Special Issue

Visible Light Communications (VLC) Networks

Message from the Guest Editors

As demand for high-speed, reliable communication networks continues to increase, Visible Light Communications (VLC) technology is emerging as a revolutionary solution, leveraging the ubiquitous infrastructure of LED lighting to transmit data. VLC technology uses the visible light spectrum, an unregulated resource, to offer high bandwidth and secure communication channels. Therefore, it presents a promising alternative to traditional RF-based systems, particularly in environments where RF interference is a problem or where the RF spectrum is congested. VLC's unique properties make it suitable for a wide range of applications. Consequently, this Special Issue aims to explore the latest advances, challenges, and applications of VLC networks. Potential topics covered by this Special Issue will include, but are not limited to, the following fields:

1. Innovative modulation and coding techniques applied to VLC;
2. Application, system design and optimization of VLC;
3. Hybrid systems that combine VLC with RF, Wi-Fi and Li-Fi;
4. Visible light channel modeling;
5. VLC for 5G and beyond;
6. Machine learning and data analytics techniques for VLC networks.

Guest Editors

Dr. Pablo Palacios-Játiva

School of Informatics and Telecommunications, Universidad Diego Portales, Santiago 8370067, Chile

Dr. César Augusto Azurdia Meza

Department of Electrical Engineering, Universidad de Chile, Santiago 8370451, Chile

Deadline for manuscript submissions

20 February 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/207215

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)