Special Issue

Metallic and Ceramic Materials Integrity—Surface Engineering for Wear, Corrosion and Erosion Prevention (3rd Edition)

Message from the Guest Editors

From the broad range of deterioration processes that occur, wear, corrosion and erosion are the dominant types of degradation observed in engineering materials. Even though the literature on the subject explains the general factors influencing the resistance of general materials, the continuous development of technologies for the fabrication, processing and treatment of metal-based structures demands systematic reporting on advances in the wear properties of metallic and ceramic materials. From the perspective of science and engineering, the wear of machine components must be minimized in order to improve their reliability.

The scientific papers contained in this Special Issue will provide new knowledge in the fields of materials science and mechanical engineering. This Special Issue will be focused on studies related to the wear, corrosion and erosion resistance and wear mechanisms of metal-based structures, ceramic materials and MMC composites: metal alloys, sinters, hardfacings, thermally sprayed deposits, thin films, composites, additive manufactured metal structures and many more.

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Deadline for manuscript submissions

20 May 2026

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/257331

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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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