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Electric Vehicle Smart Charging and V2G

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Message from the Guest Editors

Dear Colleagues,

With potential benefits such as the improvement of energy efficiency, reduction in emission and oil dependence, as well as the support of the green and sustainable development of transportation systems, electric vehicles have gained unprecedented interest from governments, industries, and academia in recent years. A widespread increase in electric vehicle charging potentially brings significant challenges to the power grid. The uncoordinated charging of electric vehicles might adversely impact the power system by increasing the peak load demand and reducing reserve margins, which can cause voltage instability and reliability issues. On the other hand, with vehicle to grid (V2G) technologies, electric vehicles might benefit power grids by supporting peak load leveling and encouraging the more efficient use of electricity generated from renewable energy sources. This Special Issue is seeking contributions regarding the development and application of grid-integrated smart charging and/or V2G strategies that can optimize the benefits and reduce the risks associated with a widespread increase in electric vehicle charging.

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Guest Editors



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Special Issue



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Message from the Editor-in-Chief

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