Special Issue

Quantum Sensing Technologies: Recent Advances and Emerging Applications

Message from the Guest Editors

The present Special Issue aims to collect recent advances in quantum sensing technologies and their enabling technologies, covering quantum sensors ranging from optronic devices—with a particular interest in the near- and mid-infrared spectral regions of the electromagnetic spectrum—to sensors of magnetic and radiofrequency fields, from gravimeters to sensors of frequency and time. Topics of primary interest include but are not limited to the following areas:

- Novel quantum sensing schemes (modelling and technical implementation);
- Diamond-based sensing and imaging;
- Atomic magnetometers;
- Optical clocks;
- Gravimeters:
- Entangled imaging schemes and systems;
- New light sources and detectors;
- Quantum schemes in non-conventional spectral regions;
- Development of optoelectronic quantum devices operating in IR wavelength range;
- Development of photonics integration system.

Authors can submit review articles, original research papers, and short communications covering all aspects of quantum sensing technologies and their enabling technologies.

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closed (20 December 2023)



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Optics (ISSN 2673-3269) aims at establishing Optics as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

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