

## Special Issue

# Advanced Light Metal and Alloys: Preparation, Characterization, and Applications (2nd Edition)

### Message from the Guest Editor

The aim of this Special Issue, entitled “Advanced Light Metal and Alloys: Preparation, Characterization, and Applications”, is to present recent advancements in various aspects related to material design, processes and applications. Potential topics include, but are not limited to: The development of advanced light-weight metals and alloys with high strength, high temperature resistance, corrosion resistance, and other excellent properties;

- The design of high-performance light-weight metals and alloys using empirical, theoretical and computational methods, including DFT, deep learning, etc.;
- The development of new process methods and heat treatment methods of light-weight metals and alloys including friction stir processing (FSP), additive manufacturing (AM), and related topics;
- Microstructural evolution and related mechanism exploration in light-weight metals and alloys subjected to deformation, corrosion, creep and other processes.

We are pleased to invite you to submit full research papers, communications, and review papers to this Special Issue.

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### Guest Editor

Dr. Pingping Liu

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### Deadline for manuscript submissions

closed (20 April 2025)



## Materials

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## About the Journal

### 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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### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

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