



an Open Access Journal by MDPI

Emerging Perovskite Materials: Synthesis, Properties and Diverse Applications

Guest Editors:

Prof. Dr. Yongseok Jun

Graduate School of Energy and Environment (KU-KIST Green School), Korea University (KU), Seoul 136-713, Korea

Dr. Suresh Kannan Balasingam

Graduate School of Energy and Environment (KU-KIST Green School), Korea University (KU), Seoul 136-713, Korea

Deadline for manuscript submissions: closed (10 September 2022)

Message from the Guest Editors

Dear Colleagues,

Perovskite is a calcium titanium oxide mineral with the crystal structure of ABX₃. Any materials having a similar crystal structure of CaTiO3 are known as perovskitestructured materials. From the discovery of perovskite minerals in the 18th century, numerous perovskitestructured materials ranging from ceramic oxides to hybrid organic-inorganic semiconductors have been discovered. These specific crystal-structured materials have intriguing ranging physical properties from insulation to superconducting properties, which have been used for various applications including photovoltaic, optical, electrical, superconductors, magnetic, catalytic, and environmental applications.

This Special Issue will bring together high-quality research and review articles on synthesis, properties, and diverse applications of perovskite-structured materials









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

Author Benefits

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

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi