

Special Issue

Advanced Vehicle Dynamics and Autonomous Driving Applications

Message from the Guest Editors

Autonomous vehicles (AVs) are revolutionizing the automotive industry, making vehicle dynamics a crucial area of focus in their development and deployment. These vehicles require a deep understanding and management of complex dynamics to ensure optimal safety, comfort, and performance across diverse driving environments. As autonomous driving systems (ADS) evolve, vehicle dynamics becomes an essential component of their design, especially when addressing challenges posed by variable road conditions, unpredictable traffic situations, and vehicle heterogeneity.

This Special Issue aims to explore cutting-edge techniques and methodologies that address the vehicle dynamics challenges faced by autonomous systems. The objective of this Special Issue is to highlight recent advancements and ongoing efforts that contribute to the development of safe, efficient, and reliable autonomous driving systems.

We welcome submissions that explore these topics and look forward to receiving contributions that push the boundaries of vehicle dynamics in autonomous driving applications.

Guest Editors

Dr. Fernando Viadero-Monasterio

Dr. Daniel Garcia-Pozuelo

Dr. Basilio Lenzo

Dr. Pablo de Villeros

Dr. José Ramón Trillo

Deadline for manuscript submissions

25 August 2026



Vehicles

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/228121

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

[mdpi.com/journal/
vehicles](https://mdpi.com/journal/vehicles)





Vehicles

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



[mdpi.com/journal/
vehicles](https://mdpi.com/journal/vehicles)



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 - 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).