



W. Tan

The author presented on this page has published more than **10 articles** in *Angewandte Chemie* in the last 10 years, most recently:

"A Controlled-Release Nanocarrier with Extracellular pH Value Driven Tumor Targeting and Translocation for Drug Delivery": Z. Zhao, H. Meng, N. Wang, M. J. Donovan, T. Fu, M. You, Z. Chen, X. Zhang, W. Tan, *Angew. Chem.* **2013**, 125, 7635–7639; *Angew. Chem. Int. Ed.* **2013**, 52, 7487–7491.



The work of W. Tan has been featured on the inside back cover of *Angewandte Chemie*:

"An Autonomous and Controllable Light-Driven DNA Walking Device": M. You, Y. Chen, X. Zhang, H. Liu, R. Wang, K. Wang, K. R. Williams, W. Tan, *Angew. Chem.* **2012**, 124, 2507–2510; *Angew. Chem. Int. Ed.* **2012**, 51, 2457–2460.

Weihong Tan

Date of birth:	May 12, 1960
Position:	Distinguished Professor and Jackson Professor, University of Florida and Hunan University
E-mail:	tan@ufl.edu
Homepage:	http://www.chem.ufl.edu/~tan/group/
Education:	1982 BSc, Hunan Normal University 1985 MSc with Shaoyi Peng, Chinese Academy of Sciences 1992 PhD with Raoul Kopelman, University of Michigan, Ann Arbor 1993–1995 Postdoctoral research with Edward S. Yeung, Ames Laboratory–US Department of Energy
Awards:	2004 Pittsburgh Conference Achievement Award; 2005 Fellow, The American Association for the Advancement of Science (AAAS); 2009 National Distinguished Expert, Ministry of Education, China; 2012 American Chemical Society Florida Award
Current research interests:	Chemical biology; bioanalysis; molecular engineering; aptamers; biosensors; bionanotechnology; molecular medicine; optical spectroscopy
Hobbies:	Tennis, poker, and walking

My favorite quote is: ... "imagination is more important than knowledge" (Einstein).

If I could be any age I would be ... I would be same age, but young at heart.

I advise my students to ... be happy and to follow their dreams.

My favorite molecule is ... DNA.

If I could be a piece of lab equipment, I would be ... a microscope.

The principal aspects of my personality are: ... I am optimistic, open-minded, and curious.

My favorite book is ... Lao Tzu's *Tao Te Ching*.

My motto is ... work hard, work smart, work together, and be happy.

My favorite drink is ... sangria.

The most significant events of the past 100 years were ... World War II and the elucidation of the structure of DNA.

The most important future application of my research is ... molecular medicine.

If I were a car I would be ... a Lexus.

My 5 top papers:

1. "Self-assembled, aptamer-tethered DNA nanotrains for targeted transport of molecular drugs in cancer theranostics": G. Zhu, J. Zheng, E. Song, M. Donovan, K. Zhang, C. Liu, W. Tan, *Proc. Natl. Acad. Sci. USA* **2013**, 110, 7998–8003. (These nanotrains fall apart into nontoxic components once their payload is delivered.)
2. "DNA Aptamer-Mediated Cell Targeting": X. Xiong, H. Liu, Z. Zhao, M. B. Altman, D. Lopez-Colon, L.-J. Chang, C. Liu, C. J. Yang, W. Tan, *Angew. Chem.* **2013**, 125, 1512–1516; *Angew. Chem. Int. Ed.* **2013**, 52, 1472–1476. (A simple, efficient, and effective way to modify the cell surface with target-specific ligands.)
3. "A Logical Molecular Circuit for Programmable and Autonomous Regulation of Protein Activity using DNA Aptamer–Protein Interactions": D. Han, Z. Zhu, C. Wu, L. Peng, L. Zhou, B. Gulbakan, G. Zhu, K. R. Williams, W. Tan, *J. Am. Chem. Soc.* **2012**, 134, 20797–20804. (A circuit that senses the concentration of thrombin in solution and then shuts down the protein's activity when thrombin levels reached a certain threshold.)
4. "A Surface Energy Transfer Nanoruler for Measuring Binding Site Distances on Live Cell Surfaces": Y. Chen, M. B. O'Donoghue, Y.-F. Huang, H. Kang, J. A. Phillips, X. Chen, M.-C. Estevez, C. J. Yang, W. Tan, *J. Am. Chem. Soc.* **2010**, 132, 16559–16570. (This technique provides structural-biology information regarding binding sites.)
5. "Aptamers evolved from live cells as effective molecular probes for cancer study": D. Shangguan, Y. Li, Z. Tang, Z. C. Cao, H. Chen, P. Mallikaratchy, K. Sefah, C. J. Yang, W. Tan, *Proc. Natl. Acad. Sci. USA* **2006**, 103, 11838–11843. (A panel of aptamers acts as probes to show the molecular-level differences between any two cell types.)

DOI: 10.1002/anie.201307442