

Jing Wu

TAMU Materials Characterization Facility
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Education: **The Ohio State University**, Columbus, Ohio
Ph.D. Analytical Chemistry, 2003-2008

Fudan University, Shanghai, China
B.Sc., Chemistry, 1994-1998

Experience: Materials Characterization Facility, **Texas A&M University**, College TX
Associate Research Scientist 2011.8-Present
Providing training and education on instruments such as XPS, profilometer, photolithography and ebeam evaporator. Maintained a class 1000 soft wall cleanroom.

Keith Stevenson's Group, **The University of Texas at Austin**, Austin, TX
Postdoctoral Fellow 2008.12 to 2011.7
Explored the phase and chemical change of lithium battery materials such as TiO_2 , V_2O_5 , LiFePO_4 , etc during Lithium ion intercalation and extraction. Techniques used including XRD, XPS, Raman, electrochemistry, STEM TEM

Richard McCreery's Group, **The Ohio State University**, Columbus, OH
Graduate Research/Teaching Associate 2003 to 2008
Conducted the fabrication and characterization of metal oxides and organic thin film devices. Developed and studied the method using redox active materials for memresistor. Techniques used including photolithography, Raman, electrochemistry, STEM and AFM.

Publications:

1. Wu, J.; Dathar, G. K. P.; Sun, C.; Theivanayagam, M.; Applestone, D.; Dylla, A. G.; Manthiram, A.; Henkelman, G.; Goodenough, J. B.; Stevenson, K. J. "In Situ Raman Spectroscopy of LiFePO_4 : Size and Morphology Dependence During Charge and Self-discharge," *Nanotechnology* 2013 24, 424009
2. Wu, J.; Membreno, N.; Yu, W.-Y.; Wiggins-Camacho, J. D.; Flaherty, D. W.; Mullins, C. B.; Stevenson, K. J. "Influence of Hydrofluoric Acid Formation on Lithium Ion Insertion in Nanostructured V_2O_5 ," *J. Phys. Chem. C* 2012, 116(40), 21208-21215

3. Hall, J. W.; Membreno, N.; Wu, J.; Celio, H.; Jones, R. A.; Stevenson, K. J. "Low Temperature Synthesis of Amorphous FeP₂ and use as Anodes for Li-Ion Batteries," J. Amer. Chem. Soc. 2012, 134(12), 5532-5535
4. Lu, Y.; Goodenough, J.B.; Dathar G.K. P.;Henkelman, G.; Wu, J.; Stevenson, K. J. "Behavior of Li Guest in KNb₅O₁₃ Host with One-Dimensional Tunnels and Multiple Interstitial Sites," Chem. Mater. 2011 23(13), 3210-3216
5. Mao, Y.; Abel, P. R.; Flaherty, D. W; Wu, J.; Stevenson, K. J.; Heller, A.; Mullins, C. B.; "Morphology Controlled Growth of Amorphous Titanium Oxide for Lithium Insertion/Extraction," J. Phys. Chem. C 2011, 115(5), 2585-2581
6. J. Wu, and R. L. McCreery, *Solid State Electrochemistry in Molecule/TiO₂ Molecular Heterojunctions as the Basis of the TiO₂ "Memristor"*, Journal of Electrochemistry society, 2009, 156, 1, 29
7. J. Wu, K. Mobley, and R. L. McCreery, *Electronic characteristics of fluorene/TiO₂ molecular heterojunctions*, Journal of Chemical Physics, 2007, 126, 2, 024704
8. R. L. McCreery, J. Wu, and R. P. Kalakodimi, *Electron transport and redox reactions in carbon-based molecular electronic junctions*, Physical Chemistry Chemical Physics, 2006, 8, 2572

Patent:

Electronic junction devices of the general type C/molecule/TiO₂/Au featuring redox electrodes to alter the conductivity *McCreery, Richard L.; Mobley, Kenneth J.; Wu, Jing* U.S. Pat. Appl. Publ. (2007), US 2007090348 A1 070426