

MSE 2024

24 - 26 Sep 2024 (Darmstadt)

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Topic F: Functional Materials, Surfaces and Devices

F05: Multi-Functional High Entropy Alloys

High entropy alloys (HEAs), as a fundamentally new material design concept, are a rapidly growing field of research in recent years with a wide range of possibilities for tailoring new materials with interesting combinations of properties. These almost unlimited design options are based on the alloy structure of five or more elements, which can often be present in simple crystal structures. After the original focus on metals and their mechanical properties, the concept has now been developed to many other material classes and the research on their functional properties is now coming to the fore.

Current examples are high entropy alloys for electrocatalysis, hydrogen storage, magnetic applications, high entropy oxides for batteries and photovoltaics. We invite contributions on these and other functional HEAs.

Symposium Organizer



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