



Photonic Jet: Science and Application

Guest Editors:

Dr. Zengbo Wang

School of Computer Science and
Electronic Engineering, Bangor
University, Bangor, UK

Prof. Dr. Boris Luk'yanchuk

Physical Faculty, Lomonosov
Moscow State University,
Moscow, Russia

Prof. Dr. Igor V. Minin

Tomsk Polytechnic University, 30
Lenin Avenue, 634050 Tomsk,
Russia

Deadline for manuscript
submissions:

closed (31 August 2021)

Message from the Guest Editors

Dear Colleagues,

Photonic jet is a subwavelength focusing effect arising from electromagnetic waves interaction with low-loss dielectric objects, including micro and nano spheres, fiber, cubes and even biological cells and spider silks.

This special issue focuses on the recent advances on photonic jet developments, including both science and applications. Topics will include, but are not limited to:

- Label-free microscopy and imaging by photonic jet
- Sensing, trapping, manipulation and other applications of photonic jet
- Enhanced Raman scattering and photoluminescence by photonic jet
- High-index dielectric photonic jet lens
- Solid Immersion photonic jet lens
- Resonant and super-oscillation effects in photonic jet
- Metamaterial photonic jet
- Nonlinear photonic jet
- Integrated photonic jet devices
- Acoustic and Terahertz jet
- Photonic hook (curved photonic jet)

Dr. Zengbo Wang

Prof. Dr. Boris Luk'yanchuk

Prof. Dr. Igor V. Minin

Guest Editors

