

Gang Ruan

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Education and Employment

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| Postdoc | Chemical and Biomolecular Engineering, the Ohio State University (USA), 2007-present (with Jessica O. Winter) |
| | Biomedical Engineering, Emory University & Georgia Institute of Technology (USA), 2003-2007 (with Shuming Nie) |
| PhD | Chemical and Biomolecular Engineering, the National University of Singapore (Singapore), 2004 (with Sishen Feng) |
| ME | Petroleum Chemical Technology, Tianjin University (China), 1999 |
| BE | Chemical Engineering, Harbin Engineering University (China), 1996 |

Research Experience

Postdoctoral Research at Ohio State

- Developed a technology to simultaneously image and manipulate single sub-100 nm nanoparticles
- Developed non-blinking and color-alternating nanoparticles for single particle tracking
- Developed magnetofluorescent nanoparticles for MRI-fluorescent bimodal imaging
- Developed a block copolymer-based platform technology to incorporate multiple types of nanoparticles

Postdoctoral Research at Emory & GaTech:

- Developed a quantum dot-based technology for intracellular targeting and imaging
- Developed a technology for single quantum dot imaging in live cell cytoplasm
- Investigated the intracellular transport of Tat peptide conjugated with quantum dots

PhD Research

- Developed a novel drug delivery system liposome-in-microsphere (LIM)
- Developed amphiphilic polymer nanoparticles to deliver highly water-insoluble anticancer drugs

Master Research

- Developed a novel crop growth enhancer based on polyamino acids

Teaching Experience

Guest-lecturing, Moderating seminar, Demonstrating experiment, Mentoring research, Preparing textbook

Publications (h-index=7 as of 09/26/09, * denotes corresponding author)

Original articles

1. [Ruan, G.](#), Vieira, G., Thakur, D., Henighan, T., Sooryakumar, R.* & Winter, J.O.* (manuscript in preparation, to be submitted to Nature Nanotechnology)

2. Ruan, G. & Winter, J.O.* (manuscript in preparation, to be submitted to Nature Materials)
3. Agrawal, A., Ruan, G. & Nie, S.* (manuscript in preparation, to be submitted to JACS)
4. Deng, S., Ruan, G. & Winter, J.O.* (submitted to ACS Nano)
5. Ruan, G., Agrawal, A., Marcus, A.I. & Nie S.* *Journal of the American Chemical Society* 129, 14759-14766 (2007). (cited 37 times, impact factor 8.091)
6. Smith, A.M., Duan, H.W., Rhyner, M.N., Ruan, G. & Nie S.* *Physical Chemistry Chemical Physics* 8, 3895-3903 (2006). (cited 53 times, impact factor 4.064)
7. Feng, S.S.*, Ruan, G. & Li, Q.T. *Biomaterials* 25, 5181-5189 (2004). (cited 22 times, impact factor 6.646)
8. Ruan, G. & Feng, S.S.* *Biomaterials* 24, 5037-5044 (2003). (cited 77 times, impact factor 6.646)
9. Ruan, G., Feng, S.S.* & Li, Q.T. *Journal of Controlled Release* 84, 151-160 (2002). (cited 32 times, impact factor 5.690)
10. Ruan, G., Ng, J.K. & Feng, S.S.* *Journal of Microencapsulation* 21, 399-412 (2004). (cited 5 time, impact factor 1.314)
11. Wang, Y.Q.*, Hou, Y.J., Zhang, J. & Ruan, G. *Polymer International* 53, 156-162 (2004). (cited 0 time, impact factor 2.029)
12. Wang, Y.Q.*, Hou, Y.J., Ruan, G., Pan, M. & Liu, T.F. *Journal of Macromolecular Science-Pure and Applied Chemistry* A40, 293-307 (2003). (cited 3 times, impact factor 0.720)
13. Wang, Y.Q.*, Zhang, J., Hou, Y., Ruan, G., Pan, M. & Liu, T. *Journal of Thermal Analysis and Calorimetry* 73, 923-929 (2003). (cited 1 time, impact factor 1.630)
14. Wang, Y.Q.*, Ruan, G. & Han, S. *Reaction Kinetics and Catalysis Letters* 67, 305-310 (1999). (cited 4 times, impact factor 0.610)
15. Wang, Y.Q.*, Yang, L., Wang, T., Zhang, Z.Y., Ruan, G. & Han, S. 68, 183-190 (1999). (cited 0 time, impact factor 0.610)
16. Wang, Y.Q.*, Ruan, G. & Fu, J.C. *HUXUE TONGBAO* Aug 1998. (in Chinese, indexed in Chemical Abstracts)

Invited reviews

17. Ruan, G. & Winter, J.O.* *International Journal of Molecular Sciences* (manuscript in preparation)
18. Suri, S., Ruan, G., Winter, J.O. & Schmidt, C.E.* *Biomaterials Science: an Introduction to Materials in Medicine (3rd edition)* (submitted)
19. Ruan, G., Agrawal, A., Smith, A.M., Gao, X.H. & Nie, S.* *Annual Reviews in Fluorescence* 2006, 181-193
20. Smith, A.M., Ruan, G., Rhyner, M.N. & Nie, S.* *Annals of Biomedical Engineering* 34, 3-14 (2006). (cited 44 times, impact factor 2.605)
21. Xing, Y., Smith, A.M., Agrawal, A., Ruan, G. & Nie, S.* *International Journal of Nanomedicine* 1, 473-481 (2006). (cited 7 times, impact factor 1.642)

Patent

22. Ruan, G. & Winter, J.O. (provisional patent 2009)

Reviewership

International Journal of Molecular Sciences, Materials Research Society Proceedings, Nanoscale Research Letters

Honors

- Outstanding Review Paper of the Year, 2006, Annals of Biomedical Engineering
- Top 25 (6th) Hottest Article in Engineering, 2004, ScienceDirect
- Outstanding Postdoctoral Award for Research Excellence, 2009, Ohio State University
- Outstanding Student Leader Award, 1994, Harbin Engineering University
- Outstanding Dissertation, 1996, Harbin Engineering University
- Outstanding Student Award, 1995, Harbin Engineering University