Special Issue

Advances in Optical Fiber Sensors for Temperature and Humidity Monitoring

Message from the Guest Editor

The precise and reliable monitoring of humidity and temperature is critical across a vast range of industries, including healthcare, environmental science, industrial process control, energy, and structural health monitoring. While electronic sensors are widely used, they face limitations in harsh environments characterized by electromagnetic interference, extreme temperatures, corrosive atmospheres, or explosive risks. This Special Issue aims to compile high-quality research and review articles that highlight the latest breakthroughs and future directions in optical fiber sensing for humidity and temperature. We seek to showcase novel sensing mechanisms, advanced materials for functionalization, innovative device structures, and cutting-edge systems for simultaneous or decoupled measurement. We encourage submissions that address both fundamental research and practical applications, demonstrating the unique value proposition of optical fiber sensors in solving realworld measurement challenges. We look forward to receiving your contributions.

Guest Editor

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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 peerreviewed 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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