

Ruyan Guo
Robert E. Clarke Endowed Professor

1. Degrees

- Ph.D.** Solid State Science The Pennsylvania State University, 1990
M.S. Electrical Engineering Xi'an Jiaotong University, Xi'an, China, 1984
B.S. Electrical Engineering Xi'an Jiaotong University, Xi'an, China, 1982

2. Service at UTSA

Years of Service: 11 years
 Original appointment: Robert E. Clarke Endowed Professor of Electrical Engineering,
 Department of Electrical and Computer Engineering, UTSA (Fall 2007 – present).
 Current appointment: (same)

3. Other Related Experience**a. At Pennsylvania State University, University Park, PA, USA**

Adjunct Professor of Electrical Engineering, Dept of Electrical Engineering and Materials Research Institute (2008 - 2014), Professor of Electrical Engineering, Dept of Electrical Engineering and Materials Research Institute (2004 – 2008), Associate Professor of Electrical Engineering, Dept of Electrical Engineering and Materials Research Institute (1999 - 2004), Senior Research Associate and Associate Professor of Materials and Associate Professor of Electrical Engineering (affiliated), Materials Research Laboratory (1996–1999), Faculty Research Associate and Assistant Professor of Materials, Materials Research Laboratory (1995 – 1996), Faculty Research Associate, Materials Research Laboratory (1991-1994)

b. At Xian Jiaotong University, Xian, China

Associate Lecturer, Electrical Engineering Dept. Xi'an Jiaotong Univ., Xi'an, China (1984-1985)

c. At other institutes

Visiting Prof. Swiss Federal Institute of Technology Lausanne, Lausanne, Switzerland (July 2015).
 Visiting Professor, National Chiao Tung University, Hsinchu, Taiwan (Jan. 2006)

4. Consulting, Patent, etc.:

Motorola; Philip Morris; Corning Inc.; Cabot Inc.
 5 US Patents 62/241,786; 62/042,212; 62/042,197; 61/979,675; 61/979,721 (published & pending).

5. State(s) in which registered: (none)**6. Principle Publications of Last 5 Years [from 400+ total (287 journal and 28 Edited Books)]**

- (1). Betal, S., Shrestha, B., Dutta, M., Cotica, L.F., Khachatryan, E., Nash, K., Tang, L., Bhalla, A.S., and Guo, R.: 'Magneto-elasto-electroporation (MEEP): In-vitro visualization and numerical characteristics', *Scientific Reports*, **6**, pp. 32019, 2016
- (2). Dutta, M., Rahman, M.S., Bhalla, A.S., and Guo, R.: 'Optical and microstructural characterization of multilayer $\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3$ thin films correlating ellipsometry and nanoscopy', *Journal of Materials Science*, 2016, 51, (17), pp. 7944-7955
- (3). M. Pal, R. Y. Guo, and A. Bhalla, "Study of Multiferroic Materials at Nano-Scale," *Integrated Ferroelectrics*, vol. **131**, pp. 56-65, 2011.
- (4). R. McIntosh, C. Garcia, A. Bhalla, and R. Y. Guo, "Periodically Poled Structure on Microwave Transmissions Evaluated by Scattering Parameters," *Integrated Ferroelectrics*, vol. **131**, pp. 219-229, 2011.
- (5). J. Li, Y. Li, Z. Zhou, A. Bhalla, R. Guo, "Linear EO coeffi. r_{51} of tetragonal potassium lithium tantalate niobate $\text{K}_{0.95}\text{Li}_{0.05}\text{Ta}_{0.40}\text{Nb}_{0.60}\text{O}_3$ single crystal," *Opt Mat Exp*, **3** 2063-71, 2013.
- (6). M. Pal, M. Liu, C. R. Ma, C. L. Chen, R. Guo, and A. Bhalla, "Ferroelectric-Relaxor Behavior of Highly Epitaxial Barium Zirconium Titanate Thin Films," *J Nano Res*, **34**, 67-72, 2015.
- (7). J. P. Tamez, M. C. Bhardwaj, A. Bhalla, and R. Guo, "Simulation and experimental studies on tri-

phasic PZT piezoelectric transducer," *Ferroelectrics*, vol. 473, no. 1, 45-54, 2014.

- (8). Robert McIntosh, A. S. Bhalla, and R. Guo, "Simulation of enhanced optical transmission in piezoelectric materials," in *Advances and Appl. in Electroceramics II*. pp. 55-64, 2012
- (9). T. Maiti, R. Guo, and A. S. Bhalla "Evaluation of Experimental Resume of BaZrxTi1-xO3with Perspective to Ferroelectric Relaxor Family" An Overview," *Ferroelectrics*, **425**, 4-26, 2011

7. Scientific and Professional Societies

Society Fellow of IEEE, Society Fellow of SPIE, and Society Fellow of ACerS. Society Senior Members of SWE (Society for Women Engineers); Society Member of Women in Optics; MRS; AAAS; ASEE

8. Honors and Awards

- Fellow of IEEE and IEEE-UFFC (2013); Fellow of SPIE (2009); Fellow of ACerS (2003)
- Senior Member of SWE; Member of ASEE, AAAS, ACS
- UTSA Innovation Award - Licensing Revenue (2017, 2016); College of Engineering UTSA Annual Res Expenditure Award (2017-18; 2016-2017); College of Engineering, UTSA Highest Funding as Principal Investigator (Full Prof.) Award (2016-2017)
- Visiting Prof. Swiss Federal Institute of Technology Lausanne, Switzerland (July 2015).
- Faculty Excellence in Res Award, College of Engineering UTSA (2012-13)
- Featured Top Women Scientists/Professionals in SPIE Women in Optics Planner, 2011
- Certification for Excellence in Service, American Ceramics Society (2001)
- IEEE Certif of Recognition Organizing 9th IEEE Intern'l Symp Appl of Ferroelectrics (1994)
- XEROX Award for the Best PhD Research in Materials, Penn State U (1991).
- Robert E. Clarke Jr. Endowed Distinguished Prof., U. Texas at San Antonio (2007 -)
- Hon. Guest Prof. of Wuhan U Tech, Beijing U Tech, Shanghai U, China, (2006 -)
- Visiting Prof Grant in Sci & Tech, Nat. Sci Council, Rep. of China (Jan - Feb. 2006)
- Acad. Advisory Board Member, Electronic Materials Res Lab, Xi'an Jiaotong U, China (2006 -)

9. Institutional and Professional Services in the Last Five Years

a. Institutional:

- Director and GAR (Graduate Advisor of Record) of Interdisciplinary Graduate Program in Advanced Materials Engineering (fall 2012 – present);
- Interim Chair, Dept of Electrical and Computer Engineering, UTSA (Jan. 2010 – Aug. 2012);
- Chair Radiation and Laser Safety Committee, Office of the VPR, UTSA (2009-present);
- UTSA Graduate Council Member (2015– present)
- UTSA Faculty Senator (2015– present)
- Various faculty review, search, promotion and tenure committees at dept. & college levels.

b. Professional:

- Advisory Board, ACS Petroleum Research Fund 2009-2016.
- Division Trustee (elected), Steering Committee, Nomination Committee, Award Committee - Electronics Division, American Ceramic Society (since 1988 -)
- Editorial Board, *Ferroelectrics Letters* (2003 – resent)
- International Editorial Board, *Electronic Components and Materials* (2005 – present).
- Conference Co-Organizer/Chairmanship: Conference on Photonic Fiber and Crystal Devices: Advances in Materials and Innovations in Device Applications, Photonic Devices + Applications, SPIE, San Diego, CA (annually since 1999).
- Conference Co-Organizer/Chairmanship: International Symposium on Dielectric Materials and Electronic Devices, Materials Science & Technology Meeting (annually since 1990)
- Advisory Board Member, Northwest Vista College Technical Program – Workforce Education and Training, Alamo Colleges, San Antonio, TX.