

Special Issue

Advances in Multi-Physics Coupled Micro/Nano Devices

Message from the Guest Editors

Multi-physics coupled micro/nano devices, such as typically opto-electric-thermal (OET) devices, represent a cutting-edge field at the convergence of nanotechnology, photonics, electronics, and thermoelectrics. The interactions among optical, electrical, and thermal environments significantly affect the overall performance of these devices. However, this interplay also highlights the significant potential for their performance manipulation by tuning one of these physical fields. Ongoing research will unlock their full potential, paving the way for more advanced and multifunctional devices in the future. This Special Issue aims to attract cutting-edge research and review articles on multi-physics coupled micro/nano studies. Topics of interest include, but are not limited to, the following:

- Photon integrated multifunctional micro/nano devices;
- Advanced optoelectronic and thermoelectric devices and systems;
- Novel theory and simulation method of multi-physics coupled devices and systems;
- Novel concepts and designs in opto-electric-thermal devices and systems;
- Devices physics analysis and materials synthesis for coupled opto-electric-thermal devices etc.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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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.

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