Special Issue

Advanced Structural-Functional-Integrated Light Alloys

Message from the Guest Editors

With the rapid development of 5G communication technology and the new energy automobile industry, the broad applications of light and high-performance alloys, e.g., Al, Mg and Ti alloys, have attracted increasing attention. The existing traditional light alloys cannot meet the requirements of both structure and heat dissipation. Structural-functional-integrated light alloys provide both structural and functional properties. Mg and its alloys are attractive for application in the transportation field, Al and its alloys have been widely applied as conduction materials. Both, Mg and Ti allovs are also promising for biomedical applications. This Special Issue is to provide a platform for the in-depth discussion of the mechanisms and strategies for the development of structural-functional-integrated light alloys. Any research, including but not limited to theoretical and calculation investigation; unique material design for the structural-functional-property-integration; advanced processing methods for the synergistic improvement of an alloys structural and functional properties, and in-depth characterization of an alloys functional properties are welcome.

Guest Editors

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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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