



New Trend in Nanophotonics

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Deadline for manuscript
submissions:

closed (15 September 2023)

Message from the Guest Editors

This Special Issue aims to study new nonlinear optical materials with quadratic or cubic nonlinearity at wideband transmission in the infrared range, and the new effects of nonlinear optical conversion into longer wavelengths of the near-, mid- and even far-infrared range in such media. Both well-known oxide nonlinear crystals (with a transparency up to 5 microns) and promising phosphide, selenide, and sulphide non-oxide crystals with high second order nonlinearity and transparency in the widest spectral range, which are visible up to the mid- and far-IR range, can be used for quadratic nonlinear down-conversion. Another promising research direction is cubically nonlinear conversion. Original research articles and reviews are welcome in this Special Issue. Research areas may include (but are not limited to) the following:

- Nonlinear and ultrafast optics;
- Down-conversion in nonlinear media;
- Optical parametric generation, amplification, and oscillation;
- Supercontinuum generation;
- Raman lasers;
- Semiconductor nonlinear photonics;
- Nonlinear materials and technology;
- Nonlinear optical devices and technologies.

