Special Issue

Metals Characterization: Novel Methods, Techniques, and Instruments

Message from the Guest Editor

Increasing demand on high-quality products combined with the increasing trends toward more ecofriendly production processes, minimum use of natural resources, and digitalization practices have encouraged research efforts focusing on the development of advanced characterization techniques able to provide a fast and reliable overview of the metals properties and direct their optimization. This Special Issue invites studies dealing with the design of completely new or upgraded characterization techniques for the structural, morphological, and chemical analysis of metals, the operation of novel instrumentation, and the evaluation of newly developed metal-based materials regarding their optic, electric, thermal, and mechanical properties. Specifically, it will emphasize on single or combined X-ray, electron microscopy, spectroscopy, and thermal analysis methods used for the determination of the nanoscale characteristics of metals and alloys with respect to their macroscopic collective properties. The Special Issue will also welcome selected papers on related topics from "The International Conference on Raw Materials and Circular Economy" (RawMat2021, www.rawmat2021.gr)

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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