



Journal of Nanotechnology

Special Issue on
Nanomaterials for Ultrafast Lasers and Nonlinear Optics

CALL FOR PAPERS

Following the rapid development of nanotechnology in the past few decades, a large number of nanomaterials have shown remarkable nonlinear optical properties, including fast response time, large susceptibility, broad wavelength range, and ease of integration into optical systems, which motivates the design and fabrication of advanced photonic and optoelectronic devices in the area of ultrafast laser technology, optical communication, and high-resolution imaging.

In recent years, many significant nonlinear optical nanomaterials have been discovered, for particular example, carbon nanomaterials: 0D fullerenes, 1D carbon nanotubes, and 2D graphene. Meanwhile, various nonlinear optical phenomena have been demonstrated in carbon nanomaterials, such as saturable absorption, optical frequency conversion, photoluminescence, and optical limiting. In addition, an increasing number of novel nonlinear optical nanomaterials and phenomena are being explored in succession, and a series of excellent literatures has been reported by thousands of researchers.

We invite authors to submit original research and review articles focused on this special issue. The special issue will be mainly devoted to a broad overview of the state of the art and perspectives of nanomaterials for ultrafast laser technology and nonlinear optics and serve as universal resource for future development.

Potential topics include, but are not limited to:

- ▶ Advances in nanomaterials for ultrafast lasers and nonlinear optics
- ▶ Fabrication and processing of nonlinear optical nanomaterials
- ▶ Nonlinear optical properties of nanomaterials
- ▶ Ultrafast laser generations using nonlinear optical nanomaterials
- ▶ Optical frequency conversions using nonlinear optical nanomaterials
- ▶ Novel nonlinear optical nanomaterials, phenomena, and applications

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jnt/nulno/>.

Lead Guest Editor

Xueming Liu, Xi'an Institute of Optics and Precision Mechanics, Xi'an, China
liuxm@opt.ac.cn

Guest Editors

Zhipei Sun, Aalto University, Espoo, Finland
zhipei.sun@aalto.fi

Luming Zhao, Jiangsu Normal University, Xuzhou, China
zhaoluming@jsnu.edu.cn

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