

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME <b>Leidong Mao</b> eRA COMMONS USER NAME		POSITION TITLE <b>Assistant Professor</b>	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Fudan University	B.S.	2001	Materials Science
Yale University	M.S.	2002	Electrical Engineering
Yale University	M.Phil.	2005	Electrical Engineering
Yale University	Ph.D.	2007	Electrical Engineering

**A. Positions and Honors.****Positions and Employment**

2008-present, Assistant Professor, Faculty of Engineering, University of Georgia

**Honors**

1997-2001 LEIDONG MAO , Fudan University, Awarded 6 times, Sponsored by People's Fellowship.  
 1999-2001 LEIDONG MAO, Fudan University, , Sponsored by Chun-Tsung Fellowship.  
 2001-2002 LEIDONG MAO , Yale University, , Sponsored by Charles Deere Wiman Memorial Fellowship.  
 2002- LEIDONG MAO , Fudan University, , Sponsored by Motorola Fellowship.  
 2005- LEIDONG MAO, Sponsored by Travel Award from First International Bio-Nano-Informatics (BNI) Fusion Conference.  
 2005- LEIDONG MAO, Sponsored by Travel Award from 9th International Conference on Miniaturized Systems for Chemistry and Life Sciences.  
 2007- LEIDONG MAO, Best Poster Presentation Awar, Sponsored by 11th International Conference on Magnetic Fluids.

**B. Selected peer-reviewed publications (in chronological order).**

1. Leidong Mao, Hur Koser (2004) Modeling Ferrofluids in Spatially-Travelling Sinusoidally Time-Varying Magnetic Fields, 3rd International Conference on Computational Modeling and Simulation of Materials (CIMTEC), Sicily, Italy
2. Leidong Mao, Hur Koser (2004) Ferrohydrodynamic Pumping In Spatially-Travelling Sinusoidally Time-Varying Magnetic Fields, 10th International Conference on Magnetic Fluids, Sao Paulo, Brazil
3. Leidong Mao, Hur Koser (2005) Ferrohydrodynamic pumping in spatially travelling sinusoidally time-varying magnetic fields, Journal of Magnetism and Magnetic Materials, 289, 199-202, Published

4. Leidong Mao, Hur Koser (2005) Modeling a MEMS Ferrofluidic Pump, 14th Annual Connecticut Microelectronics and Optoelectronics Consortium, New Haven, Connecticut, USA
5. Leidong Mao, Hur Koser (2005) Pathogen Detector Based on MEMS Ferrofluidic Device, 1st International Conference on Bio-Nano-Informatics (BNI) Fusion, Marina del Rey, California, USA
6. Leidong Mao, Hur Koser (2005) An Integrated, High Flow Rate MEMS Ferrofluid Pump, 9th International Conference on Miniaturized Systems for Chemistry and Life Sciences ( $\mu$ TAS), Boston, Massachusetts, USA
7. Leidong Mao, Hur Koser (2005) An Integrated MEMS Ferrofluid Pump Using Insulated Metal Substrate, 31st Annual Conference of the IEEE Industrial Electronics Society (PCB MEMS Technology Special Session), Raleigh, North Carolina, USA
8. Leidong Mao, Hur Koser (2005) Modeling an Integrated, High Flow Rate MEMS Ferrofluid Pump, COMSOL Conference, Boston, Massachusetts, USA
9. Hur Koser, Tolga Kaya, Leidong Mao (2005) A Microfluidic Assay Design for Real-Time Bacterial Chemotaxis Studies, COMSOL Conference, Boston, Massachusetts, USA
10. Leidong Mao, Hur Koser (2006) Towards ferrofluidics for  $\mu$ -TAS and lab on-a-chip applications, Nanotechnology, 17(4)S34-S47, Published
11. Leidong Mao, Hur Koser (2006) Overcoming the Diffusion Barrier: Ultra-fast Micro-Scale Mixing Via Ferrofluids, 1st International GEMSEC Annual Workshop, Molecular Biomimetics-I: Protein-based Materials for Technology & Medicine, Seattle, Washington, USA
12. Leidong Mao, Hur Koser (2006) A Fast and Selective Assay For Ligand-Receptor Interactions Using Ferrofluids, 1st International GEMSEC Annual Workshop, Molecular Biomimetics-I: Protein-based Materials for Technology & Medicine, Seattle, Washington, USA
13. Leidong Mao, Hur Koser (2006) A Fast and Selective Assay For Ligand-Receptor Interactions Using Ferrofluids, 2nd International Conference on Bio-Nano-Informatics (BNI) Fusion and 3rd International Forum on Biochip Technologies, Beijing, China
14. Leidong Mao, Hur Koser (2007) Overcoming the diffusion barrier: ultra-fast micro-scale mixing via ferrofluids, TRANSDUCERS &EUROSENSORS' 07, Proc. of 14th International Conference on Solid-State Sensors, Actuators and Microsystems, Lyon, France
15. Leidong Mao, Hur Koser (2007) Overcoming the Diffusion Barrier: Ultra-fast Micro-Scale Mixing Via Ferrofluids, 11th International Conference on Magnetic Fluids, Koice, Slovakia
16. Leidong Mao, Hur Koser (2007) Overcoming the Diffusion Barrier: Ultra-Fast Micro-Scale Mixing Via Ferrofluids, COMSOL Conference, Boston, Massachusetts, USA
17. Birgit Fischer, Leidong Mao, L. Gungormus, M. Tamerler, M. Sarikaya, Hur Koser (2007) Biomedical engineered ferrofluids, 2007 Materials Research Society (MRS) Fall Meeting, Boston, Massachusetts, USA
18. Birgit Fischer, Leidong Mao, L. Gungormus, M. Tamerler, M. Sarikaya, Hur Koser (2008) Ferro-microfluidic device for pathogen detection, 3rd Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Sanya, Hainan Island, China