metals

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 4.9

Metal-Ceramic and Metal-Metal Interactions and Joining

Guest Editors:

Dr. Donatella Giuranno
Institute of Condensed Matter Chemistry and Technologies for Energy (ICMATE), National Research Council of Italy (CNR), Via De Marini 6, 16149 Genoa, Italy

Prof. Dr. Fabrizio Valenza
National Research Council of Italy-Institute of Condensed Matter Chemistry and Technologies for Energy

Deadline for manuscript submissions:
closed (31 December 2021)

Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to stimulate researchers worldwide to share their systematic studies, addressing both basic (wettability, interfacial tension, and phase equilibria determination) and application (e.g., joining by brazing) aspects. Particular consideration will be made to studies aimed at elucidating the role that dissolution, chemical reactions, and additions of active metal elements to the molten matrix have in wetting processes and on solid–liquid adhesion in relation to the desired final properties.

Potential topics include, but are not limited to, the following:

-Surfaces and interfaces at high temperatures;

-Wetting at high temperatures;

-Grain boundaries at high temperatures;

-Liquid-metal penetration;

-Thermodynamic studies;

-Microstructural analyses;

-Soldering, brazing, and joining processes;

-Liquid and solid-state reactivity;

-Liquid/solid interfaces in metallurgical processes (e.g., casting).

metals

IMPACT FACTOR 2.6

CITESCORE 4.9

an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez
Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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), Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI