



**IEEE INTERNATIONAL SYMPOSIUM ON INDUSTRIAL ELECTRONICS ISIE'18
12-15 JUNE 2018, CAIRNS, AUSTRALIA**

Special Session on

“Power Electronics Applied to Electric Vehicles”

Organized by

Principal Organizer(s): Oscar Lucia (olucia@ieee.org)

Kazuhiro Umetani (umetani@okayama-u.ac.jp)

Hector Sarnago (hsarnago@unizar.es)

Call for Papers

Transportation electrification is called to change the power conversion and actuation paradigm in all types of electric vehicles (EVs) including cars, trains, ships, and planes, among others. In these applications, power electronics plays a major role to implement systems with improved performance and efficiency, and reduced volume, weight, and cost. This special session aims at covering recent advances in power electronic technologies applied to EVs and foster innovation that will conduct to a significant technology change with major social, economic, and industrial impact.

Topics of interest include, but are not limited to:

- New topologies and control strategies for EV motor drives.
- PFC topologies and control for EVs.
- Dc-dc topologies and control for battery management.
- Design using wide-bandgap semiconductors.
- Advanced power converter control architectures: advanced control ICs, FPGA, ASIC, among others.
- New energy management architectures: Station charger, on-board charger, wireless power transfer chargers, bidirectional systems.
- Magnetic component design and optimization.
- Design for high efficiency and power density implementations.

All the instructions for paper submission are included in the conference website: <http://www.ieee-isie2018.org>