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## The Emerging Science in Microstructured Optical Fibers

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## **Message from the Guest Editors**

Dear Colleagues,

In this Special Issue, we expand our exploration of microstructured optical fibers (MOFs) to include breakthroughs across a spectrum from terahertz to optical frequencies. We encompass traditional and emerging areas, ensuring a balanced focus across diverse topics.

Our focus spans fiber lasers, stressing their diverse applications and innovations. We delve into nonlinear fiber optics, tackling both theoretical and practical hurdles, along with high-power fiber optics crucial for intense applications.

This Issue delves into MOF integration with semiconductor tech for fiber-to-chip systems. We also explore wearable fiber sensors and BMI fiber networks for health monitoring and neuroscience. Advanced fiber sensors' development and lab-on-fiber systems are highlighted, alongside optical neural networks, THz waveguide design, and mid-infrared hollow-core fibers for varied spectroscopic applications.



