

Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

Special Session on

“Reliability Management and Assessment of Traction Systems for Electric Vehicles”

Organized by

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Call for Papers

Theme:

This special session focuses on the latest progresses and developments in reliability management and assessment to improve the lifespan and the efficiency of the traction system in electric vehicles. This includes power capacitor, semiconductor device, power converter, electrical machine, detection part etc. This special session also addresses the combination of reliability analysis and control algorithms such as phase current reconstruction with fewer sensors as well as thermal control and fault tolerance of electric drive systems for electric vehicles. Moreover, the emerging artificial intelligence (AI) and machine learning (ML) techniques used for reliability management and assessment are also within the scope of this special session.

Topics of interest include, but are not limited to:

- Modelling of electric drive systems
- Life time modelling and calculation of power semiconductor device and capacitor
- Fault diagnosis and fault tolerance strategy
- Active thermal management
- Advanced control algorithms with reliability
- AI and ML assisted solutions for reliability management and assessment

Submissions Procedure: All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

Deadlines:

Full paper submission: June 25, 2021
Paper acceptance notification: July 30, 2021
Camera-ready paper submission: Aug. 27, 2021

Reviewers

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