

## Special Issue

# Sensor Fusion: Kalman Filtering for Engineering Applications

### Message from the Guest Editors

This Special Issue will bring together original research and review articles on the latest developments, applications, and challenges in sensor fusion with a focus on Kalman filtering for biomedical and engineering applications. We welcome contributions that explore theoretical advancements, practical implementations, and innovative solutions related to this rapidly evolving topic. Potential topics include, but are not limited to, the following:

- Kalman filter-based sensor fusion for navigation and control;
- Sensor fusion in autonomous vehicles and robotics;
- Real-time sensor integration for biomedical systems;
- GPS and inertial measurement unit (IMU) fusion using Kalman filters;
- Kalman filters for identification of nonlinear systems;
- Adaptive Kalman filtering for dynamic environment;
- Multisensor-based route planning and haptic control;
- Applications of Kalman filtering in surgical simulation, soft tissue deformation, and biological information processing;
- Optimizations in computational biology, medicine, and diagnostics.

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### Guest Editors

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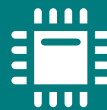
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### Deadline for manuscript submissions

31 October 2025



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## About the Journal

### Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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