Special Issue

Modelling, Stability Analysis and Advanced Control of Power Electronics Cluster System

Message from the Guest Editors

Editors invite original manuscripts presenting recent advances in these fields with special reference to the following topics:

- Network topologies of power electronics clusters;
- Multi-time scale model and its model order reduction;
- High-power and high-voltage power electronic system;
- Non-linear phenomena modeling and mechanism analysis:
- Small-/large- signal stability analysis methods;
- Harmonic instability analysis and power quality issues;
- Fault characteristics and operation monitoring;
- Advanced control of power electronic system under dynamic loads;
- Oscillation damping techniques in wind plants, microgrid, and other occasions;
- Grid-friendly interfaces and coordination control for renewable generation and vehicle-to-grid (V2G).

Guest Editors

Dr. Xiaochao Hou

Dr. Jinghang Lu

Dr. Yang Qi

Deadline for manuscript submissions

closed (31 March 2023)



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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

