

## Qingshan Wei

Postdoctoral Scholar

Bioengineering Department  
Electrical Engineering Department  
California NanoSystems Institute (CNSI)  
University of California, Los Angeles

### POSITIONS

**02/2012-present** Postdoctoral Scholar, Bioengineering and Electrical Engineering Department, University of California, Los Angeles

### EDUCATION

**09/2007-01/2012** Ph. D. in Chemistry, Purdue University

**09/2005-06/2007** M. S. in Polymer Materials & Engineering, Zhejiang University, China

**09/2001-06/2005** B. S. in Polymer Materials & Engineering, Zhejiang University, China

### AWARDS

UCLA Chancellor's Award for Postdoctoral Research, Honorable Mention, 2014

Bilsland Dissertation Fellowship, Purdue University, 2011

Research Foundation Fellowship, Purdue University, 2009-2010

### RESEARCH INTERESTS

- Synthesis, optical properties, and biomedical applications of plasmon-resonant nanoparticles;
- Single-molecule and nanoparticle imaging;
- Field-portable imaging and sensing devices.

### PUBLICATIONS

1. Qingshan Wei, Richie Nagi, Kayvon Sadeghi, Steve Feng, Eddie Yan, So Jung Ki, Romain Caire, Derek Tseng, and Aydogan Ozcan\*. Detection and Spatial Mapping of Mercury Contamination in Water Samples using a Smart-Phone. *ACS Nano*, 2014, 8, 1121-1129
2. Matthew C. Stensberg, Rajtarun Madangopal, Gowri Yale, Qingshan Wei, Hugo Ochoa-Acuña, Alexander Wei, Eric S. McLamore, Jenna Rickus, David M. Porterfield, and Maria S. Sepúlveda\*. Silver Nanoparticle-Specific Mitotoxicity in *Daphnia Magna*. *Nanotoxicology*, 2014, 8, 833-842
3. Zoltán Göröcs, Yuye Ling, Meng Dai Yu, Dimitri Karahalios, Kian Mogharabi, Kenny Lu, Qingshan Wei, and Aydogan Ozcan\*. Giga-Pixel Fluorescent Imaging over an Ultra-Large Field-of-View Using a Flatbed Scanner. *Lab Chip*, 2013, 13, 4460-4466

4. Qingshan Wei, Hangfei Qi, Wei Luo, Derek Tseng, So Jung Ki, Zhe Wan, Zoltán Göröcs, Laurent A. Bentolila, Ting-Ting Wu, Ren Sun, and Aydogan Ozcan\*. Fluorescent Imaging of Single Nanoparticles and Viruses on a Smart Phone. *ACS Nano*, 2013, 7, 9147-9155
5. Qingshan Wei, Euan McLeod, Hangfei Qi, Zhe Wan, Ren Sun, and Aydogan Ozcan\*. On-Chip Cytometry using Plasmonic Nanoparticle Enhanced Lensfree Holography. *Sci. Rep.* 2013, 3, 1699
6. Wei Xia, Hyon-Min Song, Qingshan Wei, and Alexander Wei\*. Differential Response of Macrophages to Nanoparticles and Nanostars. *Nanoscale* 2012, 4, 7143-7148
7. Zhao Tong, Qingshan Wei, and Alexander Wei\*. Metal Mesh Lithography. *ACS Appl. Mater. Interfaces* 2011, 3, 4812-4818
8. Matthew C. Stensberg, Qingshan Wei, Eric McLamore, David M. Porterfield, Alexander Wei, and Maria S. Sepúlveda\*. Toxicological Studies on Silver Nanoparticles: Challenges and Opportunities in Assessment, Monitoring and Imaging. *Nanomedicine* 2011, 6, 879-898. **(Review)**
9. Qingshan Wei and Alexander Wei\*. Optical Imaging with Dynamic Contrast Agents. *Chem. Eur. J.* 2011, 17, 1080-1091. **(Concept review)**
10. Hyon-Min Song, Qingshan Wei, Quy K. Ong, and Alexander Wei\*. Plasmon-Resonant Nanoparticles and Nanostars with Magnetic Cores: Synthesis and Magnetomotive Imaging. *ACS Nano* 2010, 4, 5163-5173.
11. Wenbo Zhou, Jinyan Shao, Qiao Jin, Qingshan Wei, Jianguo Tang, and Jian Ji\*. Zwitterionic Phosphorylcholine as a Better Ligand for Gold Nanorods Cell Uptake and Selective Photothermal Ablation of Cancer Cells. *Chem. Commun.* 2010, 46, 1479-1481.
12. Qingshan Wei, Hyon-Min Song, Alexei P. Leonov, Jacob A. Hale, Dongmyung Oh, Quy K. Ong, Kenneth Ritchie, and Alexander Wei\*. Gyromagnetic Imaging: Dynamic Optical Contrast Using Gold Nanostars with Magnetic Cores. *J. Am. Chem. Soc.* 2009, 131, 9728-9734.
13. Ling Tong, Qingshan Wei, Alexander Wei, and Ji-Xin Cheng\*. Gold Nanorods as Contrast Agents for Biological Imaging: Optical Properties, Surface Conjugation and Photothermal Effects. *Photochem. Photobiol.* 2009, 85, 21-32. **(Review)**
14. Qingshan Wei, Wenbo Zhou, Jian Ji\*, and Jiacong Shen. Thermosensitive Nanocables Prepared by Surface-Initiated Atom Transfer Radical Polymerization. *Nanoscale Res. Lett.* 2009, 4, 84-89.
15. Wei He, Walter A. Henne, Qingshan Wei, Yan Zhao, Derek D. Doorneweerd, Ji-Xin Cheng, Philip S. Low, and Alexander Wei\*. Two-Photon Luminescence Imaging of *Bacillus* Spores Using Peptide-Functionalized Gold Nanorods. *Nano Res.* 2008, 1, 450-456. **(Back cover)**
16. Qingshan Wei, Jian Ji\*, and Jiacong Shen. pH Controlled Synthesis of High Aspect-Ratio Gold Nanorods. *J. Nanosci. Nanotechnol.* 2008, 8, 5696-5701.
17. Qingshan Wei, Jian Ji\*, and Jiacong Shen. Synthesis of Near-Infrared Responsive Gold Nanorod/PNIPAAm Core/Shell Nanohybrids via Surface Initiated ATRP for Smart Drug Delivery. *Macromol. Rapid Commun.* 2008, 29, 645-650.
18. Lijiang Wang, Qingshan Wei, Chunsheng Wu, Zhaoying Hu, Jian Ji, and Ping Wang\*. The *Escherichia coli* O157:H7 DNA Detection on a Gold Nanoparticle-Enhanced Piezoelectric Biosensor. *Chinese Sci. Bull.* 2008, 53, 1175-1184.
19. Qingshan Wei, Jian Ji\*, Jinhong Fu, and Jiacong Shen. Norvancomycin-Capped Silver Nanoparticles: Synthesis and Antibacterial Activities against *E. coli*. *Sci. China Ser. B-Chem.* 2007, 50, 418-424.