Special Issue

Corrosion of Materials: Evaluation, Testing, Protection, and Failure Analysis, Third Edition

Message from the Guest Editors

The corrosion failure of materials has been a long-term, worldwide issue, causing huge economic losses and accidental disasters. Corrosion protection research comprises an important step towards sustainable actions to protect our environment and to conserve resources. With technical innovations, new corrosion problems have arisen given the emergence and application of new materials. In this context, the present Special Issue aims to collect state-of-the-art research, providing a forum for discussion on recent advances in corrosion evaluation, testing, protection, and failure analysis. We welcome high-quality original research and review articles on themes including, but not limited to, the following:

- Corrosion behaviors and mechanisms;
- Failure analysis;
- Surface modification;
- Advanced coatings;
- Corrosion inhibitors and smart carriers;
- Corrosion inhibition mechanism by DFT calculation and molecular dynamics simulation;
- Electrochemical characterization;
- New monitoring, evaluation, simulation, and prediction methods.

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

20 March 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/249898

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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.

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