

Special Issue

Wind and Renewable Energy Generation and Integration

Message from the Guest Editors

The growing demand for clean energy has accelerated the development of renewable energy technologies, such as offshore/onshore wind turbines, tidal turbines, wave energy converters, and other renewable energy applications. However, the efficient conversion of energy from these dynamic and variable renewable resources into usable electrical power remains a significant challenge. Advanced power converter systems are at the heart of these efforts, enabling enhanced energy capture, efficient power conditioning, grid integration, and operational reliability. This Special Issue aims to showcase cutting-edge research, innovative designs, and the practical applications of power converters tailored for wind and other renewable energy systems. Contributions will explore topics such as high-efficiency converter topologies, robust control strategies, energy storage integration, grid compatibility, and fault tolerance. Special emphasis will be placed on solutions that address the unique challenges posed by renewable energy sources, including corrosive conditions, variable resource profiles, and remote operational settings.

Guest Editors

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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 guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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