

Special Issue

Visible Light Positioning and Communication Systems: From Theory to Practical Applications

Message from the Guest Editor

Visible Light Communication (VLC) is an evolving field complementing traditional communication and positioning technologies. This Special Issue delves into VLC's multifaceted aspects, from theoretical foundations to practical applications in next-generation communication systems and precision indoor positioning. Our aim is to enhance positioning and communication precision through algorithmic innovation and system design advancements. With developments in LEDs and photovoltaic devices, we foresee cost-effective, widespread communication systems for everyday applications. We address the challenges of integrating VLC with existing infrastructures and mitigating interference in complex settings. We invite original research articles and reviews on the following topics:

- VLC channel modeling and estimation;
- Channel characterization and VLC-specific encoding;
- Efficient signal processing for high-precision visible light positioning;
- Security, standards, and normalization in VLC;
- Recent developments in VLC geolocation and communication.

Guest Editor

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Deadline for manuscript submissions

closed (15 January 2025)



Photonics

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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