Quanxi Jia of the Center for Integrated Nanotechnologies (MPA-CINT) is a 2014 Fellow of the Materials Research Society (MRS). The MRS Fellow program recognizes outstanding members whose sustained and distinguished contributions to the advancement of materials research are internationally recognized. The number of new fellows selected annually is capped at 0.2 percent of the current total MRS membership.

Achievements

The MRS recognized Jia for “pioneering contributions to the development of high-temperature superconducting-coated conductors and for advancing the processing and application of multifunctional metal-oxide materials.”

Jia received a doctorate in Electrical Engineering from the State University of New York at Buffalo. He joined LANL in 1993 as a Director’s Postdoctoral Fellow, and was converted to a staff in 1996. He is the Thrust Leader of Nanoscale Electronics
and Mechanics at the Center for Integrated Nanotechnologies (CINT), which is jointly operated by Sandia and Los Alamos National Laboratories. He specializes in the synthesis of nanostructured materials, multifunctional materials, and thin films, the development and fabrication of high-temperature superconducting films, and the exploration of novel solid-state microelectronic devices based on semiconductor and multifunctional materials. Jia has conducted pioneering research in high-temperature superconducting coated conductors, novel techniques to grow thin films of electronic materials, and monolithic integration of complex metal-oxide thin films for novel devices. His important contributions include the development of multilayer architectures to enhance the supercurrent-carrying capability in thick superconducting films, polymer-assisted deposition to grow a wide range of electronic materials, and integration of metal-oxide materials with complementary functionalities for electronic devices.

Jia is a fellow of the American Association for the Advancement of Science, the American Ceramic Society, the American Physical Society, and Los Alamos National Laboratory. He has received the Asian-American Engineer of the Year Award, a Federal Laboratory Consortium for Technology Transfer Award for Excellence in Technology Transfer and two R&D 100 Awards. Jia has authored/co-authored more than 400 refereed journal articles and has been awarded 46 United States patents in electronic materials and devices. He is the Co-Editor-in-Chief of Materials Research Letters and a member of the editorial boards of Journal of Semiconductors and Transactions on Electrical & Electronic Materials.

About the Materials Research Society

The MRS is an organization with more than 16,000 materials researchers from academia, industry, and government. It promotes the advancement of interdisciplinary materials research to improve the quality of life.