materials

IMPACT FACTOR 3.2

Indexed in: PubMed

CITESCORE 6.4

an Open Access Journal by MDPI

Advanced Sound Absorption Materials and Applications

Guest Editor:

Dr. Ruben Picó Vila

1. Instituto de Investigación para la Gestión Integrada de Zonas Costeras, Universitat Politècnica de València, Carrer del Paranimf 1, 46730 Gandia, València, Spain
2. Universitat Politècnica de València, Valencia, Spain

Deadline for manuscript submissions:
closed (20 December 2022)

Message from the Guest Editor

Research on materials for sound absorption and noise mitigation has dramatically evolved in recent years. The discovery of new physical phenomena has provided new innovative solutions and technology for the development of advanced sound absorption materials. Many challenges for the engineering of acoustic materials for sound absorption have motivated this research, such as reducing the density and thickness of materials or developing new promising alternatives for both thermal insulation and acoustic absorption.

Prediction tools are very powerful for understanding and describing the acoustic characteristics of different media from the microstructure to demonstrate their acoustical macro-behavior. Acoustic artificial metamaterials with exotic effective parameters have advances in manipulating and absorbing sound waves, particularly in sound absorption. Perfect sound absorption and absorption at subwavelength thickness can be obtained by properly designing these materials. Science and engineering converge in this field of acoustics to discover, develop, and fabricate new advanced sound absorption materials for future promising applications.

materials

IMPACT FACTOR 3.2 | Indexed in: PubMed | CITESCORE 6.4

an Open Access Journal by MDPI

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

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.

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)

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