

Special Issue

Boron Compounds: Synthesis, Luminescence and Applications

Message from the Guest Editors

In recent times, Boron-based compounds with excellent physicochemical properties have found applications in almost all aspects of modern material industries.

Moreover, the boron atom incorporation in any π -conjugated systems has resulted in an efficient photoluminescence quantum yield, showing bright luminescence mostly via triple harvesting mechanisms.

By utilizing the high luminescent tricoordinate/tetracoordinate boron-embedded materials, various applications received increasing amounts of attention, such as circularly polarized luminescence (CPL), organic light-emitting diodes (OLEDs), organic field-effect transistors (OFETs), sensors, X-ray scintillators, and many more optoelectronic devices. On the other hand, very recently, B/N-embedded multiresonant TADF materials (symmetrical and unsymmetrical) were synthesized via one-pot/one-shot multiple borylations as well, which are difficult to scale-up; however, these are very important for OLEDs due to their efficient narrowband emission spectra. This Special Issue of *Symmetry* features all types of contributions based on Boron-embedded compounds with tunable unique optical properties.

Guest Editors

Dr. Kenkera Rayappa Naveen

Institut für Anorganische Chemie and Institute for Sustainable Chemistry & Catalysis with Boron, Julius-Maximilians-Universität Würzburg, Am Hubland, Würzburg, Germany

Dr. Durai Karthik

EaStCHEM School of Chemistry, Rm 244, Purdie Building, North Haugh University of St Andrews, St Andrews, Fife, UK

Deadline for manuscript submissions

closed (29 February 2024)



Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



mdpi.com/si/180953

Symmetry
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

[mdpi.com/journal/
symmetry](https://mdpi.com/journal/symmetry)





Symmetry

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.3



[mdpi.com/journal/
symmetry](https://mdpi.com/journal/symmetry)



About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

Prof. Dr. Sergei Odintsov

1. ICREA, 08010 Barcelona, Spain

2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)