

**AI-ENHANCED COMPUTATIONAL MECHANICS FOR
MATERIAL STRENGTH: FRACTURE ANALYSIS AND
MATERIAL MODELING**

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ABSTRACT

This mini-symposium focuses on recent advances in AI-enhanced computational mechanics for fracture analysis and material modeling for material strength. Topics of interest include fracture and crack propagation prediction, material constitutive modeling for damage and related phenomena, and the advancement of these approaches using AI technologies. Both fundamental and applied studies are invited to foster knowledge exchange and to promote the development of novel AI-enhanced computational frameworks.