

Speaker Sessions

Sensor Processes, Circuits, and Networks

Nader Behdad, University of Wisconsin – Madison, United States
Youcef Bentoutou, Algerian Space Agency, Algeria

Pushing the Envelope for Wireless Sensor Networks
Mohamed-Slim Alouini, KAUST, Saudi Arabia

Terahertz Sensing Technologies and Applications
Mona Jarrahi, University of California Los Angeles, United States

Blind Multi Sensor Processing: Concepts and Some Applications
Adel Belouchrani, Ecole Nationale Polytechnique, Algeria

On Joint k-Coverage and Data Gathering in Mobile Wireless Sensor Networks: Challenges and Opportunities
Habib M. Ammari, Taif University, Saudi Arabia

Advanced Materials and Assemblies for Sensing

Aram Amassian, KAUST, Saudi Arabia
Baratunde Cola, Georgia Tech, United States

3D Electronics Integration for Computing, RF, and Biological Sensing Applications
Muhannad Bakir, Georgia Tech, United States

In-situ Reservoir Sensing and Intervention: The Concept of Reservoir Nanoagents
Mohammad Al Askar, Saudi Aramco, Saudi Arabia

Reconfigurable Metamaterials for Remote Optical Sensing
Jon A. Schuller, UC Santa Barbara, United States

Dynamics of Shallow Arched Microstructures
Mohammad I. Younis, KAUST, Saudi Arabia

Advances in Biomedical Sensing Technology

Mandë Holford, Hunter College, United States
Rihab Nasr, American University of Beirut, Lebanon

Democratization of Next-Generation Biomedical Imaging, Sensing, and Diagnostics Tools
Aydogan Ozcan, University of California, United States

Biosensors in Tissue Engineering- Recent Advances and Future Perspectives
Anwarul Hasan, American University of Beirut, Lebanon

Extracellular Space Volume Measured by Two-Color Pulsed Dye Injection with Microfiberoptic Fluorescence Detection
Mazin Magzoub, New York University Abu Dhabi, United Arab Emirates

Edible Electronics: Materials and Structures for Next-Generation Medical Devices
Christopher Bettinger, Carnegie Mellon University, United States

Advances in Environmental Sensing

Elizabeth Wilson, University of Minnesota, United States
Mourad Zghal, Sup'Com – Tunis, Tunisia

Senseable Cities
Carlo Ratti, Massachusetts Institute of Technology, United States

Sensing and Modeling the Urban Microclimate Regime in Desert Cities
Prashanth R. Marpu, Masdar Institute of Science and Technology, United Arab Emirates

SmarTrAC: A Smartphone Solution for Context-Aware Travel and Activity Capturing
Yingling Fan, University of Minnesota, United States

Sensing in Smart Cities: Technology Advancements and Case Studies
Fethi Filali, Qatar Mobility Innovations Center (QMIC), Qatar

Sensors to Maintain Agroecosystem Health

Moncef Bouaziz, University of Sfax, Tunisia

James Harwood, University of Kentucky, United States

Using Space-Borne Spectral, Thermal and Radar Remote Sensors together with GPR for Sustainable Agriculture Monitoring and Development

Ahmed Gaber, Port-Said University, Egypt

On the Link between Aridity and Hydrological Extremes: Lessons from Hyper-Arid Climates Could Help in Understanding Global Aridification

Annalisa Molini, Masdar Institute of Science and Technology, United Arab Emirates

Internet of Underground Things

Mehmet Can Vuran, University of Nebraska-Lincoln, United States

Plant Nanobionics

Michael S. Strano, Massachusetts Institute of Technology, United States

Integrated Approaches to Sensing Across Modalities

Jason P. Schrum, KAUST, Saudi Arabia

Joy Ward, University of Kansas, United States

Smart-Pixel Designs for Advanced Imaging Applications

Munir Eldesouki, King Abdulaziz City for Science and Technology, Saudi Arabia

Music Recommendation through Multimodal Sensing

Gert Lanckriet, UC San Diego, United States

Carbon Nanotube Transistors for Sensing Applications

Mohammed Amer, King Abdulaziz City for Science and Technology, Saudi Arabia

Biosensing across Modalities: The Electrical, Chemical & Physical Senses of Neural Cells

Amina Qutub, Rice University, United States