

8:45—9:00	Supratik Guha (Argonne National Laboratory/University of Chicago) <i>Introductory Remarks</i>
9:00—9:30	Joshua Yang (University of Massachusetts, Amherst) <i>Diffusive Memristors for Neuromorphic Computing</i>
9:30—10:00	Wei Lu (University of Michigan) <i>Memristive Devices for Neuromorphic Computing</i>
10:00—10:30	John Paul Strachan (Hewlett Packard Laboratories) <i>Toward Use of Memristors for Computation</i>
10:30—11:00	Break
11:00—11:30	Charudatta Phatak (Argonne National Laboratory/Northwestern University) <i>TEM and X-ray Nanoprobe Studies of Nanoscale Resistive-switching Oxide Heterostructures</i>
11:30—12:00	Bilge Yildiz (Massachusetts Institute of Technology) <i>Beyond Electrostatic Effects at Oxide Hetero-Interfaces: Electrochemical Phase Change, Strong Electric Fields, and Elastic Strain</i>
12:00—1:30	Lunch
1:30—2:00	Shriram Ramanathan (Purdue University) <i>Emergent Intelligence</i>
2:00—2:30	Junjing Deng (Argonne National Laboratory) <i>Non-destructive Nanoscale X-ray Ptychographic Imaging of Integrated Circuits</i>
2:30—3:00	Jerry Ziwen Wang (Stanford University) <i>Experimental Evidence of Significant Soret Diffusion in Filamentary RRAM Operation</i>
3:00—3:15	Break
3:15—3:45	Dillon Fong (Argonne National Laboratory) <i>Operando X-ray Studies of Oxygen Vacancy Behavior in Complex Oxide Heterostructures</i>
3:45—4:15	Young-Sang Yu (Lawrence Berkeley National Laboratory) <i>Advanced X-ray Transmission Microscopy for Three-dimensional Chemical and Morphological Imaging of Single Li_xFePO_4 Particles</i>
4:15—4:45	David Guzman (Purdue University) <i>Modeling of Electrochemically Driven Resistance Change Materials</i>
4:45	Closing Remarks