Special Issue

Advanced Steering and Chassis Control for Autonomous Vehicles

Message from the Guest Editors

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

- High-precision steering torque/angle control algorithms for autonomous vehicles under complex working conditions;
- Coordinated control strategies of steering, braking, suspension and traction systems in autonomous vehicle chassis;
- Adaptive and robust control of autonomous vehicle steering and chassis dynamics for parameter variation and external disturbance;
- AI and machine learning-based optimization of steering and chassis control for autonomous vehicles;
- Hardware-in-the-loop (HIL) testing and field validation of advanced steering-chassis control technologies;
- Energy-efficient steering and chassis control design for electric and hybrid autonomous vehicles;
- Fault-tolerant control and fault diagnosis of steering and chassis systems to improve autonomous vehicle safety;
- Steering feel shaping and human–machine co-driving coordinated control for autonomous vehicle chassis;
- Control of steer-by-wire systems for high-level autonomous vehicles;
- Multi-objective optimization of steering and chassis control for autonomous vehicles (safety, comfort, energy efficiency)

Guest Editors

Dr. Guobiao Shi

School of Mechanical Engineering, Beijing Institute of Technology, Beijing 100081, China

Dr. Shuai Wang

School of Mechanical Engineering, Beijing Institute of Technology, Beijing 100081, China

Deadline for manuscript submissions

25 November 2026

Vehicles

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 5.5

mdpi.com/si/277998

Vehicles
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
vehicles@mdpi.com

mdpi.com/journal/vehicles

Vehicles

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 5.5

mdpi.com/journal/vehicles

MDPI

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.

Editor-in-Chief

Prof. Dr. Mohammed Chadli
Department UFR Sciences and Technologies, Université Evry Paris-Saclay, 91020 Evry, France

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Automotive Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.7 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the first half of 2026).