Special Issue

Connected and Autonomous Vehicles in Mixed Traffic Systems

Message from the Guest Editors

As connected and automated vehicles (CAVs) gradually enter transportation systems, a transition period arises where CAVs with varying levels of automation and connectivity will coexist with human-driven vehicles (HDVs) in road networks. This coexistence gives rise to new and potentially complex interactions between CAVs at different levels of automation and HDVs, significantly impacting traffic safety, efficiency, and road capacity. This Special Issue of *Electronics* aims to present state-of-the-art papers in the domain of connected and automated vehicles and their impacts in mixed traffic systems. Topics include, but are not limited to, the following areas:

- Connection and automation technologies for connected and automated vehicles;
- Optimal control strategies of connected and automated vehicles for the driving performance of mixed traffic;
- Impacts of connected and automated vehicles in safety, travel efficiency, road capacity and fuel consumption;
- Theoretical and mathematical modelling of mixed traffic:
- Human behavioral adaptations in mixed traffic;
- Application of artificial intelligence in connected and automated vehicles;

Guest Editors

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Deadline for manuscript submissions

closed (15 July 2025)



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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

