materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

Indexed in: PubMed

CITESCORE 5.8

X-ray Diffraction (XRD) for Hydroxyapatite

Guest Editors:

Dr. Natalia V. Bulina
Laboratory of Synthesis and Physical and Chemical Analysis of Functional Materials, Institute of Solid State Chemistry and Mechanochemistry, Kutateladze str. 18, 630090 Novosibirsk, Russia

Dr. Margarita A. Goldberg
Laboratory of Composite Ceramic Materials, A. A. Baikov Institute of Metallurgy and Materials Science (IMET), Russian Academy of Sciences, 119334 Moscow, Russia

Deadline for manuscript submissions:
closed (10 June 2023)

Message from the Guest Editors

In addition to being an indispensable material for medicine, hydroxyapatite has many other applications; it is a catalyst or catalyst support for various organic reactions and an effective sorbent for water, soil, and air purification. Hydroxyapatite is ready to form various kinds of substitutions, which makes it possible to obtain new properties, for example, antibacterial, antitumor, conductive, or magnetic properties. A wide range of useful properties of hydroxyapatite indicate the great potential of this material and stimulate further research activity.

The main method for monitoring the composition and structure of materials is X-ray diffraction. Using this method, it is possible to simultaneously control both the phase purity of the material and the structural changes; determine the degree of crystallinity, crystallite size, and lattice parameters; carry out the crystal structure refinement; investigate phase transitions under heating; analyze the thermal stability; and calculate the coefficient of thermal expansion of the material.

For this Special Issue, we invite authors to contribute research articles or reviews on the above-mentioned topics.

materials

IMPACT FACTOR 3.1 | Indexed in: PubMed | CITESCORE 5.8

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. 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 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.

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi