



Buffalo Section Presentation

Joint with the Power Energy, Industrial Applications, Computer, Control Systems, Microwave Theory & Techniques, Antennas & Propagation, Engineering Management, Communications, Young Professionals Societies, Consultants Network, and Women In Engineering.

Thursday November 14, 2019 at 6 p.m.

New era of innovation in discovery and development of advanced materials

Materials design and Innovation (MDI) at UB is a new forward-learning, interdisciplinary department that aims to transform the training and education of materials scientists and engineers. MDI offers a unique program on the use of materials informatics that links experimental and computational perspectives of materials science and engineering. In this talk, I will overview MDI's efforts in materials science research and education. I will use some examples to show our research activities in rational design of functionalities where controlled synthesis, advanced characterization, theoretical modeling, and computation are fully integrated to accelerate the discovery of advanced materials with emergent and/or much improved properties.

Quanxi Jia is an Empire Innovation Professor and National Grid Professor of Materials Research at the University at Buffalo (UB), the State University of New York. He is also the Scientific Director of New York State Center for Excellence in Materials Informatics. Prior to joining UB in 2016, he had worked at Los Alamos National Laboratory for over 20 years, with the last two years serving as the co-Director and then Director of the Center for Integrated Nanotechnologies, a US Department of Energy Nanoscale Science Research Center operated jointly by Los Alamos and Sandia National Laboratories. Jia's research areas include synthesis and study of the structure-property relationships of nanostructured materials, multifunctional materials, and thin films; development of novel deposition techniques for the growth of electronic materials; as well as development and fabrication of novel solid-state microelectronic/electro-optic devices. He has authored/co-authored over 500 peer-reviewed journal articles and holds 49 U.S. patents. He is an elected Fellow of the Los Alamos National Laboratory, the Materials Research Society (MRS), the American Physical Society (APS), the American Ceramic Society (ACerS), the American Association for the Advancement of Science (AAAS), the Institute of Electrical and Electronics Engineers (IEEE), and the National Academy of Inventors (NAI).

**Davis Hall - Room 230A
State University of New York at Buffalo
Amherst, New York**

Buffet dinner will be served on site: Chicken Francaise, Pasta Salad, Chef salad, dessert and beverages
IEEE Members \$15, Life & Student Members \$10, Non Members \$20

Reservations by November 12, 2019 **Judy Moskal at 689-6689** jmmoskal@ieee.org
****Please honor your reservations. The cost of no shows is borne by the Section****