

## Special Issue

# Integration and Implementation of AI in the Control and Monitoring of Electrical Machines, High Power Converters, and Energy Storage Systems

### Message from the Guest Editor

The aim of this Special Issue is to bring together original, theoretical and practical ideas, and future trends of AI implementation in control and monitoring electrical machines (motors and generators), high-power converters (inverters and rectifiers), and energy storage systems. Topics of interest include, but are not limited to, the following:

- AI implementation for control improvement of motors and generators (all types);
- AI implementation for control improvement of electric drives;
- AI implementation for control improvement of multi-level inverters and rectifiers;
- AI implementation for control improvement of energy storage systems;
- Fault diagnosis of motors and generators by AI;
- Fault diagnosis of multi-level inverters and rectifiers by AI;
- Fault diagnosis of energy storage systems by AI;
- Application of AI in design processes of electrical machines, drives and energy storage systems;
- Application of AI for the optimization of propulsion systems of electric vehicles.

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### Guest Editor

Dr. Dmitry Baimel

Department of Electrical and Electronics Engineering, Shamoon College of Engineering, Beer Sheba, Israel

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### Deadline for manuscript submissions

closed (31 December 2025)



## Machines

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*Machines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[machines@mdpi.com](mailto:machines@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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### Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso  
CISE–Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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