







Y. Lu

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

"Catalytic Silylations of Alcohols: Turning Simple **Protecting-Group Strategies** into Powerful Enantioselective Synthetic Methods": L.-W. Xu, Y. Chen, Y. Lu, Angew. Chem. Int. Ed. 2015, 54, 9456; Angew. Chem. 2015, 127, 9590.

## Yixin Lu

Date of birth: August 21, 1970

Professor, Department of Chemistry, National University of Singapore Position:

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http://www.chemistry.nus.edu.sg/people/academic staff/luyx.htm Homepage:

**Education**: 1991 BSc, Fudan University, Shanghai

2000 PhD with George Just, McGill University, Montreal

2000 Postdoctoral fellow with Peter W. Schiller, Clinical Research Institute of Montreal

2000-2001 Postdoctoral fellow with Ryoji Noyori, Nagoya University

Awards: 2013 GSK-SNIC Award in Organic Chemistry

Asymmetric catalysis and synthesis; green/sustainable chemistry; medicinal chemistry Research:

Hobbies: Sports, exercising, watching movies, sightseeing

## My favorite food is lobster.

My favorite place on earth is The Maldives.

**M**y favorite novel is *The Romance of the Three Kingdoms* (三国演义) by Luo Guanzhong.

The downside of my job is having too many vacation days that I cannot use.

If I could have dinner with three famous scientists from history, they would be Albert Einstein, Linus Pauling, and Robert B. Woodward.

My best investment was real estate.

My most exciting discovery to date has been amino acid based bifunctional phosphines.

My worst nightmare is that someone else just published the work we are about to complete.

The most exciting thing about my research is making use of natural chirality to access man-made

lose track of time when I watch decisive sports games, such as NBA finals, tennis grand slams, or the FIFA world cup.

Guaranteed to make me laugh is watching episodes of Mr. Bean.

celebrate success by tasting ethanol with my family, students, or friends.

## My 5 top papers:

- 1. "Asymmetric Mannich Reaction of Fluorinated Ketoesters with a Tryptophan-Derived Bifunctional Thiourea Catalyst": X. Han, J. Kwiatkowski, F. Xue, K.-W. Huang, Y. Lu, Angew. Chem. Int. Ed. 2009, 48, 7604; Angew. Chem. 2009, 121, 7740. (Tertiary amine thiourea catalysts can be derived from natural amino acids.)
- 2. "Stereocontrolled Creation of All-Carbon Quaternary Stereocenters by Organocatalytic Conjugate Addition of Oxindoles to Vinyl Sulfone": Q. Zhu, Y. Lu, Angew. Chem. Int. Ed. 2010, 49, 7753; Angew. Chem. 2010, 122, 7919. (Multifunctional thiourea catalysts comprising amino acids for the construction of novel oxindole derivatives.)
- 3. "Enantioselective [3+2] Cycloaddition of Allenes to Acrylates Catalyzed by Dipeptide-Derived Phosphines: Facile Creation of Functionalized Cyclopentenes Containing Quaternary Stereogenic Centers": X. Han, Y. Wang, F. Zhong, Y. Lu, J. Am. Chem. Soc. 2011,

- 133, 1726. (Our initial report on amino acid-derived chiral phosphines in enantioselective annulation reac-
- 4. "Highly Enantioselective [3+2] Annulation of Morita-Baylis-Hillman Adducts Mediated by L-Threonine-Derived Phosphines: Synthesis of 3-Spirocyclopentene-2-oxindole having Two Contiguous Quaternary Centers": F. Zhong, X. Han, Y. Wang, Y. Lu, Angew. Chem. Int. Ed. 2011, 50, 7837; Angew. Chem. 2011, 123, 7983. (Effective utilization of the MBH adducts as a reaction partner in phosphine-triggered asymmetric cyclization.)
- 5. "Chiral Phosphine Catalyzed Asymmetric Michael Addition of Oxindoles": F. Zhong, X. Dou, X. Han, W. Yao, Q. Zhu, Y. Meng, Y. Lu, Angew. Chem. Int. Ed. 2013, 52, 943; Angew. Chem. 2013, 52, 943 (Enantioselective Michael addition can be mediated by amino acid-derived phosphines.)

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