Special Issue

Metallurgy of Non-ferrous, Rare and Precious Metals

Message from the Guest Editor

Modern metallurgy of non-ferrous, rare, and precious metals in 21st century has progressed significantly from the end of 19th century, when the metallurgical processes of, say, aluminum production were so expensive that French Emperor Napoleon III ate off of aluminum plates, while the gold and silver ones were served for his guests. However, a lot of energy is still required for the metallurgy of non-ferrous, rare, and precious metals. The trend of energy saving for this field is of primary importance. Another important problem is implification of the new fast and energy saving methods and high-tech devises made of non-ferrous metals production: additive manufacturing for the complexshape articles, micron-sized and nanometal powders production, characterization, application and modern powder metallurgy, new sintering and processing methods like spark plasma sintering (SPS), selfpropagated high-temperature synthesis (SHS), mechanical alloying and mechanosynthesis etc. The above mentioned processes of innovative metallurgy will be covered in this Special Issue.

Guest Editor

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Deadline for manuscript submissions

closed (20 April 2022)



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Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/24876

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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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