Special Issue

Advances in Electrodeposition Process for Materials

Message from the Guest Editors

This issue aims to explore innovative strategies in electrodeposition, including the development of novel electrolytes, optimization of deposition parameters, and advanced characterization techniques. Special attention will be given to sustainable and environmentally friendly approaches, such as the use of green solvents, non-toxic precursors, and waste minimization strategies. Additionally, this issue will highlight the role of computational modelling, numerical modelling, and simulation and machine learning in predicting and optimizing electrodeposition processes, particularly for designing high-performance coatings with enhanced durability, catalytic activity, and selectivity in CO2 reduction and electrolysis applications.

Guest Editors

Dr. Kranthi Maniam

1. Materials Innovation Centre, School of Engineering, University of Leicester, Leicester LE1 7RH, UK
2. Materials Performance and Integrity Group, TWI, Cambridge CB21 6AL, UK

Dr. Shiladitya Paul

1. Materials Performance & Integrity Technology Group, TWI, Cambridge CB21 6AL, UK
2. Materials Innovation Centre, School of Engineering, University of Leicester, Leicester LE1 7RH, UK

Deadline for manuscript submissions

20 August 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/236107

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)