

Special Issue

New Trends in Mechanical and Tribological Properties of Materials and Components

Message from the Guest Editors

The study of tribological and fatigue performance of materials and components has gained significant attention due to the increasing demand for high-performance materials in various industries and the improvement in reliability, efficiency, and sustainability of components and systems. This Special Issue focuses on the characterization and optimization of new materials designed to enhance tribological performance and fatigue resistance, including treatments and coatings. By employing advanced characterization techniques and fatigue testing, this Special Issue includes wear mechanisms and failure modes of innovative materials. Another topic of interest is related to artificial intelligence (AI), integrated into the design process, and data analysis enabling the prediction and optimization of material properties for specific applications.

Guest Editors

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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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