

Special Issue

Grid Integration of Electric Vehicles Using Wireless Power Transfer

Message from the Guest Editors

In the present context of global warming resulting from the emissions of greenhouse gases, the electric vehicle begins to position itself in the market as a feasible and realistic alternative to the combustion engine. The deployment of the electric vehicle not only brings along a reduction in the carbon footprint related to transport, but it provides further benefits such as an increase in the air quality along with a reduction in noise pollution. Both issues are of especial relevance in urban areas. The objective of this Special Issue is to publish the most recent research results that aid in the integration of the electric vehicle within electricity grids, using wireless energy transfer systems.

- Wireless power transfer topologies for charging electric vehicles (inductive, capacitive, etc.).
- Design of magnetic or capacitive coupling stages for wireless power transfer.
- Control design of wireless power transfer systems applied to the charge of electric vehicles.
- Resonant topologies, resonant converters, and power electronics.
- Dynamic wireless charging for electric vehicles.
- Bidirectional wireless power transfer systems applied to the vehicle-to-grid (V2G) concept.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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