

## Special Issue

# Crystal Structure and Non-Ambient Studies of Borates and Related Materials

### Message from the Guest Editors

A combination of excellent nonlinear and linear optical, luminescent properties, and rich crystal chemistry makes borates an appropriate prospective class of materials for many technical applications. Borates have a wide spectral range of transparency, combined with a high laser-damage threshold, as well as good chemical and mechanical stability. These properties make borates crucial materials for the generation of the second optical harmonic in UV and deep-UV regions. Studies have shown that optical properties of crystalline materials are closely related to their structures. For this reason, the structural behaviour of borates and related compounds in ambient and non-ambient conditions is one of the most attractive topics of modern materials science.

This Special Issue focuses on the most recent advances in the field of the search of novel borates, their crystal structures, the thermal/pressure evolution and optical properties of borate and related materials, and their technical applications from lasers to phosphors for light-emitting diodes (LED) and plasma display panels (PDP), scintillators for radiation detectors, etc.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 2020)



## Materials

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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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