

Special Issue

Quantum Optics in Strong Laser Fields

Message from the Guest Editor

Quantum optics and strong laser-field physics are two distinct major research domains founded on the quantum and classical description of the electromagnetic radiation, respectively. Recent accomplishments in the quantum optical description of strong laser-field-matter interactions and the generation of novel non-classical light sources have demonstrated that these seemingly disjointed research domains can be synthesized, depicting the potential for exciting new research in strong-field physics and quantum technology. This Special Issue welcomes articles addressing, among others, the following main topics: I) fully quantized descriptions of interactions in the strong-field region (relativistic optics, laser-particle acceleration, laser-plasma, interactions, laser-atom interactions, high harmonic generation, etc.) and II) the use of high photon flux non-classical light sources for investigations in non-linear optics (multiphoton processes, harmonic generation, spectroscopy, visual science, etc.).

Guest Editor

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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.

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