Special Issue

High-Entropy Alloys in New Technological Applications

Message from the Guest Editor

Traditionally, metallurgists have added small amounts of certain elements to tailor the properties of an alloy with one principal element, but the approach in itself is very limiting. The new alloying strategy involves the combination of multiple principal components in relatively high concentrations, which gives rise to the so-called high-entropy alloys. High-entropy alloys can potentially provide unique tailored solutions due to the large number of possible combinations of elements to create new materials with improved properties. The challenges to overcome come from the great number of possible element combinations to form high-entropy alloys. Hence, the combined efforts of experimental work and computational modeling is needed for these materials to reach their full potential. The growing relevance of these materials has been broadly recognized, and recently, they have been identified as the number one topic of the upcoming decades. This Special Issue reviews the latest technological applications and advances of high-entropy alloys.

Guest Editor

Dr. Raquel Lizárraga

Applied Materials Physics, Department of Materials Science and Engineering, Royal Institute of Technology (KTH), SE-10044 Stockholm, Sweden

Deadline for manuscript submissions

closed (10 July 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/65645

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

MDPI

About the Journal

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.

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

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)