

Special Issue

Innovative Energy Systems: Thermodynamics, Energy Storage, Performance Assessment and Optimization

Message from the Guest Editor

The Special Issue aims to bring together high-quality research on the design, modeling, analysis, optimization, and operation of innovative energy systems, including high-temperature heat pumps, organic Rankine cycles, multigeneration installations, thermal energy storage systems, hydrogen energy systems, and hybrid renewable energy systems. Topics of interest include, but are not limited to, conceptual and detailed system design, thermodynamic modeling and simulation, multi-objective optimization, performance assessment and efficiency improvement, techno-economic analysis, and design-oriented optimization frameworks. Additional topics include thermal and electrical energy storage technologies, renewable energy integration, smart operational strategies, and sustainable energy solutions for buildings and industrial applications. This Special Issue aims to provide a platform for researchers and engineers to present innovative methodologies, technologies, and design and operational approaches that contribute to the development of efficient, sustainable, and optimized energy systems for future energy infrastructures.

Guest Editor

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Message from the Editor-in-Chief

Designs (ISSN 2411-9660) is a peer-reviewed and open access journal which provides a unifying research framework for a wide range of engineering designs of disciplines and industrial applications, including mechanical engineering, electrical engineering, civil engineering, mechatronics, aerospace engineering, bioengineering, energy engineering, industrial engineering and manufacturing systems are of interest. We would like to invite you to contribute to the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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