Special Issue

Advances in Photovoltaic Technologies from Atomic to Device Scale

Message from the Guest Editors

Topics include, but are not limited to, the following:

- Solar Cell Concepts:
  - Organic and inorganic PV systems
  - Nanostructured materials and nanostructure states
  - Multi-terminal/-tandem solar cells
  - Thermophotovoltaics
- Technologies on multiple scales:
  - Atomic scale: quantum mechanical descriptions, material properties, innovative concepts, Perovskites, conductive nitrides, etc.
  - Mesoscale: electro-optical properties; mesoscopic dynamics, such as photon, phonon, and electronic dynamics; transport and absorption rates; material bounary effects, etc.
  - Nano-scale/structuring: plasmonics, metamaterials, particles and waveguide structures, imprint/template technologies, etc.
  - Device scale: macroscopic device characterization, modeling, potential evaluation for industrial applications, etc.
  - Technological developments at an industrial scale: PV module design, energy storage, power distribution networks, feasibilty of novel concepts, etc.
- Design, theory, fabrication, characterization, simulation, etc.

Guest Editors

Dr. Christin David

Dr. Katarzyna Kluczyk-Korch

Dr. Robert Hussein

Deadline for manuscript submissions

closed (20 April 2022)

hv

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/si/71527

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

mdpi.com/journal/photonics

MDPI

Photonics

an Open Access Journal by MDPI

Impact Factor 1.9
CiteScore 3.5

mdpi.com/journal/photonics

MDPI

About the Journal

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.

Editor-in-Chief

Prof. Dr. Nelson Tansu
School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

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

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).