

Special Issue

Innovative Optical Sensors for Navigation and Positioning Systems

Message from the Guest Editor

Optical sensing technologies are playing an increasingly central role in the development of advanced navigation and positioning systems. Their inherent advantages—such as high spatial resolution, immunity to electromagnetic interference, and compatibility with existing lighting infrastructure—make them ideal for a wide range of applications, ranging from indoor localization to vehicle-to-vehicle communication. This Special Issue aims to gather original research and review articles on innovative optical sensors and their integration into navigation and positioning systems. Topics of interest include, but are not limited to, the following: visible light positioning (VLP); infrared positioning; optical angle-of-arrival (AoA) and time-of-flight (ToF) techniques; position-sensitive detectors (PSD); quadrant angular diversity aperture photodiode (QADA); and hybrid systems combining optical sensing with inertial or radio-based technologies. The scope of this Special Issue also includes optical communication for navigation purposes, such as visible light communication (VLC) in vehicular or infrastructure-based systems, where positioning and data exchange converge.

Guest Editor

Dr. Álvaro de la Liana Calvo

Department of Electronics, University of Alcalá, University Campus, Madrid-Barcelona Road, Km 33, Alcalá de Henares, 28805 Madrid, Spain

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

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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.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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