Special Issue

Advances in Corrosion and Protection of Metallic Materials

Message from the Guest Editors

In summary, this Special Issue will present studies on the corrosion mechanisms of metallic materials and advanced anti-corrosion methodologies for corrosion protection. Original research articles, reviews, and communications are welcome. We invite you to submit manuscripts to this Special Issue, the scope of which includes, but is not limited to, the following aspects: (1) Uniform corrosion and localized corrosion including pitting corrosion, intergranular corrosion, stress corrosion cracking, crevice corrosion, galvanic corrosion, erosion corrosion, wear corrosion, etc.; (2) Corrosion studies using electrochemical measurements such as polarization, EIS, Mott–Schottky measurements, etc., to unravel the thermodynamics and kinetics behaviors; (3) Surface characterizations, including SEM, EDS, TEM, XPS, AFM, etc., and surface modification through physical and chemical approaches; (4) Organic/inorganic coatings and inhibitors designed for surface corrosion protections; (5) Multi-scale modeling to simulate corrosion processes and corrosion protection mechanisms.

Guest Editors

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Deadline for manuscript submissions

20 February 2026

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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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