

Special Issue

Advances in Electrical Systems for Environmental and Human Sustainability

Message from the Guest Editors

The increasing demand for sustainable energy solutions has led to the development of advanced electrical systems that can effectively manage and optimize PV, energy storage, and WPT systems. One crucial aspect of this is the modeling and simulation of these kinds of systems, which are widely used in electric vehicles and renewable energy systems. Another important aspect is the modeling of battery behavior that is essential for predicting performance, estimating capacity and voltage, and ensuring safe and efficient operation. The importance of these advances in electrical systems for environmental and human sustainability cannot be overstated. The use of sustainable energy solutions is critical for reducing greenhouse gas emissions and mitigating the impacts of climate change. This Special Issue is dedicated to exploring the latest advances in research on wireless power transfer, photovoltaic systems, battery storage, electrical vehicles, and artificial intelligence (AI). These are all critical components of modern power systems, and their continued development is essential for ensuring the efficient and sustainable generation, distribution, and consumption of electrical energy.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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