

Special Issue

Advanced Nanoindentation in Alloys

Message from the Guest Editor

The nanoindentation technique is currently one of the most essential tools for characterizing nano-/micromechanical properties of advanced metals and nanostructured materials, such as additive manufacturing materials, high-entropy alloys, nanocrystalline/nanotwinned metals, and nanoporous materials. Its great success is due in part to the simplicity of the sample requirements. In addition, the progress in the capabilities of hardware and experiment methods makes it possible to measure various mechanical properties (e.g., hardness, elastic modulus, strain-rate sensitivity, creep stress exponent, activation volume, and activation energy) under environmentally controlled conditions as well as high-temperature conditions. Therefore, this Special Issue titled “Advanced Nanoindentation in Alloys” will present the latest advances in characterizing small-scale mechanical properties of various metals and alloys with novel nano-/micromechanical testing techniques.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2021)



Materials

an Open Access Journal
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Impact Factor 3.2
CiteScore 6.4
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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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