Special Issue

Additive Manufacturing of High Entropy Alloys

Message from the Guest Editor

Additive manufacturing (AM), commonly known as 3D printing, is a newly emerging technology for bringing about revolutionary manufacturing by the integration of design flexibility and the rapid fabrication of complex parts through the bottom-up accumulation of materials. These merits make it widely accepted as a new paradigm for the production of high-end components in the aerospace, automotive, healthcare, marine, and energy fields. High-entropy alloys (HEAs), emerging as a novel frontier in the metal materials community, exhibit superior properties due to the presence of multiprincipal elements and are considered alternative materials for critical components in extreme applications. The fabrication of HEAs using AM has attracted increasing attention in both academic and industrial organizations. This Special Issue aims at collecting cutting-edge original research papers and reviews on the latest advances in the AM of HEAs. The topic themes include HEA alloy design, processing parameter optimization, characterization techniques, microstructure-property relationships, process modelling, application advances, etc., specifically for AM.

Guest Editor

Dr. Chao Cai

State Key Laboratory of Materials Processing and Die & Mould Technology, School of Materials Science and Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions

closed (10 August 2022)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



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

mdpi.com/journal/materials





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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

 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

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