JOM Call for papers

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Deformation-Assisted Pathways to Microstructural Manipulation

Metallic materials rely on engineering their microstructure and hierarchical organization, achieved through creating a spatial hierarchy ranging from atomic/dislocation to grain level. Deformation processing, such as high-pressure torsion or friction stir processing, modifies defect structures to form a microstructural hierarchy. However, understanding the microstructural evolution and its influence on material properties is a challenge due to the mechanical-thermal coupling involved. This special topic aims to bring together researchers from various communities working on deformation-induced microstructural modification, including severe plastic deformation, grain boundary engineering, and precipitation under deformation. Experimental and computational research topics are welcome.

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.

Detailed author instructions are available at: http://www.tms.org/AuthorTools/

Keywords for this topic: Additive Manufacturing; Advanced Processing; Characterization; Extraction and Processing; Physical Properties

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Committee Sponsor(s): Phase Transformations; Shaping and Forming

If you are interested in submitting a paper, upload your manuscript at https://www.editorialmanager.com/jomj/

Please note that all submissions will be subject to peer review. Submission does not guarantee acceptance.

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