

Poster Presentations

Advanced Ceramic Materials and Packaging Technologies for Realizing Sensors Operable in Advanced Energy Generation Systems - Yiping Liu, Sporian Microsystems, Inc.

Investigation on Smart Parts with Embedded Piezoceramic Sensors via Additive Manufacturing
Yirong Lin, University of Texas at El Paso

Investigation on Pyroelectric Ceramic Temperature Sensors for Energy System Applications
Yirong Lin, University of Texas at El Paso

Development of Integrated Biomimetic Framework with Intelligent Monitoring, Cognition, and Decision Capabilities for Control of Advanced Energy Plants - Debangus Bhattacharyya, West Virginia University

Deformation Properties of High-Entropy Alloys - Karin Dahmen, University of Illinois

Multi-objective Optimal Sensor Deployment Under Uncertainty for Advanced Power Systems
Urmila Diwekar, University of Illinois and Vishwamitra Research Institute

Mixed-Oxide for Carbonaceous Fuel Conversion with Integrated CO₂ Capture via Chemical Looping Oxygen Uncoupling (CLOU) - Fanxing Li, North Carolina State University

Direct Numerical Simulation of Heat and Mass Transfer of Spheres in a Fluidized Bed
Zhi-Gang Feng, University of Texas at San Antonio

Bond Coat Layers for Multilayer Thermal/Environmental Barrier Coatings
Jeffrey Fergus, Auburn University

Reduced Mode Sapphire Optical Fiber and Sensing Systems
Daniel Homa, Virginia Polytechnic Institute and State University

ATOMeS: Additive Topology Optimized Manufacturing with Embedded Sensing
Joseph V. Mantese, United Technologies Research Center

Smart Refractory Sensor Systems for Wireless Monitoring of Temperature, Health, and Degradation of Slagging Gasifiers - Edward M. Sabolsky, West Virginia University

Computational Design of Weldable, High-Cr Ferritic Steel
David Snyder, QuesTek Innovations LLC

Evolving Robust and Reconfigurable Controllers for Advanced Power Systems
Kagan Tumer and Logan Yliniemi, Oregon State University

Additive Manufacturing of Smart Parts with Embedded Sensors for In-Situ Monitoring in Advanced Energy Systems
Hai Xiao, Clemson University

Predicting Microstructure-Creep Resistance Correlation in High Temperature Alloys Over Multiple Time Scales
Hongsuk Lee, Purdue University

Ultra-short Pulsed Laser Micromachining of Sapphire
Daniel Blood, University of Florida

Poster Presentations

An Information-Theoretic Framework for Health and Condition Monitoring of Power Plant Equipment
Wanchat Theeranaew, Case Western Reserve University

A Self-Organizing Agent-Based Sensor Network for Power Plant Condition Monitoring
Hanich Agharazi, Case Western Reserve University