



## Modeling, Optimization, and Security of Modern Energy-Water Nexus with High Penetration of Renewable Energy Sources

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### Message from the Guest Editors

This Special Issue aims at acting as a bridge between research and development groups for state-of-the-art application of intelligent methods in modeling, optimizing, controlling, and securing smart grids. Researchers from academia, industry, and government are invited to submit their original and unpublished work to this Special Issue. The topics of interest include but are not limited to:

- Dynamic modeling and stability analysis of energy–water systems with high penetration of renewables and storage;
- Control of power systems in presence of uncertainty from renewables;
- Optimization problems in modern water and energy systems;
- Demand side management in modern power grids and water distribution systems with high penetration of renewables and storage;
- Modeling and detection of cyberattacks in smart grids and water distribution networks;
- Application of renewable sources to building energy management;
- Modeling and analysis of loads in buildings for economic dispatch in smart grids;
- Application of artificial intelligence in addressing modern power grid issues;
- Performance of smart homes in smart city;
- Smart homes in power markets.



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