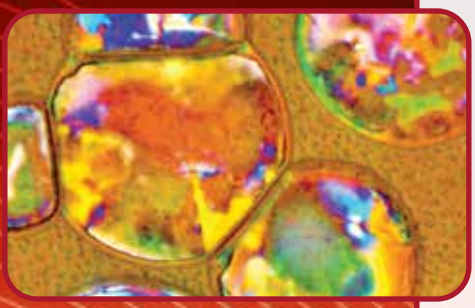
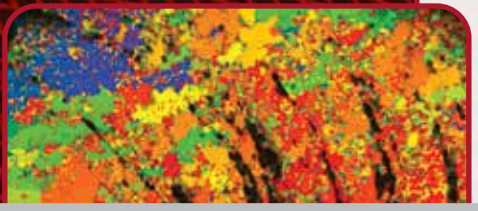
JOM Call for papers

An official publication of The Minerals, Metals & Materials Society





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Manuscript Deadline: *July 1, 2021*

Short Pulsed Lasers for Materials Modification, Characterization and Synthesis

The introduction of short pulsed lasers to materials characterization, geometric manipulation and materials synthesis in recent times enabled numerous new ways and possibilities to shed light on materials or to create unprecedented geometries in a short amount of time. Short pulsed lasers enable not only a wealth of pump-probe experiments to assess a materials thermal or elastic properties, or perform time resolved diffraction experiments, but also allow to rapidly change materials geometries with a minimum of damage to the material of interest. The latter aspect enables us to bridge the manufacturing mesoscale, it allows us to fabricate geometries in the µm-mm length scale with high precision in an efficient manner. Coupling this subtractive shaping with automated high-throughput characterization allows for large 3D characterization and the generation of new geometries for a wide range of materials. Furthermore, short pulsed lasers are used in micro-additive manufacturing, allowing to create new geometries on the micro scale via an additive process. This special topic will bring attention to the exciting developments in these areas.

Original research papers should be 3,000-6,000 words with up to 8 figures maximum; review papers should be 6,000-10,000 words with up to 15 figures maximum.

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

Keywords for this topic: **Additive Manufacturing;Advanced Processing;Characterization;Experimental Methods; Mesoscale Materials Interaction**

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Committee Sponsor(s): **Other-Invited**

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.