

## Special Issue

# Advanced Wireless Charging Technologies for Intelligent Transportation Systems

### Message from the Guest Editors

This Special Issue of *Vehicles*, entitled “Advanced Wireless Charging Technologies for Intelligent Transportation Systems”, invites original research articles, comprehensive reviews, and practical case studies.

Topics of interest may include, but are not limited to, the following:

- Static and dynamic WPT systems for road and off-road vehicles;

- Innovative coil and pad designs, metamaterials, compensation topologies, and shielding techniques for enhanced coupling;

- Control strategies and communication protocols for power–data co-transfer and adaptive tuning;

- Electromagnetic compatibility, thermal management, and safety certification;

- Bidirectional (vehicle-to-grid and vehicle-to-vehicle) energy exchange;

- Standardized testing methodologies, performance benchmarks, and interoperability frameworks;

- Lifecycle assessment, economic analysis, and sustainability metrics;

- Pilot deployments, infrastructure planning, and real-world performance evaluations.

We look forward to receiving your high-quality submissions that will push the boundaries of wireless charging in ITS and accelerate the transition to a cleaner, smarter future in mobility.

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### Guest Editors

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## Vehicles

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## About the Journal

### Message from the Editor-in-Chief

In response to economic, political, and environmental pressures, the automotive vehicle community is expanding its research, development, and production of more energysaving, environmentally friendly, and safer ground vehicles through vehicle electrification, powertrain hybridization, high-efficiency drivetrain, autonomous or automated driving, vehicle connectivity, and infrastructure.

*Vehicles* is a new open access and peer-reviewed international journal that will facilitate rapid publication of scholarly articles on studies related to ground vehicles. Its mission is to publish cutting edge articles, conference proceedings, and to organize Special Issues which highlight outstanding research on specific topics regarding all landbased vehicles with regards to the design, modeling and simulation, manufacture, testing, and operation and modification of those vehicles and their engineering systems.

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### Editor-in-Chief

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### Author Benefits

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Ei Compendex, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Automotive Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.4 days after submission; acceptance to publication is undertaken in 3.4 days (median values for papers published in this journal in the second half of 2025).