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Jaime Arau, *CENIDET, Mexico*

Carlos Aguilar, *CENIDET, Mexico*

Juan C. Yris, *Universidad Juárez Autónoma de Tabasco / DAIA, Mexico*

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Session Chairs: Alex Craig, *fairchild Semiconductor*

Matthew Wilkowski, *Enpirion*

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Yasuhiro Uemoto, *Panasonic Corporation, Japan*

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Rinkle Jain, *Intel Corporation*

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Session Chairs: Kevin Parmenter, *Exar Corporation*

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Alireza Khaligh, *IIT-Chicago*

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Session Chairs:	<i>Alexis Kwasinski, University of Texas at Austin</i>
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March 10, 2011 8:30 - 11:30

Session Chairs: Peyman Asadi, *International Rectifier*

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Søren K. Christensen, *Bang & Olufsen, Denmark*

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March 10, 2011 8:30 - 11:30

Session Chairs: Mithat Kisacikoglu, *University of Tennessee*

Jin Wang, *Ohio State*

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Sheldon Williamson, *Concordia University*

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Haidong Yu, *John Deere*

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March 10, 2011 8:30 - 11:30

Session Chairs: Douglas Hopkins, *University at Buffalo*

Laird L Macomber, *Cornell Dubilier*

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David Grider, *Cree, Inc., United States*
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Session Chairs: Cahit Gezgin, *International Rectifier*

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C. Carretero, *Universidad de Zaragoza, Spain*

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Session Chairs: Bill Peterson, *E&M Power*

Zobair A. Roohani, *International Rectifier*

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Session Chairs: Ahmed Sayed-Ahmed, *Rockwell Automation*

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Session Chairs: Jaber Abu-Qahouq, *University of Alabama*

Alan Mantooh, *University of Arkansas*

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Session Chairs: Laura Marlino, *Oak Ridge National Laboratory*

Ernie Parker, *Crane Aerospace & Electronics*

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Douglas C Hopkins, *University at Buffalo, State University of New York, United States*

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Session Chairs: Dianbo Fu, *Huawei Technology*

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M.N. Nguyen, *Stanford University / SLAC National Accelerator Laboratory, United States*
J. Hugiik, *Stanford University / SLAC National Accelerator Laboratory, United States*
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- Multiple-Output Resonant Matrix Converter for Multiple-Inductive-Load Systems** 1338
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March 10, 2011 14:00 - 17:25

Session Chairs: Cahit Gezgin, *International Rectifier*
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March 10, 2011 14:00 - 17:25

Session Chairs: Isaac Cohen, *Texas Instruments*
Liping Guo, *Northern Illinois University*

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Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

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March 10, 2011 11:30 - 13:30

Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

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Session Chairs: Shen Miaosen, *United Technologies Research Center*

Van Niemela, *Fairchild Semiconductor*

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Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

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Van Niemela, *Fairchild Semiconductor*

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March 10, 2011 11:30 - 13:30

Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

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Session Chairs: *Shen Miaosen, United Technologies Research Center*
Van Niemela, Fairchild Semiconductor

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Session D8: Renewable Energy Systems

March 10, 2011 11:30 - 13:30

Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

Interleaved ZVS Flyback-Forward Converter with Reduced Output Voltage Stress on Secondary Rectifier Diodes 1915
Wuhua Li, *Zhejiang University, China*
Yi Zhao, *Zhejiang University, China*
Xiangning He, *Zhejiang University, China*
David Xu, *Ryerson University, Canada*
Bin Wu, *Ryerson University, Canada*

A Compact Seven Switches Topology and Reduced DC-Link Capacitor Size for Single-Phase Stand-Alone PV System with Hybrid Energy Storages 1920
Xiong Liu, *Nanyang Technological University, Singapore*
Peng Wang, *Nanyang Technological University, Singapore*
Poh Chiang Loh, *Nanyang Technological University, Singapore*
Frede Blaabjerg, *Aalborg Universitet, Denmark*
Feng Gao, *Shandong University, China*

Power Control of DC Microgrid Using DC Bus Signaling	1926
Li Zhang, <i>Nanjing University of Aeronautics and Astronautics, China</i>	
Tianjin Wu, <i>Nanjing University of Aeronautics and Astronautics, China</i>	
Yan Xing, <i>Nanjing University of Aeronautics and Astronautics, China</i>	
Kai Sun, <i>Tsinghua University, China</i>	
Josep M. Guerrero, <i>Universitat Politècnica de Catalunya, Spain</i>	
Supercapacitor Testing for Power Smoothing in a Variable Speed Offshore Wave Energy Converter	1933
Dónal B. Murray, <i>University College Cork, Ireland</i>	
J.G. Hayes, <i>University College Cork, Ireland</i>	
M.G. Egan, <i>University College Cork, Ireland</i>	
D.L. O'Sullivan, <i>University College Cork, Ireland</i>	
A Transformerless Grid Connected Photovoltaic Inverter with Switched Capacitors	1940
Yunjie Gu, <i>Zhejiang University, China</i>	
Wuhua Li, <i>Zhejiang University, China</i>	
Bo Yang, <i>Zhejiang University, China</i>	
Jiande Wu, <i>Zhejiang University, China</i>	
Yan Deng, <i>Zhejiang University, China</i>	
Xiangning He, <i>Zhejiang University, China</i>	
Performance Analysis and Evaluation of a Multifunctional Grid-Connected PV System Using Power Hardware-in-the-Loop Simulation	1945
Hyo-Ryong Seo, <i>Changwon National University, Korea, South</i>	
Minwon Park, <i>Changwon National University, Korea, South</i>	
In-Keun Yu, <i>Changwon National University, Korea, South</i>	
Byeong-Mun Song, <i>Baylor University, United States</i>	
Low Power Implementation of Maximum Energy Harvesting Scheme for Vibration-Based Electromagnetic Microgenerators	1949
Rohan Dayal, <i>Rensselaer Polytechnic Institute, United States</i>	
Leila Parsa, <i>Rensselaer Polytechnic Institute, United States</i>	
Decrease in Photovoltaic Power Output from Ripple: Simple General Calculation and Effect of Partial Shading	1954
Charles R. Sullivan, <i>Thayer School of Engineering at Dartmouth, United States</i>	
Jonathan Awerbuch, <i>Thayer School of Engineering at Dartmouth, United States</i>	
Alexander M. Latham, <i>Thayer School of Engineering at Dartmouth, United States</i>	
High Gain Single-Stage Inverter for Photovoltaic AC Modules	1961
Omar Abdel-Rahim, <i>APEARC, South Valley University, Egypt</i>	
Mohamed Orabi, <i>APEARC, South Valley University, Egypt</i>	
Mahrous E. Ahmed, <i>APEARC, South Valley University, Egypt</i>	
A Less Sensor Control Method for Standalone Small Wind Energy Using Permanent Magnet Synchronous Generator	1968
Mohamed Hilmy, <i>APEARC, South Valley University, Egypt</i>	
Mohamed Orabi, <i>APEARC, South Valley University, Egypt</i>	
Mahrous E. Ahmed, <i>APEARC, South Valley University, Egypt</i>	
Mohamed El-Nemr, <i>Tanta University, Egypt</i>	
Mohamed Youssef, <i>Bombardier Transportation, Canada</i>	

Session D9: Vehicular Electronics II

March 10, 2011 11:30 - 13:30

Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

Characterization of Novel Inductive Power Transfer Systems for On-Line Electric Vehicles 1975

Jin Huh, *Korea Advanced Institute of Science and Technology, Korea, South*
Wooyoung Lee, *Korea Advanced Institute of Science and Technology, Korea, South*
Gyu-Hyeong Cho, *Korea Advanced Institute of Science and Technology, Korea, South*
Byunghun Lee, *Korea Advanced Institute of Science and Technology, Korea, South*
Chun-Taek Rim, *Korea Advanced Institute of Science and Technology, Korea, South*

Active EMF Cancellation Method for I-Type Pick-Up of On-Line Electric Vehicles 1980

Sungwoo Lee, *Korea Advanced Institute of Science and Technology, Korea, South*
Wooyoung Lee, *Korea Advanced Institute of Science and Technology, Korea, South*
Jin Huh, *Korea Advanced Institute of Science and Technology, Korea, South*
Hyun-Jae Kim, *Korea Advanced Institute of Science and Technology, Korea, South*
Changbyung Park, *Korea Advanced Institute of Science and Technology, Korea, South*
Gyu-Hyeong Cho, *Korea Advanced Institute of Science and Technology, Korea, South*
Chun-Taek Rim, *Korea Advanced Institute of Science and Technology, Korea, South*

High Accuracy State-of-Charge Estimation of Li-Ion Battery Pack Based on Screening Process 1984

Jonghoon Kim, *Seoul National University, Korea, South*
Jongwon Shin, *Seoul National University, Korea, South*
Changyoon Jeon, *Seoul National University, Korea, South*
Bohyung Cho, *Seoul National University, Korea, South*

Session D10: Applications IV

March 10, 2011 11:30 - 13:30

Session Chairs: Shen Miaosen, *United Technologies Research Center*
Van Niemela, *Fairchild Semiconductor*

Input-Powered Energy Harvesting Interface Circuits with Zero Standby Power 1992

Yuan Rao, *University of Florida, United States*
David P. Arnold, *University of Florida, United States*

Analysis of the Coupling Between Small Ring-Type Coils Used in Adaptable-Size Burners for Domestic Induction Heating Hobs 2000

J. Acero, *Universidad de Zaragoza, Spain*
C. Carretero, *Universidad de Zaragoza, Spain*
Ó. Lucía, *Universidad de Zaragoza, Spain*
J.M. Burdío, *Universidad de Zaragoza, Spain*
R. Alonso, *Universidad de Zaragoza, Spain*

Low-Dropout Voltage Regulator for Stabilizing LEDs Drives in Dimmable Group Current Sinks 2007

Hung-I Hsieh, *National Chiayi University, Taiwan*
Ssu-Wei Peng, *Amicord Electronic Co., Taiwan*
Jhih-Ting Cheng, *Amicord Electronic Co., Taiwan*

Four Quadrant Voltage Sag/Swell Compensation with Interphase Quasi-Z-Source AC-AC Topology	2013
Qin Lei, <i>Michigan State University, United States</i>	
Fang Z. Peng, <i>Michigan State University, United States</i>	
A High Step-Up Current Fed Multi-Resonant Converter with Output Voltage Doubler	2020
Donghao Li, <i>Xi'an Jiaotong University, China</i>	
Bo Liu, <i>Xi'an Jiaotong University, China</i>	
Bo Yuan, <i>Analog Devices, Inc., China</i>	
Xu Yang, <i>Xi'an Jiaotong University, China</i>	
Jason Duan, <i>Analog Devices, Inc., China</i>	
Jerry Zhai, <i>Analog Devices, Inc., China</i>	
A Parallel Topology for Inductive Power Transfer Power Supplies	2027
Hao Hao, <i>University of Auckland, New Zealand</i>	
Grant Covic, <i>University of Auckland, New Zealand</i>	
Michael Kissin, <i>University of Auckland, New Zealand</i>	
John Boys, <i>University of Auckland, New Zealand</i>	
One Cycle Controlled Three-Phase Load Emulator	2035
K. Smedley, <i>University of California, Irvine, United States</i>	
A. Abramovitz, <i>University of California, Irvine, United States</i>	
F. Maddaleno, <i>Politecnico di Torino, Italy</i>	
G. Rella, <i>Politecnico di Torino, Italy</i>	
S. Primavera, <i>Politecnico di Torino, Italy</i>	
A Family of Capacitive Current Balancing Methods for Multi-Output LED Drivers	2040
Jianfeng Wang, <i>Zhejiang University, China</i>	
Junming Zhang, <i>Zhejiang University, China</i>	
Xiucheng Huang, <i>Zhejiang University, China</i>	
Lianghui Xu, <i>Zhejiang University, China</i>	
Solid-State Light Simulator with Current-Mode Control	2047
Ali M. Bazzi, <i>University of Illinois at Urbana-Champaign, United States</i>	
Zach Klein, <i>University of Illinois at Urbana-Champaign, United States</i>	
Micah Sweeney, <i>University of Illinois at Urbana-Champaign, United States</i>	
Kevin Kroeger, <i>University of Illinois at Urbana-Champaign, United States</i>	
Pradeep Shenoy, <i>University of Illinois at Urbana-Champaign, United States</i>	
Philip T. Krein, <i>University of Illinois at Urbana-Champaign, United States</i>	
A LED Driver Based on Pulse Current Modulator	2054
Ming-Shian Lin, <i>National Taiwan University, Taiwan</i>	
Chern-Lin Chen, <i>National Taiwan University, Taiwan</i>	
Reconfigurable Blocks for Digital Power Electronics Applications in FPGA	2059
Jatin Gangani, <i>Sardar Patel Institute of Technology, India</i>	
Amod Samant, <i>Sardar Patel Institute of Technology, India</i>	
Y. Srinivasa Rao, <i>Sardar Patel Institute of Technology, India</i>	

Active Clamping Soft-Switched Flyback Converter for Low-Voltage DC Energy Sources	2065
Woo-Young Choi, <i>Chonbuk National University, Korea, South</i>	
Ju-Seung Yoo, <i>Chonbuk National University, Korea, South</i>	
Jae-Yeon Choe, <i>Chonbuk National University, Korea, South</i>	
Min-Kwon Yang, <i>Chonbuk National University, Korea, South</i>	
Design and Fabrication of Ultralight High-Voltage Power Circuits for Flapping-Wing Robotic Insects	2070
Michael Karpelson, <i>Harvard University, United States</i>	
John P. Whitney, <i>Harvard University, United States</i>	
Gu-Yeon Wei, <i>Harvard University, United States</i>	
Robert J. Wood, <i>Harvard University, United States</i>	
An Optocouplerless Two-Stage High Power Factor LED Driver	2078
Xiaogao Xie, <i>Hangzhou Dianzi University, China</i>	
Meipan Ye, <i>Hangzhou Dianzi University, China</i>	
Yongjun Cai, <i>Hangzhou Silan Microelectronics Ltd., China</i>	
Jianxing Wu, <i>Hangzhou Silan Microelectronics Ltd., China</i>	
Medium Voltage Multilevel AC Regenerative Load with One-Cycle Control	2084
In Wha Jeong, <i>University of California, Irvine, United States</i>	
Mikhail Slepchenkov, <i>University of California, Irvine, United States</i>	
Keyue Smedley, <i>University of California, Irvine, United States</i>	