Special Issue

Advances in Surface Engineering Technologies and Their Impact on Surface Integrity and Functional Performance of Additively Manufactured Parts

Message from the Guest Editor

Any failure in a component starts from its surface, so enhancing surface properties can prevent the component from failing if it is subject to intense loading conditions. Additively manufactured (AM) components are no different from traditional manufacturing ones. Surface engineering, often known as surface modification, is a post-processing technique applied to address surface integrity issues. This Special Issue aims to publish innovative research, innovative methodologies, and practical applications, fostering a comprehensive understanding of the capabilities and limitations within surface engineering of AM materials and components. Topics of Interest:

- Novel Approaches and Advanced Techniques in Surface Engineering;
- AM Component Microstructural Transformations, Phase Evolution, and Property Enhancements due to Surface Engineering;
- Material Compatibility and Application Specificities in AM Components;
- Surface Modification and Property Development in AM Components;
- Developments in Process Monitoring, Control, and Optimization;
- Advances in Numerical Modeling and Simulation in Surface Engineering;
- Real-world Applications and Case Studies.

Guest Editor

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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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