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Call for Papers: Special Issue on Nanostructured High-Entropy Materials

Guest Editor

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Dear Colleagues,

High-entropy materials (HEMs) are usually defined by their configuration entropy. The components can be elements, nitrides, or oxides; the dimensions can be particles, fibers, films, and/or bulk. The high entropy of the materials is believed to make the high-entropy and/or disordered phases stable, such as random solid solution or amorphous phases. The following five characteristics are typical and have been verified for HEMs: (1) high thermal stability and resistance to heat softening; (2) ease of breaking the trade-off between strength and ductility; (3) very low stacking-fault energy; (4) high irradiation resistance; (5) high corrosion resistance.

Nanostructure is significant for the properties' transit from the micro-scale to the nano-scale. In the past, large efforts have been put into the micro-scale structures, and with the fast development of science and technologies, the capability for exploring the nanoscale structures have been greatly enhanced. Nanostructured HEMs have the most potential to break the limits of the properties of the current materials. This Special Issue emphasizes, but is not limited to the following: (1) compositional design; (2) computational modeling and simulation; (3) mechanical behavior; (4) irradiation behaviors; (5) corrosion properties; (6) performance and applications of nanostructured HEMs.

We encourage submissions of studies related to lightweight HEMs, high throughput compositional films, flexible high-entropy fiber and wires, high-entropy oxides, serration and noise behaviors, large fluctuation and collective phenomena, plastic flow, flow units, etc.

Prof. Dr. Yong Zhang
Guest Editor

Deadline for manuscript submissions:
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Manuscript Submission Information

The online submission site for this journal is located at **https://mc03.manuscriptcentral.com/ijom**. Instructions for authors and other details are available at www.springer.com/journal/12613. To ensure that your manuscripts are correctly identified for inclusion into the special issue, it is important for you to select "**Nanostructured High-Entropy Materials**" when you reach the "Type" step in the submission process.

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