



## Special Issue on Advanced Optics and Photonics at MIT

*Submission Deadline: 31 December 2024*

### Illustration

This special issue is cooperated by Massachusetts Institute of Technology (MIT) and journal Light: Science & Applications, which aims to highlight the most cutting-edge research works in optics and photonics performed recently at MIT, showcasing the forefront advancements of basic, applied and engineering.

### Brief introduction of MIT

The Massachusetts Institute of Technology (MIT) is a world-renowned research university located in Cambridge, Massachusetts, USA. Founded in 1861, MIT has gained global acclaim for its outstanding contributions to science, technology, and engineering research. As one of the foremost academic institutions worldwide, MIT has cultivated a reputation for excellence in education, technological innovation, and applied research, and ever produced numerous Nobel laureates.

As a trailblazer in the fields of optics and photonics. MIT's achievements encompass a wide range from fundamental quantum optics to practical applications in imaging, sensing, and materials research. MIT's groundbreaking research initiatives have consistently pushed the boundaries of optical sciences, contributing to transformative advancements in optics and photonics, which continues to lead the way in developing novel technologies that have far-reaching implications for global societal development.

### Interested Topics

The interested topics will include but not limit to:

- Biophotonics and Medical Optics
- Fiber Optics and Optical Communications
- Integrated and Optoelectronic Devices
- Lasers and Laser Optics
- Micro- and Nanophotonics,
- Nonlinear Optics and Ultrafast Optics

- Optical Imaging and Display
- Optical Materials and Photonic Crystals
- Optical Metrology and Detection
- Quantum Optics and Quantum Information

## About Submission

Accepted type: Original Research Article/Review/Perspective

The authors should state that their manuscript is submitted to this special issue and identify the corresponding author of MIT or MIT alumni in the cover letter.

Please submit via: <https://mts-lsa.nature.com>

## Guest Editors-in-Chief



**Prof. Wojciech Matusik**  
**MIT, USA**

Wojciech Matusik is a professor in the Department of Electrical Engineering and Computer Science at the Computer Science and Artificial Intelligence Laboratory at MIT, where he leads the Computational Design and Fabrication Group and is a member of the Computer Graphics Group. His research interests are in computer graphics, computational design and fabrication, computer vision, robotics and human-computer interaction. Before coming to MIT, he worked at Mitsubishi Electric Research Laboratories, Adobe Systems, and Disney Research Zurich. He studied computer graphics at MIT and received his PhD in 2003. He also received a BS in EECS from the University of California at Berkeley in 1997 and MS in EECS from MIT in 2001. In 2004, he was named one of the world's top 100 young innovators by MIT's Technology Review Magazine. In 2009, he received the Significant New Researcher Award from ACM Siggraph. In 2012, Matusik received the DARPA Young Faculty Award and he was named a Sloan Research Fellow. In 2014, he received Ruth and Joel Spira Award for Excellence in Teaching.



**Prof. Juejun Hu**  
**MIT, USA**

Juejun Hu is currently the John F. Elliott Professor of Materials Science and Engineering at MIT. His research primarily focuses on integrated optics and photonics. Prof. Hu has authored and coauthored more than 150 refereed journal publications, and he has been recognized with the SPIE Early Career Achievement Award, the Robert L. Coble Award from the American Ceramic Society, the Vittorio Gottardi Prize from the International Commission on Glass, the NSF CAREER award, and the DARPA Young Faculty Award, among others. Hu is a fellow of Optica, SPIE, and the American Ceramic Society.



**Prof. Brian Anthony**

**MIT, USA**

Brian Anthony is the Co-Director of MIT's Medical Electronic Device Realization Center and Associate Director of MIT.nano. With over 25 years of experience in product realization, Dr. Anthony designs instruments and techniques to monitor and control physical systems. His work involves systems analysis and design, calling upon mechanical, electrical and optical engineering, along with computer science and optimization. He has extensive experience in market-driven technology innovation, product realization, and entrepreneurship and commercialization at the intersection between information technology, design, and advanced manufacturing. Dr. Anthony spent the first part of his career as an entrepreneur. He developed and directed the development of products and solutions for the industrial and scientific video markets. He has been awarded 20 patents, published over 50 peer-reviewed articles, and won an Emmy from the Academy of Television Arts and Sciences for innovations in sports broadcasting.