



Upgrading the Future Power Grid: Current Research, Trends and Challenges in Distributed Energy Resources and Mobility Ecosystems

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Message from the Guest Editors

This Special Issue aims to publish high-quality manuscripts related to current trends and challenges in DERs and mobility ecosystems, with the goal of addressing a better overall management of the future power grid and the derived services and applications. Topics of interest include, but are not limited to, the following:

- Integration of RES and DERs;
- Energy management and control systems for DERs and/or mobility systems;
- Wired/wireless/hybrid communication technologies for DERs and/or mobility systems;
- Big Data analytics for DERs and/or mobility systems;
- Quality of service and quality of supply assessment;
- Grid stability and resiliency performance;
- Utility-scale storage systems;
- AC/DC microgrids;
- Microgrid clusters/communities;
- Ancillary services under high variable RES penetration;
- Smart charge management;
- Vehicle-to-grid (V2G) and vehicle-to-everything (V2X);
- V2G strategies to support resilience and efficient operation of the power grid.





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Message from the Editor-in-Chief

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