# Jie (Joyce) Wang

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Electron Microscopy Center

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## Education

M. E., Material Science & Engineering, Texas A&M University, USA
M. S. Physics, Hong Kong University of Science & Technology, China
B. S., Applied Physics, Shanghai Jiaotong University, China

## Career Highlights

- Program Committee Member, Women in Science and Technology Program, Corning Incorporated, 2013-2015
- Distinguished Contribution Award, Corning, Incorporated, 2010
- Six Sigma Green Belt, Corning Incorporated, Corning, NY, 2010
- Fellowship, Smalley Institute, Rice University, 2008
- Fellowship, Electrical and Computer Engineering Department, Texas A&M University, TX, 2006-2008
- Outstanding Thesis Award, Shanghai Jiaotong University, Shanghai, 2003

## Professional Experience

Argonne National Laboratory - Center for Nanoscale Materials (CNM) — *2015-present*
Electron Microscopy Center Facility Manager

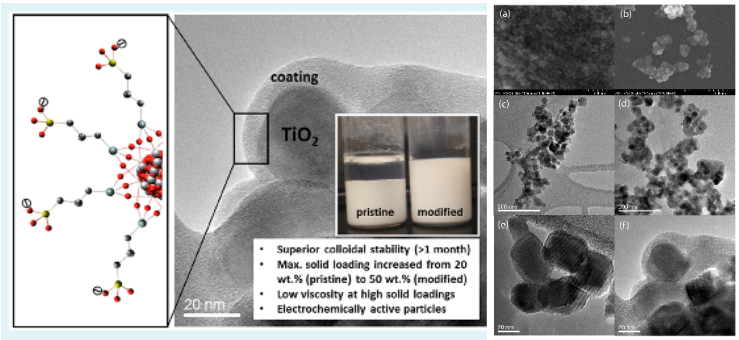
Corning Incorporated –Sullivan Park Research Center — *2008-2015*
Sr. Scientist / Material Scientist

Texas A&M University – Department of Electrical and Computer Engineering — *2006-2008*
Research assistant

Hong Kong University of Science and Technology – Department of Physics — 2004-2006
Research assistant

## Selected Publications

1. Sujat Sen, Vijay Govindarajan, Christopher J. Pelliccione, Jie Wang, Dean J. Miller, and Elena V. Timofeeva, Surface Modification Approach to TiO2 Nanofluids with High Particle Concentration, Low Viscosity, and Electrochemical Activity, *ACS Applied Materials & Interfaces*, **2015**, 7 (37), pp 20538- 20547.



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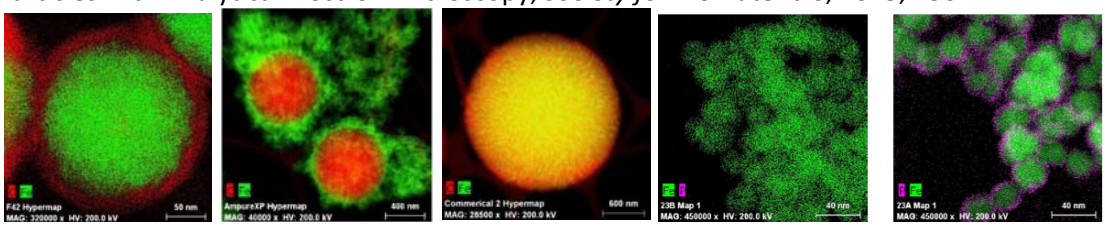
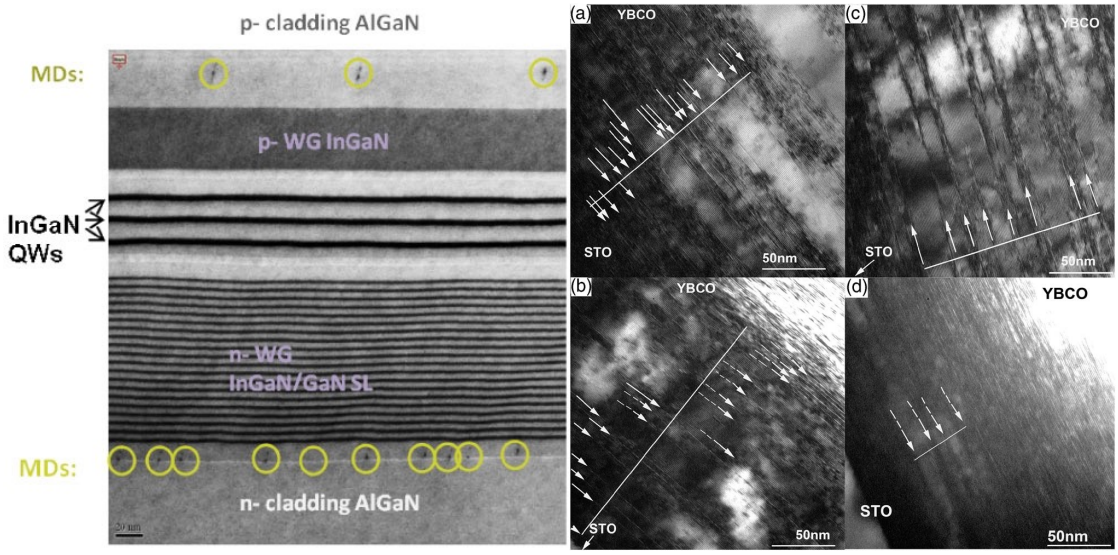
2. Alex Y. Song, Rajaram Bhat, Andrew A. Allerman, Jie Wang, Tzu-Yung Huang, Chung-En Zah, and Claire F. Gmachl, Quantum cascade emission in the III-nitride material system designed with effective interface grading, *Applied Physics Letters*, **2015**, 107, 132104.
3. J. Wang, Lingyan Wang, Ann Ferrie, Yan Jin, Visualizing Structure of Bio-Functional Magnetic Nano-Particles with Analytical Electron Microscopy, *Society for Biomaterials*, **2015**, 156.



4. Feng Xie, Catherine G. Caneau, Herve P. LeBlanc, Ming-tsung Ho, Jie Wang, Satish Chaparala, Lawrence C. Hughes, and Chung-en Zah, High power and high temperature continuous-wave operation of distributed Bragg reflector quantum cascade lasers, *Applied Physics Letters*, **2014**, 104, 071109.
5. Q. Fu, J. Wang, B. Wheaton, K. Geisinger, Crystallization mechanism of Lithium Aluminosilicate (LAS) glass ceramics: nucleation, viscosity and microstructure, *10th Pacific Rim Conference on Ceramic and Glass Technology*, **2013**, PACRIM10-SB-023-2013.
6. Gary Li, Lingyan Wang, Andrew Bradshaw, Fang Lai, Yan Jin, Joyce Wang and Bassam El-Fahmawi, An Efficient Way to Prepare DNA from Large Volume Samples, *Next Generation DNA Sequencing (NGS) and Microarray*, **2013**, WDD 17.
7. Dmitry Sizov, Rajaram Bhat, Jie Wang, Donald Allen, Barry Paddock, Chung-En Zah, Development of semipolar laser diode, *Physica Status Solidi A*, March **2013**, Volume 210, Issue 3, pages 459–465.
8. Jie Wang. Chen-Fong Tsai, Zhenxing Bi, D. Naugle and Haiyan Wang, Microstructural and Pinning Properties of YBa2Cu3O7-δ Thin Films Doped with Magnetic Nanoparticles, *IEEE Trans. Appl. Supercond.,* **2009**, 19, 3503-3506.
9. Haiyan Wang and Jie Wang, Interfacial Defects and Flux-Pinning Effects in Nanostructured YBa2Cu3O7-δ Thin Films, *IEEE Trans. Appl. Supercond*., **2009**, 19, 3395.
10. J. Wang, J.H. Kwon, J. Yoon, H. Wang, T.J. Haugan, F.J. Baca, N.A. Pierce, P.N. Barnes, Flux Pinning in YBa2Cu3O7-δ Thin Film Samples Linked to Stacking Fault Density, *Appl. Phys. Lett*., **2008**, 92, 082507.