

Quanxi JIA

Fellow of AAAS, ACerS, APS,
IEEE, MRS, NAI, and LANL

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EDUCATION

- 09/1991 **Ph.D.** in Electrical & Computer Engineering, University at Buffalo - the State University of New York (SUNY), NY
- 04/1985 **M.S.** in Electronic Engineering, Xian Jiaotong University, Xian, China
- 07/1982 **B.S.** in Electronic Engineering, Xian Jiaotong University, Xian, China

PROFESSIONAL EXPERIENCE

- 08/2016 - present Scientific Director, New York State Center of Excellence in Materials Informatics, University at Buffalo, SUNY, NY
- 08/2016 - present Empire Innovation Professor and National Grid Professor, Department of Materials Design & Innovation, University at Buffalo, SUNY, NY
- 02/2016 - 08/2016 Director of the Center for Integrated Nanotechnologies (CINT), a Department of Energy funded nanoscience research facility jointly operated by Los Alamos and Sandia National Laboratories
- 04/2015 - 02/2016 Co-Director of CINT, Los Alamos National Laboratory (LANL)
- 04/2015 - 08/2016 Group Leader of MPA-CINT, Division of Materials Physics and Applications (MPA), Los Alamos National Laboratory
- 06/2014 - 04/2015 Acting Co-Director of CINT, LANL
- 03/2010 - present Foreign Visiting Professor, Konkuk University, Seoul, Korea
- 12/2009 - 06/2014 Thrust Leader, CINT, LANL
- 09/2003 - 09/2017 Laboratory Fellow (currently, retired Laboratory Fellow), LANL
- 10/1997 - 12/2009 Team Leader, Superconductivity Technology Center (MPA-STC), LANL
- 01/1996 - 09/2017 Technical Staff Member, MPA-STC, LANL
- 08/1993 - 01/1996 Director's Postdoctoral Fellow, LANL
- 04/1993 - 12/1993 Visiting Associate Professor, Kumamoto University, Japan
- 09/1991 - 08/1993 Research Associate, University at Buffalo, SUNY
- 09/1988 - 08/1991 Teaching Assistant, University at Buffalo, SUNY
- 02/1988 - 08/1988 Research Associate, University at Buffalo, SUNY
- 12/1987 - 01/1988 Assistant Professor, Xian Jiaotong University, Xian, China
- 05/1985 - 11/1987 Research Associate, Xian Jiaotong University, Xian, China

FUNDED PROJECTS, PATENTS, PUBLICATIONS, & PRESENTATIONS

- More than 45 funded projects (as PI) with total >\$62M
- 50 US patents issued
- More than 500 peer reviewed journal articles with a total citation over 25,600 and an *h*-index 79 from *Google Scholar*
- More than 120 invited conference presentations and seminars
- 11 book chapters and co-edited 6 proceeding books
- More than 70 refereed/un-refereed proceeding articles

RESEARCH INTERESTS

- Synthesis and structure-property relationships of nanostructured materials, multifunctional materials, thin films and multilayer systems. In particular, the growth of nanocomposite and layered metal-oxide thin films, the growth mechanism, the study of optical/electrical properties of the films, and the device applications of the films
- Novel deposition techniques for the growth of electronic materials with controlled structural and transport properties
- Development and fabrication of high-temperature superconducting films for coated conductors and devices
- Development of quantum devices using high performance superconducting materials
- Development and fabrication of novel solid-state microelectronic/electro-optic devices, research on advanced semiconductor devices and materials
- Development and study of energy materials and devices

HONORS & AWARDS

- *Fellow* of National Academy of Inventors (2018)
- *Fellow* of Institute of Electrical and Electronics Engineers (IEEE) (2017)
- *Fellow* of Materials Research Society (MRS) (2014)
- *Fellow* of American Association for the Advancement of Science (AAAS) (2011)
- Postdoctoral Distinguished Mentor Awards of LANL (2010)
- *Fellow* of American Ceramic Society (ACerS) (2010)
- Adjunct Professor, State Univ. of New Mexico, Las Cruces, NM (2010 - 2016)
- *Fellow* of American Physical Society (APS) (2009)
- The Outstanding Women's Career Development Mentoring Awards of LANL (2008)
- The Federal Laboratory Consortium for Technology Transfer Awards (2008)
- Adjunct Professor, Jiaotong Univ., Xian, China (2008 - 2015)
- Asian-American Engineer of the Year Award (2005)
- *Laboratory Fellow* of Los Alamos National Laboratory (2003)
- R&D 100 award - Flexible Superconducting Tape (2003)
- Los Alamos National Laboratory Achievement Award (2000)
- R&D 100 award - Underground Radio (1998)
- Listed in Marquis *Who's Who*
- Listed in *who's Who in America*
- Listed in *Who's Who in Science and Engineering*
- Listed in *American Men and Women of Science*
- Award for Excellence in Industrial Partnerships at LANL (1996)
- National Link Foundation Fellowship Award (1990 - 1991)
- Distinguished Teaching Award at Jiaotong University (1986 - 1987)

PROFESSIONAL SERVICES

- Editor-in-Chief of *Materials Research Letters*, Taylor & Francis Group (2013 - present)
- Principal Editor of *Journal of Materials Research*, Cambridge Core (July 2018 – present)

- Editorial Board of *Nano Convergence*, Springer (2013 - present)
- Editorial Board of *Trans. Electrical & Electronic Materials*, Korean IEEE (2010 - present)
- Editorial Board of *Ferroelectrics Letters*, Taylor & Francis Group (2013 - 2020)
- Editorial Board of *Journal of Semiconductors*, IOP Publishing (2010 - 2016)
- Editorial Oversight Committee, *Journal of Electronic Materials*, Springer (2017 – 2019)
- Meeting Chair, 2018 MRS Spring Meeting & Exhibit, Phoenix, AZ
- Chair of Award Committee of the Electronics Division, ACerS (2007 - 2008)
- Executive Committee of the Electronics Division, American Ceramic Society (ACerS): Secretary-Elect (2008 - 2009); Secretary (2009 - 2010); Vice-Chair & Program Chair (2010 - 2011); Chair-Elect (2011 - 2012); Chair (2012 - 2013)
- LANL Fellows Organization: Secretary (2009 - 2010); Deputy Coordinator (2010 - 2011); Coordinator (2011 - 2012)
- Review Panel of NSF MRI/IMR, ERC, DMR/ECCS proposals
- Proposal reviewer for NSF, BES/DOE, SBIR, and other funding agencies
- External reviewer for the Korea Science Prizes
- Organizing committees of over 25 international Symposia/conferences
- Reviewer for the scientific journals: *Nature*, *Science*, *Nat. Mater.*, *Nat. Nanotechnol.*, *Nat. Commun.*, *Adv. Mater.*, *Adv. Functional Mater.*, *Appl. Phys. Lett.*, *APL Mater.*, *J. Appl. Phys.*, *J. Vac. Sci. Technol.*, *J. Mater. Res.*, *Integrated Ferroelectrics*, *Ferroelectrics*, *IEEE Trans. Appl. Supercond.*, *IEEE Electron Devices Lett.*, *Phil. Mag. B*, *Physica B*, *Physica C*, *J. Am. Ceramic Soc.*, *Thin Solid Films*, *J. Phys. Chem. B*, *Chem. Mater.*, *J. Am. Chem. Soc.*, *Nano Lett.*, *ACS Nano*, *Small*, *Angew. Chem. Int. Ed.*, *J. Phys. Chem.*, *Phys. Status Solidi (a)*, *Appl. Surf. Sci.*, *Electrochem. Solid-State Lett.*, *Int. J. Photoenergy*, *Supercond. Sci. Technol.*, *J. Crystal Growth*, *Crystal Growth & Design*, and *Rev. Sci. Instrum.*

TEACHING AND MENTORING

- Supervised and mentored 40 postdoctoral and graduate students
- Supervised 6 college and high school interns (at Los Alamos National Laboratory)

MEMEBERSHIPS

American Physical Society (APS)
 American Ceramic Society (ACerS)
 Materials Research Society (MRS)
 Institute of Electrical & Electronics Engineers (IEEE)
 American Association for the Advancement of Science (AAAS)
 National Academy of Inventors (NAI)