



J. Zhou

Jianrong (Steve) Zhou

Date of birth:	September 12, 1975
Position:	Assistant Professor, Nanyang Technological University, Singapore
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Education:	1988 BSc, National University of Singapore 2000 MSc with Prof. Teck-Peng Loh, National University of Singapore 2005 PhD with Prof. Gregory Fu, Massachusetts Institute of Technology 2005–2008 Postdoc with Prof. John Hartwig, Yale University and University of Illinois at Urbana–Champaign
Awards:	2013 GSK Green and Sustainable Manufacturing Award
Research:	Transition metal catalysis and asymmetric catalysis for fundamental bond-forming reactions
Hobbies:	Reading, movies, and travel

The author presented on this page has recently published his **10th article** in *Angewandte Chemie* in the last 5 years:

“Palladium-Catalyzed Heteroarylation and Concomitant *ortho*-Alkylation of Aryl Iodides”: C. Lei, X. Jin, J. Zhou, *Angew. Chem. Int. Ed.* **2015**, 54, 13397; *Angew. Chem.* **2015**, 127, 13595.

The worst advice I have ever given was “it won’t work”.

If I were not a scientist, I would be a historian.

My favorite films of all time are *The Godfather I–III*.

The most significant scientific advance of the last 100 years was the invention of NMR spectroscopy and X-ray crystallography.

The biggest problem that scientists face is the energy crisis. There has not been a sustainable solution to date.

When I’m frustrated, I read a book and go to sleep. Tomorrow will be a new day.

I chose chemistry as a career because I was lucky to have excellent chemistry teachers in high school and university.

My not-so-secret passion is to find good food in Singapore, which can be difficult.

The most exciting thing about my research is to discover new reactions.

My biggest motivation is to see co-workers grow intellectually and solve problems independently.

I can never resist to share my new ideas with co-workers.

My 5 top papers:

1. “A General Palladium-Catalyzed Method for Alkylation of Heteroarenes Using Secondary and Tertiary Alkyl Halides”: X. Wu, J. W. T. See, K. Xu, H. Hirao, J. Roger, J.-C. Hierso, J. Zhou, *Angew. Chem. Int. Ed.* **2014**, 53, 13573; *Angew. Chem.* **2014**, 126, 13791. (A good method for the introduction of alkyl groups to many electron-deficient heteroarenes.)
2. “Nickel-Catalyzed Asymmetric Transfer Hydrogenation of Olefins for the Synthesis of α - and β -Amino Acids”: P. Yang, H. Xu, J. Zhou, *Angew. Chem. Int. Ed.* **2014**, 53, 12210; *Angew. Chem.* **2014**, 126, 12406. (Use of nickel catalysts in transfer hydrogenation with formic acid.)
3. “Asymmetric Intermolecular Heck Reaction of Aryl Halides”: C. Wu, J. Zhou, *J. Am. Chem. Soc.* **2014**, 136, 650. (Simple hydrogen-bond donors promoted the ionization of neutral arylpalladium halides.)
4. “Intermolecular Mizoroki–Heck Reaction of Aliphatic Olefins with High Selectivity for Substitution at the Internal Position”: L. Qin, X. Ren, Y. Lu, Y. Li, J. Zhou, *Angew. Chem. Int. Ed.* **2012**, 51, 5915; *Angew. Chem.* **2012**, 124, 6017. (Regioselective Heck reaction of common aliphatic olefins using a designed bisphosphine, dnpf, which is now commercially available.)
5. “Arene C–H \cdots O Hydrogen Bonding in Palladium-Catalyzed Arylation and Vinylation of Lactones”: Z. Huang, Z. Chen, L. H. Lim, G. C. Phan Quang, H. Hirao, J. Zhou, *Angew. Chem. Int. Ed.* **2013**, 52, 5807; *Angew. Chem.* **2013**, 125, 5919. (Stereoselectivity was guided by weak attractive interactions between non-acidic C–H bonds and enolate oxygen atoms.)

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