on the increase of the Organic Loading Rate Thomas Schmidt
17:00-17:15	Biogas production from co-digestion by-products from biodiesel industry Julio Fierro Fernández
17:15-18:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Prof. Shin'ya Obara (Kitami Institute of Technology, Japan)	
18:30-18:45	Selection of Renewable Energy Technologies in Landfills: The M-Macbeth Decision Support Ricardo Orling
18:45-19:00	An experimental investigation of the biodiesel stability by means of oxidation and property determination Masjuki Hj. Hassan
19:00-19:15	Performance and stability of corundum and mullite hot gas filter candles in gasification environment Sarah Schaaflhausen
19:15-19:30	High efficient bio-ethanol production method to offer competitive alternative spark ignition engine fueling Corina Stanescu
19:30-19:45	Characteristics of Biodiesel Fuels Applied to Diesel Engine Ku-Sung Kim
19:45-20:00	Influence of biodiesel fatty acid composition on exhaust emissions and engine performance Marta Inés Gregorio Arenas
20:00-20:15	Potential of Biochar Combustion in Blast Furnace Ironmaking Jun Fukai

WEDNESDAY, 20 JUNE (HALL 2)	
Nuclear Energy and Materials	
Chair: Dr. Lelio Luzzi (Polytechnic University of Milan, Italy)	
14:45-15:00	Influence of structural and microstructural parameters on fluorite-type (An,Ln)O₂ mixed oxides dissolution Nicolas Dacheux
15:00-15:15	Nanocrystalline Al₂O₃/a-Al₂O₃ composite coatings for protection of steels from heavy liquid metal corrosion Francisco Garcia Ferre
15:15-15:30	Composite zirconium materials with increased level of properties for active core components of new type light-water reactors with more rigid operation conditions Svetlana Ivanova
15:30-15:45	Ways to improve the radiation resistance of pressure vessel materials for water-moderated reactors by their structure refinement Evgenia Kuleshova, Svetlana Fedotova
15:45-16:00	Sintering of Fluorite-type MO₂ (M = Th, Ce) : New Insights from Coupled HT-ESEM and Dilatometry Approach Nicolas Dacheux
16:00-16:15	Microchemistry of dislocations loops in Fe-based ferritic alloys studied by atomistic Metropolis Monte Carlo techniques Evgeny Zhurkin
16:15-16:30	Manufactured new energy source from hot waste seawater of nuclear power plant <production of sodium metal for hydrogen power generation > Masataka Murahara
16:30-16:45	Development of higher order shear element for the static analysis of composite lamina Virendra Kumar Sharma
16:45-17:00	Simplification of elastomeric sealing of fast breeder reactors based on a few material formulations, analysis procedures, coating technique and manufacturing processes N. K. Sinha
17:00-17:15	Unification of elastomeric sealing applications of fast breeder reactors based on peroxide cured fluorohydrocarbon rubbers N. K. Sinha
17:15-18:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Energy Production from Fossil Fuels	
Chair: Dr Ananda Amarasekara (Prairie View A&M University, USA)	
18:30-18:45	The influence of creep-corrosion interaction on the residual life of high temperature applications Rishi Pillai

18:45-19:00	Qualification of Materials and Their Welded Joints for Advanced Ultra-Supercritical Power Plants Magdalena Speicher
19:00-19:15	Molecular view on natural gas production from shales Alexandru Botan
19:15-19:30	Study of the Kinetics and Mechanisms of Thermal Decomposition of Ellajjun Kerogen Omar S. Al-Ayed
19:30-19:45	Spectroscopic study of heavy fuel oils (HFO) aging using specific cell and chemometric data treatment Braham Zeineb
19:45-20:00	Thermochemical conversion of fuels to synthesis gas by using ICE recuperative heat Valeriy Kirillov

THURSDAY, 21 JUNE (HALL 1)	
Solar Energy	
Chair: Dr. M. TuanTrinh (University of Amsterdam, Netherlands)	
09:00-09:45	PLENARY LECTURE Photovoltaic materials based on Small molecules: an emerging approach to organic solar cells Jean Roncali Group Linear Conjugated Systems CNRS, MOLTECH, University of Angers, France
09:45-10:00	Dye Sensitized Solar Cells – how far away from commercialization Iliev Boyan
10:00-10:15	Bimodal nanostructured TiO₂ thin films for dye sensitized solar cells Marketa Zukalova
10:15-10:30	Investigating the binding of ruthenium dyes to TiO₂ in dye-sensitized solar cells Tracy Hewat
10:30-10:45	Advanced light management in Solid State Dye sensitized solar cells by quasi-1D hierarchical TiO₂ nanostructures Luca Passoni
10:45-11:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Dr. Ceylan Zafer (Ege University, Turkey)	
11:30-11:45	High performance plastic cosensitized dye-sensitized solar cells using multiple electrophoretic deposition Zhaosheng Xue
11:45-12:00	Dye Adsorption by Electrophoresis for Dye Sensitized Solar Cells Takuya Yuasa
12:00-12:15	Thienopyrroledione-containing Donor/Acceptor alternating copolymers as new electron-donating materials for BHJ polymer solar cells Chiara Ottone
12:15-12:30	Size effect of synthetic saponite-clay in quasi-solid electrolyte for Dye-Sensitized Solar Cells (DSSC) Chiara Bisio, Fabio Carniato
12:30-12:45	Efficiency Enhancement of Dye Sensitized Solar Cell by Incorporating Li Ion In to ZnO Nanosturcures Kosala Wijeratne
12:45-13:00	Using density functional theory to model dye-sensitized solar cells Frederic Labat
13:00-13:15	Electrochemical characterizations of ZnO nanowires for dye-sensitized solar cells Abdoul Fatah Kanta
13:15-13:30	Quantum dots and nano-porous materials for solar energy conversion Badawy Waheed

13:30-14:45	LUNCH BREAK (Lunch Area)
Chair: Prof. Jyh-Chen Chen (National Central University, Taiwan)	
14:45-15:00	High Efficiency Hybrid Photovoltaics with a Novel Hierarchical TiO₂ Photoanode Ali Ghadirzadeh
15:00-15:15	Light-harvesting excitons as solar energy carriers at functional temperatures Arvi Freiberg
15:15-15:30	Nanocomposites derived from silica and carbon for low temperature photothermal conversion Xavier Deschanel, Olivier Bruguier
15:30-15:45	A Theoretical Study on Electron Injection and Recombination of Surface Complexes with TiO₂ Koichi Yamashita
15:45-16:00	Deposition of Composite Thin Films by Electrophoresis using Two Kinds of TiO₂ Nano Particles Ryo Kawakami
16:00-16:15	TiO₂ Thin Films Prepared by APCVD for Organic Solar Cells Application Mohammed Said Belkaid
16:15-16:30	Growth of high mobility metal phthalocyanine thin films S K Gupta
16:30-16:45	Transparent and hydrophobic nanocoating materials for photovoltaic cells Gabriella Rossi
16:45-17:00	Low-Cost CIS/CIGS solar cell processing Dimitra Papadimitriou, George Roupakas
17:00-17:15	Electrochemical deposition of CIGS on electropolished Mo Tiziana Spanò
17:15-18:00	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Prof. Koichi Yamashita (The University of Tokyo, Japan)	
18:00-18:15	Surface selenization of CuInS₂ thin-film solar cell absorbers by rapid thermal processing Roberto Felix Duarte
18:15-18:30	Optical design of Gallium Zinc Oxide/Zinc Oxide/Cadmium sulfide layers for Cu(In,Ga)Se₂ solar cells Soochang Jeong
18:30-18:45	Efficiency of energy transfer in nanomodified photocells via plasmons in metallic nanoparticles Artur Henrykowski
18:45-19:00	Silica Enrichment as raw material for Silicon solar grade production Abdelkrim Kheloufi

19:00-19:15	Spatially separated carrier multiplication in silicon Nanocrystals: towards high efficiency solar cells M. Tuan Trinh
19:15-19:30	AlGaAs/ GaAs Tunnel diodes grown on misorientated GaAs substrates for InGaP/ GaAs dual-junction solar cell applications Tsun-Ming Wang
19:30-19:45	Characteristic Solar Thermal Collector on Serial and Parallel Configuration Muhammad Idrus Alhamid
19:45-20:00	Phosphorous Emitter redistribution study under Laser doping Abderrahmane Moussi

THURSDAY, 21 JUNE (HALL 2)

Energy production from Biomass - Biofuels

Chair: Prof. Aharon Gedanken (Bar-Ilan University, Israel)

09:00-09:15	Catalytic microwave-assisted pyrolysis of biomass for biofuels and chemicals Production Rongsheng Ruan
09:15-09:30	Build-up granulation of lignin sludge's as innovative process improving its energy efficiency Satyanarayana Narra
09:30-09:45	The heating liquids containing the component from fermentation processes Krzysztof Kolodziejczyk
09:45-10:00	CO₂ Capture by a Synthetic, CaO-containing Sorbent in a Fixed-bed Reactor Kumar Ranjan Rout
10:00-10:15	Variation in fuelwood properties of five tree/shrub species in the Sahelian and Sudanian ecozones of Mali: relationships with rainfall, regions, land-use and soil types Carmen Sotelo Montes
10:15-10:30	Withdrawn
10:30-10:45	Withdrawn
10:45-11:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)

Hydrogen

Chair: Prof. Jörg Libuda (University Erlangen-Nuremberg, Germany)

11:30-11:45	Hydrogen storage via liquid organic carriers: a microscopic view Jörg Libuda
11:45-12:00	Withdrawn
12:00-12:15	Relationship between structural features and catalytic activity in WGS and PROX reactions over gold catalysts on Fe-modified ceria Lyuba Ilieva Gencheva

12:15-12:30	Acceleration of Hydrogen Desorption from MgH₂ by High-Energy Ball-Milling with Al₂O₃, TiO₂, Cr₂O₃, and ZrO₂ for Extremely Short Time Manshi Ohyanagi
12:30-12:45	Dopant Effect on Hydrogen Generation Step of Two-Step Water Splitting using CeO₂-ZrO₂-MOX Reactive Ceramics Chongil Lee
12:45-13:00	Optimization of the synthesis method and gold nanoparticle size of TiO₂-Au photocatalysts for hydrogen production Karoly Mogyorosi
13:00-13:15	Optimum Conditions for Efficient Hydrogen Generation in Water Electrolyzer Powered by a Solar cell or by a Power Supply Shahed Khan
13:15-13:30	Understand the high photocatalytic activity of Zn_xCd_{1-x}S by hybrid DFT study of the formation of bulk defect states Jianwei Zheng
13:30-14:45	LUNCH BREAK (Lunch Area)
Chair: Dr. Andrew Hsu (Wright State University, USA)	
14:45-15:00	Hydrogen production by methanol steam reforming over Cu-based catalysts: Insights into the role of Cu Spiros Zafeiratos
15:00-15:15	Bio-inspired membrane electrode assembled with electrospun-fibres for catalytic evolution of hydrogen in water Xiaoming Liu
15:15-15:30	Optimizing metal alloys for H₂ separation from gas mixtures A.J. Bottger
15:30-15:45	On-site sodium metal production for hydrogen generation on sea and on-demand hydrogen power generation on land Masataka Murahara
15:45-16:00	Kinetics of Ce_{0.95}Li_{0.05}O_{2-δ} solid solution in the O₂-releasing step for solar hydrogen Production Qing-Long Meng
16:00-16:15	SiN films as an efficient hydrogen permeation barrier Bojan Zajec
16:15-16:30	Permeation of hydrogen and other types of buoyant gases through foils for balloons and their tensile properties Tatjana Haramina
16:30-16:45	Consolidated bioprocessing of lignocellulosic biomass and waste for cost-efficient biohydrogen production Lew Christopher
16:45-17:00	Analysis of solar hydrogen production potential in Algeria: case of an electrolysis-PV tracking system Rafika Boudries

17:00-17:15	Hydrogen storage capacity of activated carbon pellet bounded by Lignocellulose liquid Nasruddin Yusuf
17:15-18:00	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
	Energy Harvesting Materials Wave, Tidal and Hydropower
	Chair: Prof. Aderemi Oki (Prairie View A&M University, USA)
18:00-18:15	A facile method for synthesis of polyaniline nanospheres and effect of doping on their electrical conductivity Aderemi Oki
18:15-18:30	Argon Plasma Treated Flexible CNTs Bulky Paper with Improved Thermoelectric Properties Weiyun Zhao
18:30-18:45	Room-temperature photoluminescence properties and corresponding size-effect of p-CuAlO₂ nanoparticles for energy-related applications Arghya Naraya Banerjee
18:45-19:00	Calendar aging and post mortem analysis of a Graphite/LiFePO₄ cell Mohammad Kassem
19:00-19:15	Plasmonic applications: New designs for high-efficiency thin film photovoltaics Anura Samantilleke
19:15-19:30	Designing and Numerical Simulation of a Pump-Turbine Runner Alireza Riasi

FRIDAY, 22 JUNE (HALL 1)

	Solar Energy
	Chair: Dr. Tao Gao (Norwegian University of Science and Technology, Norway)
09:00-09:15	3C Concept for Control Strategies of Building Integrated Solar Energy Systems Mike Duke
09:15-09:30	Challenges in materials selection for hydrogen producing solar reactors Nesrin Ozalp
09:30-09:45	A new solar concentrator and its performance analysis Guiqiang Li
09:45-10:00	Behaviour of steels in contact with liquid metals considered for thermal energy storage Jean-Bernard Vogt
10:00-10:15	The energy performance analysis of building integrated photovoltaic (BIPV) Trombe wall system for summer period Basak Kundakci Koyunbaba
10:15-10:30	Optimisation of the utilisation of the solar energy: economic profitability of one telephony mobile network Fatiha Youcef Ettoumi
10:30-10:45	Development of a pilot plant Solar Crop Drying System Using Liquid Desiccant Shahab Alizadeh
10:45-11:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
	Chair: Dr. S.K. Gupta (Bhabha Atomic Research Centre, India)
11:30-11:45	ZnO Nanowire Arrays Sensitized with CuInS₂ and Cu₂ZnSnS₄ Absorbing Materials for Extremely Thin Absorber Solar Cells Sylvia Sanchez
11:45-12:00	Extended cylindrical projection method for assessment of sunshine in buildings Ammar Bouchair
12:00-12:15	One-year comparison of different thin-film technologies at Bolzano Airport Test Installation Giorgio Belluardo, Miglena Nikolaeva-Dimitrova
12:15-12:30	Optimization of solar water heaters in Lebanon Leila Kantar
12:30-12:45	Thin film solar cells from nanocrystal inks of quaternary semiconductors Rakesh Agrawal
12:45-13:00	Thin film layers of Amorphous SiCx:H intrinsic and phosphorus-doped for the manufacture of emitters in solar cells Ivaldo Torres Chavez
13:00-13:15	Withdrawn
13:15-14:30	LUNCH BREAK (Lunch Area)

Fuel Cells	
Chair: Dr. Joost van Duijn (University of Castilla-La Mancha, Spain)	
14:30-14:45	Nanoimprinting and nanotransfer for electrochemical systems Benedikt Weiler
14:45-15:00	The development of fuel processor platform for micro-scale solid oxide fuel cells Bo Jiang
15:00-15:15	Catalysts for Ethanol Oxidation in Ethanol Solid Oxide Fuel Cells (ESOFC) Andrzej Kowal
15:15-15:30	Oxyanion doping in cathode materials for SOFCs: a new strategy to improve their performance Jose Porras
15:30-15:45	Study of methane electro-oxidation in solid oxide electrode assemblies under operando conditions Vasiliki Papaefthimiou
15:45-16:00	Preparation of submicron Yttria Stabilized Zirconia films via e-beam deposition: Structural and optical properties Panayiotis Yianoulis
16:00-16:15	Nanofiber-based SPEEK composite membranes for DMFC applications Sergio Molla Romano
16:15-16:30	Mesoporous materials for direct methanol PEM micro fuel cells Horacio Corti
16:30-17:15	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Prof. Sam Li (National University of Singapore, Singapore)	
17:15-17:30	Performance of modified SPEEK membrane by inorganic nanocomposite for Fuel Cell Khaled Charradi
17:30-17:45	Proton conductive nanofiber membrane for fuel cells Hiroyoshi Kawakami
17:45-18:00	PEM electrochemical systems development at NRC "Kurchatov Institute" Vladimir Fateev
18:00-18:15	Carbon Aerogel as a Carbon Support for PEMFC Electrocatalysts Ayşe Bayrakçeken
18:15-18:30	Characterization of hybrid membranes for PEMFC Marcos Borro García
18:30-18:45	Proton transport in poly-imidazole membranes: a fresh appraisal of the Grotthuss mechanism Giuseppe Mangiatordi
18:45-19:00	Investigation of Mn-polypyrrole-carbon nanotube composite as oxygen reduction catalyst and its application in microbial fuel cells Sam Li

19:00	CONFERENCE CLOSURE
FRIDAY, 22 JUNE (HALL 2)	
Energy Transmission, Distribution and Storage Energy Saving and Sustainability	
Chair: Dr. Laure Timperman (University François Rabelais Tours, France)	
09:00-09:15	Protic ionic liquid electrolyte for supercapacitor applications Laure Timperman
09:15-09:30	New electrolytes for ultracapacitor devices using manganese oxide as electrode material Aurélien Boisset
09:30-09:45	Enhanced Lithium Storage Properties of Tin-based Anode Materials Prepared via Melt Spinning Process Shufen Fan
09:45-10:00	The optimum design methods of integration system with PV and EV Norihiko Kose, Tsuguhiko Nakagawa
10:00-10:15	A holistic evaluation plan for agent-based brokerage systems for neighbourhood electricity usage optimization Loukia Prentza
10:15-10:30	Effect of energy technologies on water consumption Bert Bras
10:30-10:45	Influence of the thermal capacity of the hot active wall on the 2D transient free natural convection in diode cavities Esther Zarco Pernia
10:45-11:30	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Dr. Bert Bras (Georgia Institute of Technology, USA)	
11:30-11:45	Opportunities for rare earth metal recycling Bert Bras
11:45-12:00	Critical Metals in Strategic Energy Technologies Raymond Moss
12:00-12:15	Sustainable Assessment Method in Limestone Mining Management Julija Šommet
12:15-12:30	Modelling and experimental validation for the thermal performance of a hybrid vacuum glazing Yueping Fang
12:30-12:45	Hybrid organosilica membranes for energy-efficient molecular separation Hessel L. Castricum

12:45-13:00	Sugarcane straw cellulose as reinforcement in composite materials Adilson Roberto Gonçalves
13:00-13:15	A review of vacuum insulation technology for building insulation: current and future use Farid Arya
13:15-14:30	LUNCH BREAK (Lunch Area)
Energy-Efficient Buildings Advances in Lighting Materials Other topics	
Chair: Dr. Hakima Abou-Rachid (National Defence Canada, Canada)	
14:30-14:45	Making cool roofs compatible with low heating and cooling loads Jose Luis Castro Aguilar
14:45-15:00	Global warming and building energy use and environmental implications Joseph C. Lam
15:00-15:15	Fabrication and characterization of triple vacuum glazing at low temperature using an indium-based seal Farid Arya
15:15-15:30	Nano insulation materials for energy efficient buildings: from theory to practice Tao Gao
15:30-15:45	Development of photoelectrochromic devices for energy saving applications George Leftheriotis
15:45-16:00	Withdrawn
16:00-16:15	Vacuum insulation panels with melamine-formaldehyde rigid foams as core material Bojan Zajec
16:30-17:15	POSTER SESSION & COFFEE BREAK (Exhibition Hall)
Chair: Prof. Woei-Shyan Lee (National Cheng Kung University, Taiwan)	
17:15-17:30	Impact properties and dislocation evolution of Ti-6Al-4V alloy at cryogenic temperatures Woei-Shyan Lee
17:30-17:45	Synthesis and characterization of Lithium Zirconate based adsorbents for CO₂ capture Partha Sarkar
17:45-18:00	The best energy policy selection using VIKOR methodology Pelin Alcan
18:00-18:15	Performance comparison of CCHP systems using different fuzzy multi criteria decision making models for energy sources Abit Balin

18:15-18:30	Lithium-ion capacitors: study of a new co-solvent (MiPC) with LiTFSI salts in electrolyte ternary mixtures Mouad Dahbi
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FRIDAY, 22 JUNE (HALL 3)

Wind Power Wave, Tidal and Hydropower	
Chair: Prof. George Weiss (Tel Aviv University, Israel)	
11:30-11:45	Econometric Forecasting of Wind Power Production Carsten Croonenbroeck
11:45-12:00	Numerical Study on a vertical axis-helical savonius wind turbine YoungTae Lee
12:00-12:15	Comparison of Aerodynamic Performance of Curved and Straight-blade Darrieus Wind Rotors Ibrahim Rashed
12:15-12:30	Withdrawn
12:30-12:45	Estimation of Performance of the H Wind Turbine Using the Multiple Double Disk Stream Tube Theory Ali . M. Elmabrok
12:45-13:00	Optimal control of wave energy converters using deterministic sea wave prediction George Weiss

POSTER PRESENTATIONS (EXHIBITION HALL)

WEDNESDAY, 20 JUNE 2012		
From 17:15-18:30		
Energy production from Biomass – Biofuels		
Nuclear Energy and Materials		
Energy Production from Fossil Fuels		
Code	Title	Presenter(s)
W1	Reducing furnace wall corrosion by coating the furnace tubes in a waste wood firing power plant	Yousef Alipour
W2	Deconstructing sugarcane cell wall for the production of second generation ethanol	Camila Alves Rezende
W3	Engineering Bacterial Surfaces to Degrade Biomass	Timothy Anderson
W4	Economical sweet potato enzymatic hydrolysis for using as carbon source for single cell oil production by thermotolerant oleaginous yeast	Piyawan Buayai, Vichai Leelavatcharamas
W5	<i>Kluyveromyces marxianus</i> mutant strains for improved ethanol fermentation with Jerusalem artichoke	Eui-Sung Choi
W6	Reproductive biology and artificial pollination of <i>Jatropha curcas</i> L.: a promising oilseed for biodiesel	Luiz Dias
W7	Evaluation of genetic variability of <i>Jatropha curcas</i> L. accessions by means of RAPD and SSR markers	Luiz Dias
W8	Dual-frequency ultrasound-assisted reactor for transesterification of vegetable oils aiming at biodiesel production	Adriana Franca
W9	Application of Anaerobic Co-digestion for Utilization of Seaweed, Pectin and Carrageenan Waste	Dhan Prasad Gautam
W10	Retrofitting Practice of a 100kWth Coal/Biomass Air-firing Combustor to the Oxy-firing Mode: Experiences and the Experimental Results	Hamidreza Gohari Darabkhani
W11	Use of Ultrasound in Biodiesel Synthesis	Marta Inés Gregorio Arenas
W12	Environmental protection by the anaerobic methanisation of the cameline scrap of the slaughter-house of the city by a batch digester heated by solar energy	Kamel Hadri
W13	Characterisation of corn starch content for bio-ethanol production purpose	Endre Harsányi, Tamás Rátonyi
W14	Economical bioethanol fermentation of different kind of corn hybrids	Endre Harsányi
W15	Heterogeneous catalysis and Dark fermentation integrated system for the conversion of cellulose into biohydrogen	Edgar Jiménez Güell
W16	Potato pulp as a modifier of biofuels rich in chlorine and alkali	Danuta Król

W17	Slag and fly ash from waste incineration – possibilities of management	Danuta Król
W18	Physicochemical characterization of biodiesel from weed <i>Cyperus esculentus</i>	André Lazarin Gallina, Paulo Rogério Pinto Rodrigues
W19	Chemometric study of biodiesel production from soybean oil	André Lazarin Gallina, Paulo Rogério Pinto Rodrigues
W20	State of art of Biomass exploitation in South KOREA	Ocktaeck Lim
W21	Production of biofuels that integrate glycerol into their composition by lipase catalized transesterification	Diego Luna, Enrique Sancho
W22	The photosynthetic process of C-4 perennial energetic grasses in the climatic condition of Poland	Włodzimierz Majtkowski
W23	Effect of the temperature in ethanol and xylitol production by <i>Hansenula polymorpha</i> using hydrolysates of sunflower stalks	M ^a Lourdes Martínez Cartas
W24	Ethanol production by <i>Pichia stipitis</i> NRRL Y-7124 from olive-tree pruning hemicellulosic hydrolyzate	Alberto J Moya López
W25	Synthesis of biodiesel in supercritical methanol using alumina, silica and zeolites as heterogeneous catalysts	Pilar Olivares-Carrillo
W26	Survivability of <i>Saccharomyces cerevisiae</i> strains selected for bioethanol manufacturing during storage in -70C	Piotr Patelski
W27	Influence of the zinc, magnesium, thiamine and pyridoxine supplementation on the fermentation of sugar beet juice to bioethanol	Piotr Patelski
W28	Cold flow properties investigation of some blended biodiesels from safflower and soybean	Mihaela Patrascoiu
W29	High methane gasification of biomass - experimental studies	Sławomir Poskrobko
W30	Transcriptome analysis of <i>Botryococcus braunii</i> race A by <i>de novo</i> assembly of pyrosequencing cDNA reads and real time PCR	Mariella Rivas Alvarez
W31	Sludge valorization test issued from wastewater treatment plant after an anaerobic digestion as a bio-fertilizer for the Sahara soil	Kalloum Slimane
W32	Potential of Sulphonated Carbonaceous Materials as Catalysts for Biodiesel Production	Leandro Soares de Oliveira
W33	Bioalcohols from biowastes: an assessment of current technologies	Leandro Soares de Oliveira
W34	Microalgae production for biodiesel using mixed system (batch, turf scrubber and photobioreactor)	Rosana de Cassia de Souza Schneider
W35	Effect of the biodiesel from waste oil in the metals composition in lubricative oil	Rosana de Cassia de Souza Schneider
W36	Chemical interesterification of rapeseed oil with ethyl acetate using	Zane Šustere

	methanolic sodium metoxide and t-butanolic potassium butoxide solutions as catalysts	
W37	A method for wood fuel/charcoal of the alien invasive species mesquite (<i>Prosopis juliflora</i>) to support local incomes with better energy efficiency in arid land of Sudan	Hiroshi Nawata
W39	The onset of flow instability under research reactor's operating condition	Nouara Ibrahimrassoul
W40	Modelling of fission gas behaviour applied to nuclear fuel rod analysis	Lelio Luzzi
W41	Diversification of processes to measure thermal power of nuclear reactors	Amir Zacarias Mesquita
W42	Uptake properties of Re(VII) and Tc(VII) for xerogel microcapsules enclosing MIDOA extractants	Hitoshi Mimura
W43	An analytical study on the molten nuclear fuel coolability after severe accidents	Jong Woon Park
W44	Withdrawn	
W45	Segregation at radiation defects in Fe ₇₀ Cr ₂₀ Ni ₁₀ austenitic alloy studied by atomic scale computer simulation	Evgeny Zhurkin
W46	Recycling of Zircaloy from nuclear fuel fabrication scraps	Luis Gallego Martinez
W47	Elastic and electronic properties of YVO ₄ under pressure	Souad Messekine
W49	Withdrawn	Camilo Franco
W50	Preparation of Ni-MOF-74 membrane for CO ₂ separation by layer-by-layer seeding technique	Hern Kim
W51	Electrochemical production of fuel from coal or CO ₂ in mini-plants: a thermodynamic and quantum mechanical study	Zeljka Kröner, Friedrich Kröner
W52	Design of experimental facility to study partial oxy-combustion CO ₂ capture technology	Fernando Vega Borrero

THURSDAY, 21 JUNE 2012		
From 10:45-11:30 and from 17:15-18:00		
		Solar Energy Hydrogen Energy Harvesting Materials
Code	Title	Presenter(s)
T1	Cu-doped TiO ₂ by means of hydrolysis reaction at low temperature	Teresa Aguilar
T2	Development of a Pilot Plant Solar Liquid Desiccant Air Conditioner	Shahab Alizadeh
T3	Characterization of materials degradation of photovoltaic modules	M ^a Begoña Asenjo
T4	Immobilization of the I ₃ ⁻ /I ⁻ redox couple on lamellar solids and their application for dssc technology	Chiara Bisio, Fabio Carniato
T5	Reuse of the Reflective Light in Concentrated Photovoltaic Cells	Liann Be Chang
T6	Synergistic effects of InN compact layer and different concentrations electrolytes for dye-sensitized solar cells	Cheng-Chiang Chen
T7	Effects of the position of the gas flow guidance device on carbon distribution during the growth of multicrystalline silicon ingots by the directional solidification process	Jyh-Chen Chen
T8	Characterization of transparent graphene electrode for dye-sensitized solar cell	Hyonkwang Choi
T9	Silicon thin films obtained by epitaxial lateral overgrowth for PV applications	Krystian Cieslak
T10	Al-doped ZnO nanostructured layers for increasing the efficiency of thin films solar cells	Anca-Ionela Danciu, Viorica Musat
T11	Preparation and characterization of CuI/PVA : PEDOT:PSS core-shell for photovoltaic application	Mabrouk Kamel El Mansy
T12	Kinetic studies of silicon epilayers obtained by epitaxial lateral overgrowth method for photovoltaic applications	Slawomir Gulkowski
T13	Enhanced Efficiency of Polymer Solar Cells by incorporation of Plasmonic Gold Nanoparticles	Samrana Kazim
T14	Towards zero energy buildings in central Europe – GIS-based mapping tool of urban solar energy potential	Attila Talamon
T15	Effect of substrate temperature on properties of Cu ₂ ZnSnS ₄ thin films sulfurized from Cu-Zn-Sn alloy precursors	Kyooho Kim
T16	An experimental study of a hybrid photovoltaic-wind system with battery storage	Rachid Maouedj
T17	Comparison of different Scalar-Based control in the Photovoltaic pumping system	Chergui Moulay-Idriss
T18	Light soaking induced increase in conversion efficiency in solar cells based on In(OH) _x S _y /Pb(OH) _x S _y	Robinson Juma Musembi
T19	Hydrogen dilution effect in film growth for amorphous silicon thin film solar cells	Takehiko Nagai

T20	Electrical and photovoltaic parameters of an enzyme based heterojunction	Yusuf Selim Ocak
T21	TTF/p-InP organic-inorganic heterojunction solar cell	Yusuf Selim Ocak
T22	Investigation of electrodeposited ZnO thin films as transparent conducting oxide for application in CIGS-based solar cells	Tiziana Spanò
T23	Optical and electrical properties of novel Schiff base polymers with naringenin	Hamdi Temel
T24	Electrical and photoelectrical characteristics of a rectifying diode based on a novel Cu(II) complex	Hamdi Temel
T25	Withdrawn	
T26	Withdrawn	
T27	Efficiency Optimization of the CuInS ₂ QD Doped Organic-Inorganic Hybrid Solar Cells Through the Nanocrystal Size and Composition Controlling	Ceylan Zafer, Cihan Ozsoy
T28	A Novel n-type Semiconductor for Organic Photovoltaics	Ceylan Zafer, Burak Gultekin
T29	Modeling of highly efficient triphenylamine based sensitizers with improved electron injection	Abdullah G. Al-Sehemi
T30	Modified Solvothermal Synthesis of NiO Nanoparticles: Optical Properties and Surface Area Studies	Ayed Saad Al-Shihri
T31	Numerical simulation of the thermal behavior of heat storage, for an application in the drying of cocoa beans	Yobouet Honoré Andoh
T32	Solar pond technology to precipitate lithium carbonate from salt lake brine	Zhen Nie
T33	Highly oriented SnS thin films: preparation, post deposition heat treatments and characterization	Patrick Akata Nwofe
T34	Synthesis and characterisation of SnO ₂ nanocrystallite films formed by electrodeposition in nitric acid solution	Lakhdari Delloula
T35	Dye sensitized solar cells based on metal-free organic dyes and aqueous electrolyte	S K Gupta
T36	CdTe thin films for Solar Cells Application Prepared by Close-Spaced Sublimation and Magnetron Sputtering Methods	Rashad Hajimammadov
T37	Investigation of the Fundamental mechanisms that take part in the process of absorption of Si during rapid thermal process	Ivaldo Torres Chavez
T38	Nanotubes of TiO ₂ development for a flexible dye-sensitized solar cell	Abdoul Fatah Kanta
T39	Inverters for grid connected photovoltaic systems	Linda Hassaine
T40	Optical and structural properties of SiO ₂ /SiN _x graded refractive index layers	Abderrahmane Moussi, Samir Meziani
T41	TiFe – based alloys with nanocrystalline/amorphous structure as a	Borislav Abrashev

	material for hydrogen storage application in nickel metal-hydride batteries	
T42	Effect of the temperature in a pre-reforming reactor with dolomite for H ₂ production by crude bio-oil steam reforming in a two-step reactor system	Borja Aramburu Ortega
T43	Nobel Bioethanol Steam Reforming Catalysts Based on Delaminated Zeolites Promoted with Cobalt	Antonio Chica Lara
T44	Novel periodic nanoporous organosilicas for hydrogen and methane storage	Konstantinos Dimos
T45	Biological hydrogen production in a packed bed reactor	Julio Fierro Fernández
T46	Experimental study of hydrogen generation from water using activated aluminum for portable power sources	Anastasia Ilyukhina
T47	A solid state photoelectrochemical cell with gaseous water and methanol as reactants	Kingsley Iwu
T48	Microbial Hydrogen and Ethanol production from biodiesel waste glycerol via “dark “fermentation	Edgar Jiménez Güell
T49	Nanocatalyst: Electrospun nanofibers of PVDF - dicationic tetrachloronickelate (II) anion and their effect on hydrogen generation from the hydrolysis of sodium borohydride	Hern Kim
T50	Hydrogen production with TiO ₂ photocatalysts modified by Pt nanoparticles in different sizes	Akos Kmetyko
T51	Noble metal deposited TiO ₂ /WO ₃ composite photocatalysts for hydrogen production: the role of the localization of the gold or platinum nanoparticles	Akos Kmetyko
T52	Reforming methane towards hydrogen and aromatic hydrocarbons on highly stable Mo and Re/H-ZSM5 catalysts modified with La	Artur Malinowski
T53	Theoretical study of H adsorption on FeNi(111) surface	Jorge Mario Marchetti
T54	Hydrogen production by means of catalytic gasification of plastic waste	Maria Laura Mastellone
T55	Equilibration treatment of a CuFe ₂ O ₄ /AlOOH bifunctional catalyst for the stable operation in successive reaction –regeneration cycles in the DME steam reforming	Lide Oar-Arteta
T56	Indoor versus outdoor biohydrogen photoproduction by <i>Rhodospseudomonas palustris</i> 42OL	Giulia Padovani, Pietro Carlozzi, Cristina Pintucci
T57	Exploitation of pre-treated olive mill wastewater for hydrogen photoproduction by <i>Rhodospseudomonas palustris</i> 42OL	Giulia Padovani, Pietro Carlozzi, Cristina Pintucci
T58	Simultaneous photoelectrochemical hydrogen generation and organic compound oxidation under W/WO ₃ photoanode	Thais Tasso Guaraldo
T59	Selectivity of MCH dehydrogenation over monometallic and bimetallic Pt catalysts	Faisal AlHumaidan

T60	Methane auto-thermal reforming in a compact thermal integrated ATR reformer: monolith and foams structured catalyst performances	Antonio Ricca
T61	Effect of spark plasma texturing on the thermoelectric properties of doped bismuth telluride	Shekhar Bhame
T62	Effect of thermal gradient on spin-wave amplification in a ferromagnet: numerical study and phenomenological model	Simone Borlenghi
T63	All-solution based engineering of aggregation effects in photon up-converting layers of organic binary composites	Hossein Goudarzi
T64	Synthesis and Characterization of Gold Nanoparticles- Cationic Polythiophene nanocomposites for Optoelectronics Applications	Samrana Kazim
T65	PVDF-TrFE coated stainless steel blender for energy harvesting from wind flow	Dongjun Li
T66	Substitution Strategy for Controlling the Thermoelectric Efficiency of Layered and Perovskite Oxides	Radostina Stoyanova
T67	Nickel and Iron Co-substituted Lanthanum Cobaltates as New Thermoelectric Oxide Materials	Ekaterina Zhecheva
T68	Design, Modeling, Fabrication, and Characterization of Defect-Free InGaN Nanowire Arrays/Metal and Metal Nanoparticles	Hakima Abou-Rachid
T69	Withdrawn	
T70	Pipe friction reduction with guar gum solutions in rough pipes flow	Yanuar Anwas
T71	Withdrawn	

FRIDAY, 22 JUNE 2012

From 10:45-11:30 and from 16:30-17:15

Fuel Cells Energy Transmission, Distribution and Storage Energy Saving and Sustainability Energy-Efficient Buildings Advances in Lighting Materials Wind Power - Geothermal Energy Other topics		
Code	Title	Presenter(s)
F1	Conducting Polymer/Carbon Composites for PEMFC Electrocatalysts	Ayşe Bayrakçeken
F2	Investigation of Pt-CeO ₂ Catalyst for Polymer Membrane Fuel Cell	Roman Fiala
F3	Single-chamber solid-oxide fuel cells driven by thermal transpiration Knudsen Compressors	Yen-Lin Han
F4	Electrochemical recovery of platinum from PEM fuel cell electrodes	Mikkel Juul Larsen, Casper Nørgaard
F5	Metallic-ceramic composite on Crofer22APU channelled interconnect for cathode contact layer application in solid oxide fuel cells	Aroa Morán Ruiz
F6	VUV irradiation: towards an innovative process for PEMFC membranes synthesis	Claudia Nastase
F7	Performance Improvement of PEM Fuel Cells Using New Type of Bipolar Plates	Ángel Pérez Manso
F8	Atomic layer deposition of dense mixed ionic-electronic conducting membrane on porous tubular substrate for oxygen combustion	Ville Ristimäki
F9	Cobalt Containing Perovskite Structures for Solid Oxide Fuel Cell Cathodes	František Šimo
F10	Stability and conductivity of La _{2-x} Ce _x Zr ₂ O ₇ pyrochlores	Joost van Duijn
F11	Electrospun PAni/PAN composite fibres for microbial fuel cell electrode	Silviu Vulpe
F12	Clean-up of Biogas from H ₂ S by selective oxidation on the V-Ce catalysts	Daniela Barba
F13	Hybrid polymer electrolytes Nafion-TiO ₂ for PEMFCs: synthesis and characterization	Khaled Charradi
F14	Fabrication and test of Co-Sb thin film heat flux gauges	Hang Guo
F15	Carbon foams derived from Polyacrylonitrile-Formaldehyde Resins -prospective electrode for hybrid supercapacitors	Silviu Vulpe
F16	Organic-Inorganic Hybrid Materials for Supercapacitors	Pedro Gómez-Romero
F17	Synthesis and Morphology Control of Novel Nanostructures of	Pedro Gómez-Romero

	LiFePO ₄ Cathode Materials for Li-ion Battery	
F18	Efficiency of Catalysts in Rechargeable Lithium-Air Batteries	Andrew Hsu
F19	Synthesis conditions of the Li _{3-x} La _{2/3-x} TiO ₃ electrolyte and compatibility with cathode material in solid-state lithium-ion batteries	Karmele Vidal
F20	<i>In situ</i> characterization of battery materials using x-ray diffraction	Javier Bolívar
F21	Fabrication and Characterization of Ionic Polymer Metal Composites Prepared by Electro-less Plating of Nickel	Suran Kim
F22	Theoretical study of CO adsorption over a B2 FeTi (111) slab	Jorge Mario Marchetti
F23	Two phase flow in Pin-type positive flow field of PEM water electrolyzer	Fang Ye
F24	Development of guidelines for help on a platform wiki as a tool to support the process of self-learning in materials engineering of the technical Industrial Engineering degree	M ^a Teresa Cotes Palomino Carmen Martínez García
F25	Production of sintered lightweight aggregates using wastes of brewing industry	M ^a Teresa Cotes Palomino Carmen Martínez García
F26	Utilization of Sugarcane Straw to obtain products with higher added value: Bioethanol and Carboxymethylcellulose	Adilson Roberto Gonçalves
F27	Comparative evaluation of biodiesel processing solid residues as adsorbents for wastewater treatment	Adriana Franca
F28	Assessment of current methods for determination the stability of fuels in the context of development online system	Artur Malinowski
F29	Withdrawn	
F30	A Study of the Installed Capacity and Electricity Quality of an Independent Microgrid with Tidal Power Generation, Photovoltaics and Fuel-Cell	Shin'ya Obara
F31	New evidence of anti-herding of oil-price forecasters	Georg Stadtmann
F32	Withdrawn	
F33	Exciton absorption in GaSe layered crystal hydrogen intercalates	Yuriy Zhirko
F34	Development of a thermal storage system based on phase change material as storage medium	Salama Omran
F35	Withdrawn	
F36	Study of the effect of oxidation time on ZnO nanowires formation	Aicha Bensouici
F37	An Analysis of Energy as a Precondition for the Improvement of Living Conditions and Poverty Reduction in Sub-Saharan Africa	Hanaa Mahmoud Sid Ahmed, Muawya Ahmed Hussein
F38	Withdrawn	

F40	Different photovoltaic systems and the use of natural lighting for energy saving in a building	Giorgia Nardini
F41	A comparison between lighting and daylighting performance in an office building and an economic comparison of daylighting and lighting control system	Giorgia Nardini
F42	Withdrawn	
F43	Switching properties of switchable mirrors based on magnesium-yttrium alloy thin films	Yasusei Yamada
F44	Performance analysis of a PV-array mounted single-span plastic greenhouse	Akira Yano
F45	Cu-doped ZnO nanostructured layers obtained by hydrothermal method for light-emitting-diode (LED) applications	Viorica Musat
F47	A model about windfarms and collision risk of birds: an Italian example	Alessia D'Alessandro
F48	Reliability evaluation of off-grid small hybrid solar pv-wind power system for the rural electrification in Nepal	Nabina Pradhan
F49	Low temperature geothermal energy	Salima Ouali
F50	A geochemometrics approach to determine the reaction time required to reach quasi-steady state conditions of mineral dissolution reactions in geothermal systems by water-rock interaction experiments, Na-K geothermometry and regression tools	Edgar Santoyo-Gutierrez
F51	A new improved mathematical method to estimate stabilized formation temperatures using thermal recovery data of geothermal boreholes	Edgar Santoyo-Gutierrez

VIRTUAL PRESENTATIONS

Title	Presenter(s)
Pyrolysis of <i>Jatropha curcas</i> wastes to produce bio-oil	Seyed Amirmostafa Jourabchi
Study of micro and nano bio-oil emulsions in fuel oil for use in power generation in thermoelectric plants	Carmen Luisa Barbosa Guedes
Prediction of performance in combustion of vine shoots from La Rioja (Spain) based on their chemical composition	Manuel Antonio Mendivil Giro
Co-product recovery from biomass during ethanol production	Ronald Holser
Hydrogen-induced effects in GaSe layers for solar energy devices	Jacek Elias
Modelling a CO ₂ separation made by Molten Carbonate Fuel Cell	Jaroslav Milewski
Development of informative methodology for half cell and fuel cell tests through incorporation of reference electrodes	Elena Konysheva
Comparative study of biological hydrogen production using microbial fermentation	Peng Chen
A sodium borohydride hydrogen generation reactor for stationary applications. Experimental and reactor simulation studies.	Carmen M. Rangel
Current challenges of hydrogen energy	Bozena Losiewicz
Performance of a hybrid wind- grid- load energy system	Maamar Taleb
Separation of Re(VII) and Tc(VII) in simulated HLLW using a column packed with xerogel microcapsules enclosing MIDOA extractants	Syed Masud Rana Rana
Porous polycarbonate membranes with Ni and Cu nano catalytic additives fabricated by selective laser sintering	Igor Shishkovsky
Rapid Removal and Enhanced Catalytic Decomposition/Gasification of Columbian Asphaltenes by Hybrids Nanomaterials Containing Dispersed NiO Nanoparticles	Esteban Alberto Taborda Acevedo
Experimental assessment of fuel production from waste plastics	Abdelati Elalem
Near-neutral pH stress corrosion cracking in a straight seam welded X80 pipe	Jidong Kang
Charge monitoring and control system for Li-Ion batteries with modular communication interfaces	António Gano
Capacity fading in Li-ion batteries: Thermal and state of charge effects	Carmen M. Rangel
Finite Element simulation of heat transfer through single-leaf walls in buildings	Manuel Celso Juárez Castelló
Analysis of Thermal Comfort and Energy Efficiency of Building Using Novel Building Envelop	Ashfaque Ahmed Chowdhury
Public lighting control systems	Marijana Zivic Djurovic
Developing innovative photovoltaic materials in the dawn of a new era: self-generation and small scale electricity consumption	Jesús M. Blanco
Study of biobutanol compatibility with polymer materials in gasoline engine systems	Santiago Gómez Ayechu