JOM TECHNICAL TOPICS



Find peer-reviewed technical articles covering the full range of minerals, metals, and materials science and engineering in the April issue of *JOM*: The Journal. Each issue features several technical topics presenting a series of related articles compiled by guest editors. A preview of April technical topics and articles are listed below. TMS members can log in to www.tms.org/Journals for full access to technical articles from *JOM*: The Journal and additional TMS journals.

Below is a sample of articles that will appear in the April issue, based on information available at press time. For the most up-to-date article listing, visit www.tms.org/JOM.



Fiseha Tesfaye

JOM welcomes Fiseha
Tesfaye to the editorial
team joining Victoria
Miller as an Associate
Editor. As a former JOM
Advisor for the Recycling
& Environmental
Technologies Committee,
Tesfaye brings strong
subject matter expertise
and TMS volunteer
experience to his work
with the journal.

['] APRIL 2024

Innovations in Forming Technologies for Light Alloys

Editor: Dmitry Eskin, Brunel University London
Sponsor: Aluminum Committee

"Fabrication of Gasar Porous Mg Agx (x = 0.5, 17.57) Alloys Via the Metal-H Eutectic Directional Solidification Process," **Fei Bao,** et al.

"Dimensional Accuracy Enhancement in Hydroforming of Tubular Components with Rectangular Cross-Sections," **Xiao-Lei Cui**, et al.

"The Influence of Y and Er on the Grain Structure and Superplasticity of Al-Cu-Mg-Based Alloys," **A.V. Mikhaylovskaya**, et al.

"Defect Formation in Different Characteristic Areas During Variable-Curvature Shell Room-Temperature Stamping of Cast-Rolled AZ31 Alloy," **Wenxing Zheng**, et al.

"Microstructure, Texture, and Mechanical Properties of Mg-Gd-Y-Zr Alloy Prepared by Rotating Backward Extrusion Process," **Mengxian Zhang**, et al. "Effect of a Large Height-to-Diameter Ratio Upsetting-Extrusion Process on the Microstructure and Mechanical Properties of Mg-Gd-Y-Zn-Zr Alloys," **Weidong Qiao**, et al.

"Simultaneous Enhancement of Strength and Ductility in AM60 Tubes Using a Novel Approach of Modified Tube Cyclic Expansion Extrusion," M. Aali Majidabad, et al.

"Evolution of Texture and Mechanical Anisotropy of Mg-13Gd-4Y-2Zn-0.5Zr Sheet Produced by Rotary Forward Extrusion," **Zhaocan Li**, et al.

"Effect of Multi-pass Deformation on Microstructure Evolution of Spark Plasma Sintered Ti-6Al-4V Alloy." **Xueyan Dai**, et al.

Materials Research Needs for Development of Technical Standards in Additive Manufacturing

Editor: Mark R. Stoudt, National Institute of Standards and Technology;

Thomas P. Battle, Extractive Metallurgy Consultant; and **David L. Bourell**, University of Texas at Austin **Sponsor**: Additive Manufacturing Committee

"Materials Research Needs for Development of Technical Standards in Additive Manufacturing," Mark Stoudt, et al.

"Providing a Rigorous Benchmark Measurement Foundation for Modeling-Informed Qualification and Certification of Metal Additive Manufactured Components," **Lyle Levine**, et al. "Toward a Standard Data Architecture for Additive Manufacturing," **Shengyen Li,** et al.

"Scientific Foundations and Approaches for Qualification of Additively Manufactured Structural Components," **Sharlotte L.B. Kramer**, et al.

"Standardization Gaps in Powder Feedstock Characterization and Establishing Acceptability for Reuse in Additive Manufacturing," **Tyler LeBrun**