Special Issue

From Surface Modification to Additive Manufacturing of Components by Solid-State Cold Spray Technology

Message from the Guest Editor

The objective of this Special Issue is to present the latest experimental and theoretical developments in this field, through original research and short communication papers, and review articles from academia and industry around the world. In particular, the topics of interest include, but are not limited to:

- 3D printed/additively manufactured coatings and repair of structurally critical components using cold spray technology.
- Cold spray additive manufacturing of high entropy alloys, Ti, Al, Fe, Ni based alloys and super alloys, refractory metals, etc.
- Improvement of corrosion, wear and high temperature oxidation resistances of additively manufactured cold sprayed components/deposits using post-cold spray treatments.
- Modification of mechanical properties of additively manufactured cold sprayed components using post-cold spray treatments.
- Application of additively manufactured cold sprayed components/deposits for biomedical applications.
- Hybrid additive manufacturing: the combination of cold spray processes and common additive manufacturing methods.

Guest Editor

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Deadline for manuscript submissions

closed (20 September 2023)



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About the Journal

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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