



SUBMIT AN ABSTRACT BY JULY 1

FEBRUARY 27-MARCH 3, 2022
ANAHEIM CONVENTION CENTER & ANAHEIM MARRIOTT
ANAHEIM, CALIFORNIA, USA
#TMSAnnualMeeting

SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2022 SYMPOSIUM:

ELECTRONIC MATERIALS

Recent Advances in Printed Electronics and Additive Manufacturing: 2D/3D Functional Materials, Fabrication Processes, and Emerging Applications

Additive manufacturing and direct-write printed electronics technologies employing metal, dielectric, polymer, and ceramic materials have the potential to enable new products and markets. The proposed symposium will focus on the emerging additive manufacturing concepts and techniques for the processing of 2D/3D structures. Technical sessions will focus on processing and characterization of active and passive functional components integrated on engineered geometries. Topics related to functional materials, low-temperature processing, large area manufacturing, and electronic applications are within the scope of this symposium. Invited and contributed papers will discuss both the fundamental aspects underlying certain applications and the particular challenges regarding technology, fabrication processes, and reliability.

Research fields of interest are related to, but not necessarily limited to, the following topics:

- Direct-write printing and additive manufacturing of functional 2D/3D structures and geometries: Materials, Processes, and Characterization
- Nanomaterials, inks, and substrates for direct-write printing and additive manufacturing
- Nanostructured materials for solid-state and electrochemical energy storage devices (batteries and supercapacitors)
- Low thermal budget processing and characterization of functional inks and 2D/3D materials
- Hybrid electronics: Merging printed electronics and additive manufacturing (Materials and Process integration to realize active/passive sensors, detectors, TFTs, antennas, PVs, batteries, Supercapacitors)

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