sensors

an Open Access Journal by MDPI

IMPACT FACTOR 3.9

Indexed in: PubMed

CITESCORE 6.8

Sensors Based on Photonic Crystal Fiber

Guest Editors:

Dr. Qiang Liu
College of Control Engineering, Northeastern University at Qinhuangdao, Qinhuangdao 066000, China

Dr. Lu Cai
School of Information Science and Engineering, Northeastern University, Shenyang 110000, China

Deadline for manuscript submissions:
closed (15 January 2023)

Message from the Guest Editors

Dear Colleagues,

Photonic crystal fibers belong to a kind of special fiber that have numerous unique characteristics. Many air holes are distributed on the cross-section and go through the whole fibers, which makes the fiber easy to deform and more sensitive to ambient force. Photonic crystal fibers are less sensitive to temperature, and the crosstalk between detected parameters and temperature can be avoidable because the background materials of the special fiber are generally pure silica and air, whose thermal dependences are very low. Moreover, the existence of air holes provides a platform to integrate the fiber with optical functional materials, such as fluorescent materials, two-dimension nanomaterials, metallic materials, biochemical materials, photoelectric materials and so on. The sensing characteristics of fiber sensors could be improved by filling the photonic crystal fiber with optical functional materials. Meanwhile, the materials in the holes of the photonic crystal fiber can be protected from external mechanical damage, the stability of the sensors can be improved that way.

This Special Issue is focused on sensors based on photonic crystal fiber.

sensors

IMPACT FACTOR 3.9 | Indexed in: PubMed | CITESCORE 6.8

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

Author Benefits

Open Access : free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
𝕏@Sensors_MDPI