

Annual Conference of the IEEE Industrial Electronics Society (IECON 2022)

Special Session on

“Artificial Intelligence Methods for the Control of Power Electronics Converters”

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Call for Papers

Theme: Power Electronics has become omnipresent in the past 10 years in all power conversion applications. Recently, the advancement of computer science and of microprocessor technologies made it possible to increase the control complexity with the aim of improving the performance. Example of this include multi-objective optimization, model inversion and multi-physics controls. This Special Session calls for the latest contributions regarding the usage of Artificial Intelligence for the optimized control of the power electronics converters. Papers covering the theoretical aspects as well as the applications of such techniques are of interest of the Special Session.

Topics of interest include, but are not limited to:

1	Artificial Intelligence for Multi-objective optimization in Power Electronics
2	Artificial Neural Networks applications to power Electronics Converters
3	System Identification for Power Electronics Systems
4	AI for design and optimization of Power Electronics Systems
5	Data-based control for power converters
6	AI for Power Electronics Systems maintenance
7	Data-based Health diagnosis of power converter systems
8	Remaining useful life of power converter component by AI techniques
9	AI for enhancing Power Electronics reliability
10	

1 Good quality papers may be considered for publication in the IEEE Trans. on Industrial Electronics, subject to further rounds of review.

Submissions Procedure:

All the instructions for paper submission are included in the conference website: <https://iecon2022.org/>

Deadlines:

Full paper submission:	April 15, 2022
Paper acceptance notification:	June 17, 2022
Camera-ready paper submission:	July. 29, 2022

Please send this completed document to:

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