

## Special Issue

# Advancements in Nanofabrication: Innovations in Advanced Semiconductor Materials and Processes for Next-Generation Lithography

### Message from the Guest Editors

**Scope:** We invite contributions that delve into the forefront of nanofabrication technologies, emphasizing advancements in semiconductor materials and processes that directly impact next-generation lithography methods. **Potential Themes:** Advanced Semiconductor Materials: Explore the latest developments in semiconductor materials such as advanced photoresists, high-index materials, and alternative lithographic materials. Innovative Lithographic Techniques: Investigate novel approaches and methodologies in lithography, including extreme ultraviolet (EUV) lithography, directed self-assembly, and other emerging techniques. Process Optimization and Integration: Address challenges and breakthroughs in optimizing nanofabrication processes, as well as strategies for the seamless integration of advanced materials into existing fabrication workflows. Applications in Emerging Technologies: Showcase the practical applications of nanofabrication innovations in areas such as quantum computing, photonics, bioelectronics, and other cutting-edge technologies.

### Guest Editors

Dr. Sihai Luo

Dr. Jingyuan Deng

Dr. Chun Cao

### Deadline for manuscript submissions

closed (10 March 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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### Editor-in-Chief

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