Call for papers

An official publication of The Minerals, Metals & Materials Society



Publication Date: *September 2025*Manuscript Deadline: *March 1, 2025*

Mechanical Behavior Related to Interface Physics IV

Interfaces constitute a key microstructural variable for tuning materials behavior across wide range of length scales from nano to macro in single and multiphase systems, including structural and functional materials. The advent of novel multi-phase/multi-interface/composite structures holds great potential for enabling unparalleled performance under coupled extremes. Interfaces dominate material response in nanostructured systems and produce unique combinations of properties, from enhanced elastic-plastic material properties, tunable fracture properties, to electro/thermal functional properties. Fundamental understanding of interfacial physics and coupled phenomena impacting mechanical behavior is necessary to harness new concepts and methodologies in interface design of novel, multifunctional layered and composite structures.

Original research papers should be 3,000-9,000 words with up to 12 figures maximum; review papers should be 6,000-11,000 words with up to 20 figures maximum.

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Keywords for this topic: Advanced Materials; Composites; Mechanical Properties; Physical Properties; Thin Films and Interfaces

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Committee Sponsor(s): Nanomechanical Materials Behavior

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