



entropy



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Exploring Complexity: Short-Range Order in Medium and High-Entropy Materials

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Message from the Guest Editor

This Special Issue serves as a nexus for researchers exploring the intersection of complexity, entropy, thermodynamics, and statistical mechanics in the context of medium- and high-entropy materials. From examining thermodynamic stability to understanding the statistical mechanics governing short-range order in medium- and high-entropy materials, this Special Issue endeavors to provide a multidimensional perspective on the interplay between structural complexity and fundamental physical principles. The insights gathered are anticipated to significantly contribute to advancing our understanding of the thermodynamic and statistical mechanics foundations shaping materials with diverse atomic arrangements. Topics are but not limited to:

- short-range order
- complexity
- entropy
- thermodynamics
- statistical mechanics
- medium-entropy alloys
- high-entropy materials
- material properties
- structural properties



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Special Issue



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Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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