Special Issue

High-Entropy Materials and Their Applications

Message from the Guest Editors

Highientropy materials (HEMs), an emerging class of single-phase solid solutions composed of a large number of species, are gaining increasing scientific and applicative interest thanks to the possibility of suitably tailoring their structural and functional properties through the choice of proper element combinations and/or proportions. The strong synergistic effects among the constituent species result in enhanced performance compared to conventional compounds. Among HEMs, particular attention is presently focused on high-entropy oxides (HEOs) and alloys (HEAs), which look to be very appealing materials for energy-related applications, such as energy production and storage. This Special Issue aims to depict the state of the art of this hot topic, both in terms of goals achieved and challenges to be faced and to draw the possible future scenery for developing HEMs with fully controllable properties. Contributions from all researchers (material scientists, chemists, physicists, engineers, etc.) on the following topics are welcome.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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