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# Quantum Sensing Technologies: Recent Advances and Emerging Applications

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## **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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