

Special Issue

Applications of Power Electronics, Triboelectric Nanogenerators, Sensors and Artificial Intelligence in IoT and Power Grids

Message from the Guest Editors

This Special Issue is dedicated to the study and integration of emerging technologies, including power electronics, triboelectric nanogenerators (TENGs), sensors, and artificial intelligence (AI), into the Internet of Things (IoT) and power grids. Submissions are invited that discuss the performance and practical applications of TENGs in grid environments. Topics of interest include, but are not limited to, the following:

- Integration of new energy sources into the power grid;
- Power electronics (SiC, GaN, Si, etc.);
- Material, design, fabrication, integration, and reliability of power systems;
- Emergency power support using TENGs in the power grid;
- Self-powered sensing for human care;
- Storage and computing systems in sensors;
- The role of artificial intelligence (AI) in grid management;
- AI applications in power distribution and optimization;
- AI-driven security and privacy protection in the power grid.

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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