

SUBMISSION DEADLINE: **Monday, 25 May 2016** 12:00 EDT (16:00 GMT)

CALL FOR PAPERS

Frontiers in Optics/Laser Science offers a broad range of topics in optical science and engineering. Submit your paper today in one of the following categories.

FiO Categories

FiO 1: Optical Design and Instrumentation

- 1.1 Optical Design and Instrumentation
- 1.2 Optical Fabrication and Testing
- 1.3 Optics in Consumer Electronics
- 1.4 Coherence, Interference, and Polarization
- 1.5 Three-Dimensional Optical Structure Design, Fabrication and Nanopatterning
- 1.6 Wavefront Sensing and Adaptive Optics
- 1.7 Computational Optical Sensing and Imaging

FiO 2: Optical Sciences

- 2.1 Laser-Plasma Based Acceleration and Light Sources
- 2.2 Frequency Combs, High-Harmonic Generation, and Attoscience
- 2.3 Laser-Matter Interaction (Material Processing and Fabrication)
- 2.4 Ultrafast Lasers and Applications
- 2.5 Exotic States of Light
- 2.6 General Optical Sciences

FiO 3: Optics in Biology and Medicine

- 3.1 Microscopy and Optical Coherence Tomography – 25 Years of OCT
- 3.2 Diffuse Optics, Molecular Imaging and Hybrid Optical and Acoustic Methodologies
- 3.3 Optical spectroscopy in biomedicine
- 3.4 Novel Fiber-optics and Endoscopic Methodologies
- 3.5 Optical Trapping and Manipulation
- 3.6 Photoactivation, Phototherapy and Light Interactions with Tissue
- 3.7 Optical Technologies in Neuroscience (Joint with FiO 7)

FiO 4: Fiber Optics and Optical Communications

- 4.1 High Capacity Optical Communications and Data Centers
- 4.2 Optical Fiber Sensors
- 4.3 Novel Light Generation and Manipulation in Fiber Devices
- 4.4 Quantum Communications
- 4.5 Optical Fibers for Space Projects
- 4.6 High Power Fiber Lasers and Beam Combining
- 4.7 General Fiber Optics and Optical Communications

FiO 5: Integrated Photonics

- 5.1 Silicon Photonics
- 5.2 Hybrid Integration
- 5.3 Strongly Confined Nanoscale Waveguide and Resonator Devices
- 5.4 Plasmonics
- 5.5 Integrated Nonlinear Optics
- 5.6 Mid-Infrared Integrated Photonics
- 5.7 General Integrated Photonics

FiO 6: Quantum Electronics

- 6.1 Integrated Quantum Optics
- 6.2 Quantum Communication and Networking
- 6.3 Quantum Optical Measurement and Quantum Technologies
- 6.4 Nonlinear Optics in Micro/Nano-Optical Structures
- 6.5 Optics and Photonics of Disordered Systems
- 6.6 General Quantum Electronics

FiO 7: Vision and Color

- 7.1 Novel Design Concepts for Eye Correction and Vision Simulators
- 7.2 Understanding Myopia Development
- 7.3 Probing Ocular Biomechanics with Imaging Technologies
- 7.4 Novel Applications of Femtosecond Lasers in Ophthalmology
- 7.5 Optical Technologies in Neuroscience (Joint with FiO 3)

Laser Science Categories

1. High Harmonic Generation from Solids to Gases
2. Multiphoton Effects and High Resolution Imaging
3. Advanced Nano-Photonic Lasers: Science and Application
4. Quantum Light Sources
5. Integrated Quantum Photonics
6. Nonreciprocal and Topological Photonic Devices
7. Nano-Plasmonics for Spectroscopy and Imaging
8. Advances in X-ray and XUV Laser Science and Applications
9. General Laser Science

Frontiers in Optics General Chairs

Scott Carney, University of Illinois at Urbana-Champaign, US
Urs Utzinger, University of Arizona, US

Frontiers in Optics Program Chairs

Chris Dainty, University College London, UK
Tom Brown, University of Rochester, US
Ling Fu, Wuhan National Lab for Optoelectronics, China

Laser Science Chairs

Kevin J. Kubarych, University of Michigan, US
Edo Waks, University of Maryland, US

Browse paper topics and invited speakers.

frontiersinoptics.org

