12th International Conference on Compatibility, Power Electronics and Power Engineering
CPE-POWERENG 2018
10-12 April, 2018, *Doha, Qatar*

Special Session on
Impedance Source Converters—Improved Topologies, Advanced Control, and Emerging Applications
organized and co-chaired by:

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Call for Papers

Outline of the Session:

Impedance source converters overcome the boost ratio limitation of traditional solutions in a single-stage topology through embedding a network with inductors, capacitors, and switches/diodes. In addition, it is possible to get rid of the dead time between phase-leg switches thus to enhance the reliability of the entire power system. For this challenging topology, widespread investigations have been performed on improved topologies, modified modulation techniques, advanced control methods, and various applications including electric drives, renewable energy systems, transportation, battery energy storage, etc. The aim of this special session is to concentrate all related contributions on impedance source converters to provide a common environment for presentation and discussion on their emerging research, development, and applications.

Topics of interest include, but are not limited to:

- Improved topologies
- Advanced modulation and control strategies
- Multilevel / Multiphase impedance source converters
- Impedance source isolated/non-isolated DC-DC converters
- Impedance source DC-AC/AC-DC converters
- Fault detection and fault-tolerant control for impedance source converters
- Estimation techniques for impedance source converters
- Impedance source matrix converters
- Wide Band Gap devices implementation in impedance source converters
- Techniques of optimizing impedance source network parameters
- Applications in renewable energy power systems
- Applications in electric vehicles and motor drives
- Novel applications

Author's schedule:

Deadline for submission of special session papers	November 15, 2017
Notification of acceptance	January, 2018
Deadline for submission of final manuscripts	February, 2018

All the instructions for paper submission are included in the conference website:
http://www.cpe-powereng2018.org/