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.

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Deadline for manuscript submissions

closed (10 January 2024)

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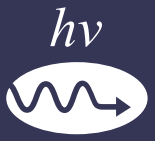

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Message from the Editor-in-Chief

Editor-in-Chief

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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).