Special Issue

Welding and Joining Technologies for Advanced Structural Alloys and Multifunctional Materials

Message from the Guest Editor

Topics of interest include advanced welding and joining methods for high-performance alloys and composites, welding-enabled additive manufacturing of complex energy-related components, and the critical issue of hot cracking in these materials. We particularly welcome contributions on new evaluation techniques for cracking susceptibility and computational modeling that shed light on microstructural evolution and defect formation during welding and additive processes. We invite researchers and practitioners to submit original research articles and review papers that advance the science and engineering of welding, joining, and additive manufacturing for energy-related structural materials. We look forward to your contributions to this Special Issue.

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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