Z.L. Wang's biosketch

Dr. Zhong Lin (ZL) Wang is the Hightower Chair in Materials Science and Engineering, Regents' Professor, Engineering Distinguished Professor and Director, Center for Nanostructure Characterization, at Georgia Tech. Dr. Wang is a foreign member of the Chinese Academy of Sciences, member of European Academy of Sciences, fellow of American Physical Society, fellow of AAAS, fellow of Microscopy Society of America and fellow of Materials Research Society. He has received the 2001 S.T. Li prize for Outstanding Contribution in Nanoscience and Nanotechnology, the 1999 Burton Medal from Microscopy Society of America, and the 2009 Purdy award from American ceramic society.

Dr. Wang has made original and innovative contributions to the synthesis, discovery, characterization and understanding of fundamental physical properties of oxide nanobelts and nanowires, as well as applications of nanowires in energy sciences, electronics, optoelectronics and biological science. His discovery and breakthroughs in developing nanogenerators establish the principle and technological road map for harvesting mechanical energy from environment and biological systems for powering a personal electronics. His research on self-powered nanosystems has inspired the worldwide effort in academia and industry for studying energy for micro-nano-systems, which is now a distinct disciplinary in energy research and future sensor networks. He coined and pioneered the field of piezotronics and piezo-phototronics by introducing piezoelectric potential gated charge transport process in fabricating new electronic and optoelectronic devices. This breakthrough progress has important applications in smart MEMS/NEMS, nanorobotics, human-electronics interface and sensors. Wang also invented and pioneered the *in-situ* technique for measuring the mechanical and electrical properties of a single nanotube/nanowire inside a transmission electron microscope (TEM). Dr. Wang entire publications have been cited for over 43,000 times by July, 2011. The H-index of his citations is 100. Details can be found at: http://www.nanoscience.gatech.edu/zlwang