Special Issue

Metallic and Ceramic Materials Integrity—Surface Engineering for Wear, Corrosion and Erosion Prevention (2nd Edition)

Message from the Guest Editors

Wear, corrosion, and erosion are key degradation processes in engineering materials. Advances in fabrication technologies demand systematic research on the wear behavior of metallic and ceramic structures. Understanding wear mechanisms is critical to improving component reliability. Computational approaches and experimental studies are vital for designing wear-resistant materials.

This Special Issue is 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. The submission of papers focused on wear improvement via the modification of microstructural properties, surface layer treatment and the deposition of wear-resistant coatings onto a metal-based substrate are encouraged.

This Special Issue is open for submissions and welcomes original research contributions and review articles highlighting recent advances and future directions in the wear, corrosion and erosion behavior of metallic and ceramic structures.

Guest Editors

Dr. Mirosław Szala

Department of Materials Engineering, Faculty of Mechanical Engineering, Lublin University of Technology, 20-618 Lublin, Poland

Prof. Dr. Mariusz Walczak

Department of Materials Engineering, Faculty of Mechanical Engineering, Lublin University of Technology, Nadbystrzycka 36D, 20-618 Lublin, Poland



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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials



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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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