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 Isuse, 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;
- Thermaldynamics between materials;
- Thermal conductivity measurements;
- Progress in thermometry.

Guest Editors

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Deadline for manuscript submissions

closed (10 January 2024)

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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

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