

## Special Issue

# Advances in Smart Grid Technologies and Methods

### Message from the Guest Editors

The rapid advancement of smart grid technologies and methods is transforming modern power systems by enhancing efficiency, resilience, and sustainability. This Special Issue explores cutting-edge developments in technologies, including, but not limited to, power electronics, FACTS devices, energy storage, sensors, IoT, 5G, and blockchain, as well as methods such as advanced control strategies, optimization algorithms, AI-driven forecasting, flexibility, and cybersecurity frameworks. Topics of interest also include, but are not limited to, renewable energy integration, microgrids, distributed energy resources (DERs), active distribution networks, virtual power plants (VPPs), aggregators, real-time grid monitoring, and energy trading mechanisms. We invite high-quality research and review papers addressing emerging challenges and novel approaches, fostering the transition toward a more adaptive, intelligent, and secure power grid.

### Guest Editors

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### Deadline for manuscript submissions

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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