

THE WORLD COMES HERE  
**TMS2019**  
 148<sup>th</sup> Annual Meeting & Exhibition

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March 10–14, 2019  
 San Antonio, Texas, USA

**JOIN US FOR THIS TMS2019 SYMPOSIUM:**

**ELECTRONIC MATERIALS**

**Recent Advances in Functional Materials and 2D/3D Processing for Sensors and Electronic 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. Advanced additive manufacturing and direct-write printing techniques in combination with rapidly expanding material sets have the potential to meet the cost and performance demands of future manufacturing technologies. 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:

- Nanomaterials, inks, and substrates for direct-write printing and additive manufacturing
- Direct-write printing and additive manufacturing of functional 2D/3D structures and geometries: Materials, Processes, and Characterization
- 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)

**ORGANIZERS**

**Pooran Joshi**, Oak Ridge National Laboratory, USA

**Nuggehalli M Ravindra**, New Jersey Institute of Technology, USA

**Jud Ready**, Georgia Institute of Technology, USA

**Anming Hu**, University of Tennessee, USA

**Tolga Aytug**, Oak Ridge National Laboratory, USA

**Konstantinos Sierros**, West Virginia University, USA

**Wenchao Zhou**, University Of Arkansas, USA

Nearly 4,000 presentations are planned  
 at more than 80 symposia at TMS2019.

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