Special Issue

Quantum Enhanced Devices and Instruments for Sensing Applications

Message from the Guest Editors

Quantum-enhanced sensors enable us to acquire unprecedent sensitivity and precision for many measurements and explorations in various scenarios, including but not limited to electric and magnetic fields, acceleration, gravity and exotic forces. At present, the question of how we can develop more versatile quantum sensors and further improve their performance for sensing applications is attracting great interest from researchers. This Special Issue is expected to advance and develop novel quantum-enhanced sensing technology and related techniques. Topics include, but are not limited to, the following:

- Novel design and simulation of quantum sensors;
- Progress on improvement on quantum enhanced sensors and systems;
- Novel principles and technology on light-matter interactions;
- Optical detection techniques;
- Signal detection and control of photonics devices;
- Advanced manufacturing and integration technologies;
- Noise analysis and suppression methods;
- Applications using quantum enhanced sensors;
- Other quantum metrology with optical systems.

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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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