

Special Issue

All-Optical Thermometric Techniques

Message from the Guest Editors

All-optical nanothermometry can probe local temperature changes at the nanoscale and also bring the advantages of being non-invasive, with a fast response, high accuracy, and high-resolution imaging. This can help to reveal fundamental insights into their chemical, biological and/or structural properties. We invite researchers to submit manuscripts that introduce recent research to this Special Issue, entitled "All-Optical Thermometric Techniques". All theoretical, numerical, and experimental papers are accepted. Topics include, but are not limited to, the following areas:

- Thermometry or temperature sensing based on fluorescence or photoluminescence;
- Biological application of thermometry;
- New detection techniques for thermometry;
- Advanced optical materials with temperature-responsive properties;
- The improvement of accuracy in the temperature measurements;
- Fiber-optic sensor;
- Photonic bandgap;
- The mechanisms of thermometry;
- Thermodynamics between materials;
- Thermal conductivity measurements;
- Progress in thermometry.

Guest Editors

Dr. Yongliang Chen

School of Mathematical and Physical Sciences, University of Technology Sydney, Sydney, NSW, Australia

Dr. Dejiang Wang

Yale School of Medicine, Yale University, New Haven, CT, USA

Dr. Xiangjun Di

Institute for Biomedical Materials and Devices, Faculty of Science, University of Technology Sydney, Sydney, NSW 2007, Australia

Deadline for manuscript submissions

closed (10 January 2024)



Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.5



mdpi.com/si/161145

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)





Photonics

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 3.5



[mdpi.com/journal/
photonics](https://mdpi.com/journal/photonics)



About the Journal

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 peer-reviewed 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.

Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Optics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2024).