Special Issue

Autonomous Vehicles: Sensing, Mapping, and Positioning

Message from the Guest Editors

This Special Issue focuses on cutting-edge research in sensing, mapping, and positioning systems that enable robust and intelligent vehicle autonomy as well as intraand inter-vehicle communication systems covering legal requirements of the EU data act as well. We seek original and high-quality papers from industrial and scientific sources that explore the use of diverse sensors-such as LiDAR, radar, cameras, and GNSS-for accurate environmental perception and situational awareness. Topics of interest include, but are not limited to, sensor fusion, environmental modeling, real-time mapping, and control- and/or Al-based algorithms for localization and pose estimation in dynamic and challenging conditions. Contributions that advance the theoretical foundations or practical implementations of these technologies, including Al-driven perception systems and cooperative positioning methods, are especially encouraged. By bringing together developments across hardware and software domains, the journal aims to foster innovation that supports the safe and scalable deployment of autonomous vehicles.

Guest Editors

Prof. Dr. Felix Huening

Prof. Dr. Toni Viscido

Prof. Dr. Alexander Ferrein

Deadline for manuscript submissions

15 August 2026



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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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