

JOM Call for papers

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Solidification Under the Influence of External Fields

This topic focuses on solidification influenced by external fields, which includes, but is not limited to, solidification in the presence of strong gravitational, acoustic, or electromagnetic fields. Examples include the use of magnetic fields to introduce electromagnetic braking of fluid flow, to interact with inherent electric currents to drive flow in processes, or to use electromagnetic fields to levitate droplets of highly reactive metals to understand and measure key material properties, with a comparison to experiments under microgravity conditions. Acoustic fields can also drive flow through acoustic streaming, but also cause cavitation of micro bubbles that can refine grain 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.

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

Keywords for this topic: *Advanced Processing; Fundamentals; Molten Metal and Solidification; Phase Transformations*

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Committee Sponsor(s): *Solidification*

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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