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EDUCATION

Ph.D. Condensed Matter Physics - Kansas State University (1999)
M.S. Inorganic Chemistry - Kansas State University (1999)
M.S. Condensed Matter Physics - Shanghai JiaoTong University (1994)
B.S. Applied Physics (Major) - Shanghai JiaoTong University (1991)
B.S. Telecommunication Engineering (Minor) - Shanghai JiaoTong University, (1991)

PROFESSIONAL APPOINTMENT

2011-current Joint Staff, James Franck Institute & MRSEC, University of Chicago,
2006-current Scientist, Center for Nanoscale Materials, Argonne National Laboratory, Argonne, IL
2002- 2006 Assistant Scientist, Materials Science Division, Chemistry Division and Center for Nanoscale Materials, Argonne National Laboratory, Argonne, IL.
2000-2002 Postdoctoral Fellow - The James Franck Institute, University of Chicago.

SELECTED PUBLICATIONS

1. Yifan Wang, Pongsakorn Kanjanaboos, Edwards Barry, Sean Mcbride, Xiao-Min Lin, Heinrich Jaeger, Fracture and Failure of Nanoparticle Monolayers and Multilayers, Nano Lett., 14, 826−830 (2014).
2. Yi Liu, Chengjun Sun, Trudy Bolin, Michael Sternberg, Shouheng Sun, Xiao-Min Lin, Kinetic Pathway of Palladium Nanoparticle Sulfidation Process at High Temperatures, Nano Lett., 13, 4893-4901 (2013).
3. Pongsakorn Kanjanaboos, Alexandra Joshi-Imre, Xiao-Min Lin, Heinrich Jaeger, Strain Patterning and Direct Measurement of Poisson's Ratio in Nanoparticle Membrane Sheets, Nano Letts. , 11, 2567-2571, (2011).
4. Jinbo He, Xiao-Min Lin, Henry Chan, Lela Vukovic, Petr Kral, Heinrich Jaeger, Diffusion and Filtration Properties of Self-assembled Gold Nanocrystal Membranes, Nano Letts., 11, 2430-2435, (2011).
5. Zhang Jiang, Xiao-Min Lin, Michael Sprung, Suresh Narayanan, Jin Wang, Capturing the crystalline phase of two-dimensional nanocrystal superlattices in action, Nano Lett. 10, 799, (2010).
6. Klara E. Mueggenburg, Xiao-Min Lin, Rodney H. Goldsmith, Heinrich M. Jaeger, Elastic Properties of Close-packed, Free-standing Nanoparticles Arrays, Nature Materials, 6, 656-660, (2007).
7. Terry .P. Bigioni, Xiao-Min Lin, Toan T. Nguyen, Eric I. Corwin, Thomas A. Witten, Heinrich M. Jaeger, Kinetically-Driven Self Assembly of Highly-Ordered Nanoparticle Monolayers, Nature Materials,5, 265, (2006).
8. Anna.C.S. Samia, Kylee Hyzee, John Schlueter, Chang-Jin Qin, J. Samuel Jiang, Samual D. Bader, Xiao-Min Lin, Ligand Effect on the Growth and the Digestion of Co Nanocrystals. J. Am. Chem. Soc. (Communications)127 (12): 4126, (2005).

9. Suresh Narayanan, Jin Wang, Xiao-Min Lin, Dynamical Self-assembly of Nanocrystal Superlattices during Colloidal Droplet Evaporation by in situ Small Angle X-ray Scattering, Phys. Rev. Lett. 93, 135503, (2004).
10. Xiao-Min Lin, H.M. Jaeger, C.M. Sorensen, K.J. Klabunde, Formation of Long-Range-Ordered Nanocrystal Superlattices on Silicon Nitride Substrates, J. Phys. Chem. B 105, 3353 (2001).
11. Quy Khac Ong, Alexander Wei and Xiao-Min Lin, Exchange bias in Fe@Fe3O4 core-shell magnetic nanoparticles mediated by frozen interfacial spins, Phys. Rev. B., 80, 134418 (2009).

SUPERVISED STUDENTS:

1. Edwards Barry, Argonne Named Postdoctoral Fellow, 2012-current.
2. Yi Liu, Postdoctoral Fellow, 2011-2012, currently at School of Chemical and Biomedical Engineering, Nanyang Technological University, Singapore.
3. Lei Zhao, Postdoctoral Fellow, 2012-2013, currently at Baker Hughes, Inc.
4. Yiliang Wang, Postdoctoral Fellow, 2008-2011.
5. Yan Zhao, postdoc, 2007-2009. Currently Institute of Metals Research, Chinese Academy of Sciences.
6. Istvan Robel, postdoc, 2006-2007, currently scientist at Los Alamos National Lab.
7. Sang-Kee Eah, Joint UC-Argonne CNR Postdoc, 2002-2005, Faculty at Rensselaer Polytechnic Institute, Current at Applied Materials, NY.
8. Anna C.S. Samia, Postdoc, 2002-2005, Currently at Case Western Reserve University, Cleveland, OH as an assistant professor.

SYNERGISTIC ACTIVITIES:

- Reviewer for the following professional journals: *Nature, Nature Nanotechnology, Phys. Rev. Lett., Appl. Phys. Lett.; J. Appl. Phys.; J. Am. Chem. Soc.; J. Phys. Chem. C.; J. Vacu. Soc.; J. Mag. Mag. Mater.; Nano Lett.; J. Colloid. Inter. Sci.; Nanotechnology.*
- Reviewer for DOE Office of Science Chemical Imaging Proposal.
- Invited panel reviewer for NSF DMREF Metals & Metallic Nanostructure Proposal Call, June 4-5, 2014. DMREF represents the NSF component of the US Materials Genome Initiative
- Lead-organizer for Symposium Joint NSRC Workshop on Nanoparticle Science, Argonne National Laboratory, November 5-6, 2012.
- Co-organizer for Symposium "Evaporative Self-Assembly of Polymers, Nanoparticles, and DNA", Materials Science Society 2010 spring meeting.
- Co-organizer for Symposium "Low-dimensional materials – synthesis, assembly, property scaling and modeling", Materials Science Society 2007 Spring meeting.
- Co-organizer for Workshop "Synthesis and Self-Assembly of Nanomaterials", 2007 User meeting, Center for Nanoscale Materials, Argonne.

RECENT EXTERNAL COLLABORATIONS

- Jeff Guest, Subramanian Sankaranarayanan, Jin Wang, Zhang Jiang, John Muntean, Matt Pelton, Argonne National Lab, U.S.A.
- Heinrich M. Jaeger, University of Chicago, U.S.A.
- Gary Grest, Sandia National Laboratory, U.S.A.
- Alex Wei, Purdue University, U.S.A
- Christopher M. Sorensen, Stephan H. Bossmann, Emily McLaurin Kansas State University, U.S.A.