Special Issue

100th Anniversary of Brillouin Scattering

Message from the Guest Editor

The year 2022 marks hundred years since the discovery of Brillouin scattering by L. Brillouin in 1922. Nowadays, the term Brillouin scattering is extensively used as the inelastic light scattering in the gigahertz range. Owing to the non-contact method, phase transition, liquid-glass transition, and polymerization have been studied by changing temperature, pressure, and external fields such as electric and magnetic fields and stress. Recently, the exiting light source is extended to UV and X-ray, which covers the terahertz-nanometer range. Brillouin scattering imaging or Brillouin microscopy enables the detection of elastic heterogeneity, which is useful for in vivo diagnostics. Investigations of various excitations, not only acoustic phonon, but also magnon and fracton, for example, provide new insights into physics, chemistry, mineralogy, biology, pharmacy, medical science, and engineering. This Special Issue will be devoted to the Brillouin scattering study of these various fields for hard and soft materials. Original research papers and review articles are cordially invited.

Guest Editor

Prof. Dr. Seiji Kojima
Division of Materials Science, University of Tsukuba, Tsukuba, Ibaraki 305-8573, Japan

Deadline for manuscript submissions

closed (20 July 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/100266

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

About the Journal

Message from the Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma
State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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

MDPI