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TMS 2023
152nd Annual Meeting & Exhibition

MARCH 19–23, 2023
SAN DIEGO CONVENTION CENTER &
HILTON SAN DIEGO BAYFRONT
SAN DIEGO, CALIFORNIA, USA
#TMSANNUALMEETING



SUBMIT AN ABSTRACT BY JULY 1 FOR THE FOLLOWING TMS2023 SYMPOSIUM:

ELECTRONIC MATERIALS

Printed Electronics and Additive Manufacturing: Functional Materials, Processing Techniques, 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. This 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 interests are related, 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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