Special Issue

Refractory Multicomponent Alloys: Current Trends and Future Perspectives

Message from the Guest Editors

This Special Issue invites original research and review articles focused on the latest advancements in the field of RMCAs:

Novel RHEA Design: High-throughput computational design, composition optimization, and tailored property design.

Processing-Structure-Property Correlation:

Microstructural characterization, phase stability, and processing effects—powder metallurgy, casting, and additive manufacturing.

Thin Films: Thin-film deposition, sputter coating, and atomic layer or pulsed laser deposition.

Mechanical Properties: High-temperature strength, creep resistance, fatigue, fracture toughness, and deformation mechanisms.

Oxidation, Corrosion, and Environmental Degradation: Oxidation resistance, corrosion behavior, wear tests, and environmental degradation mechanisms.

Energy Storage: Investigation of RHEAs for hydrogen storage applications.

High-Temperature Applications: Aerospace, energy, and nuclear industries. Future Trends and Challenges: Future directions, critical challenges, and sustainability considerations.

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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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