Special Issue

Perspectives in Nonlinear Crystals: Fundamentals and Applications

Message from the Guest Editor

This Special Issue aims to gather cutting-edge research and comprehensive reviews in the field of nonlinear optical crystals. Topics of interest include, but are not limited to, the following:

- Fundamental properties of nonlinear optical crystals;
- Crystal growth techniques and characterization;
- Applications in laser technology, optical communication, and quantum optics;
- Recent advances in nonlinear optical materials.

This Special Issue will be widely disseminated, exhibiting your work to a broad audience of researchers, academics, and industry professionals. We welcome the following:

- Original Research: Innovations in material design (e.g., defect engineering, phase-selective synthesis).
- Reviews: Critical analyses of challenges in scalability, stability, and interfacial charge transfer.
- Device Studies: Photodetectors with ultrahigh responsivity (>10^4 A/W) or photocatalysts with >90% quantum efficiency.
- Theoretical Work: Computational modeling of exciton dynamics, carrier mobility, and heterostructure interfaces.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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