

IEEE International Symposium on Industrial Electronics ISIE'17

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Special Session on

Impedance Source Converters: Control, Improved Topologies, and Emerging Applications

organized by

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Call for Papers

Theme:

The impedance source converter with a network consisting of inductors, capacitors, and switches/diodes, overcomes the limitations of traditional solutions by offering buck or boost capabilities in a single stage and with short circuit immunity of power transistors. Thus, it is possible to get rid of the dead time between phase-leg switches and to enhance the reliability of the entire power system. The solution has found widespread investigations for dc-dc, dc-ac, ac-dc and ac-ac applications, including electric drives, renewable energy systems, transportation, and battery storage. 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 of this session include (but are not limited to):

- New control methods of impedance source converters
- Improved and new topologies
- Multilevel / Multiphase impedance source converters
- Impedance source DC-DC converters
- Impedance source DC-AC / AC-DC converters
- Impedance source matrix converters
- Techniques of optimizing impedance source network parameters
- Applications of impedance source converters in electric drives and renewable energy power systems
- Novel applications of impedance source converters

Submission procedure, deadlines, and author instructions:

A manuscript submitted to the Special Session of ISIE 2017 must be in the IEEE double format with single space 10p fonts and figures included in the text, so the length of the manuscript of 8 pages long in PDF format can be evaluated. For your convenience you may download the WORD template.doc from the conference website: <http://www.ISIE2017.org>

Deadlines:

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| • Reception of full paper: | December 15 th 2016 |
| • Paper acceptance notification: | March 1 st 2017 |
| • Camera ready paper reception: | April 10 th 2017 |