



A. Lei

The author presented on this page has published more than **10 articles** since 2000 in *Angewandte Chemie*, most recently:

“Oxidative Carbonylation Reactions: Organometallic Compounds (R–M) or Hydrocarbons (R–H) as Nucleophiles”: Q. Liu, H. Zhang, A. Lei, *Angew. Chem.* **2011**, 123, 10978–10989; *Angew. Chem. Int. Ed.* **2011**, 50, 10788–10799.

Aiwen Lei

Date of birth:	August 4, 1973
Position:	Professor of Organic Chemistry, College of Chemistry and Molecular Sciences, Wuhan University (P.R. China)
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Education:	1995 B.S., Huaibei Normal University, Huaibei, Anhui Province (P.R. China) 1995–2000 PhD with Professor Xiyan Lu, Shanghai Institute of Organic Chemistry, Chinese Academy of Science (CAS), Shanghai (P.R. China) 2000–2003 Postdoctoral Fellow with Professor Xumu Zhang, Pennsylvania State University (USA) 2003–2005 Research Associate with Professor James P. Collman, Stanford University (USA)
Awards:	2008 Synthesis & Synlett Journal Award; 2008 Chinese Chemistry Society-John Wiley Young Chemist Award; 2009 CAPA (Chinese-American Chemistry & Chemical Biology Professors Association) Distinguished Faculty Award; 2011 Lectureship Award of Asian International Symposium for Outstanding Young Scientists; 2011 Eli Lilly Asian Scientific Excellence Award
Current research interests:	Development of oxidative coupling reactions, especially involving O ₂ or air as terminal oxidant; kinetic/mechanistic studies for in-depth understanding of chemical reactions
Hobbies:	Badminton, Wuxia fiction (martial-chivalric fiction)

The biggest problem that scientists face is ... the pursuit of fame and fortune.

If I won the lottery, I would ... stop applying for grants and concentrate on oxidative coupling research just for fun!

The most significant scientific advances of the last 100 years have been ... computers and chemistry because they changed the life style of human beings.

My favorite place on earth is ... Yangqiao qian village in Gao'an, Jiangxi Province, China—a small village in which I was born and raised.

My best investment was ... to buy an in situ IR instrument in 2005 when I started my independent career (I had never used this instrument before).

If I were not a scientist, I would be ... an excellent cook (I might become even fatter).

The best advice I have ever been given is ... “Chem is try (Chemistry)” from Prof. Xiyan Lu at the Shanghai Institute of Organic Chemistry (SIOC).

My favorite food is ... hot, hot, and hot spicy meat!

My 5 top papers:

1. “Oxidative Cross-Coupling through Double Transmetalation: Surprisingly High Selectivity for Palladium-Catalyzed Cross-Coupling of Alkylzinc and Alkynylstannanes”: Y. Zhao, H. Wang, X. Hou, Y. Hu, A. Lei, H. Zhang, L. Zhu, *J. Am. Chem. Soc.* **2006**, 128, 15048–15049. (Our first example of constructing compounds by using two different “nucleophiles” (organometallic reagents)).
2. “Palladium-Catalyzed Aerobic Oxidative Carbonylation of Arylboronate Esters under Mild Conditions”: Q. Liu, G. Li, J. He, J. Liu, P. Li, A. Lei, *Angew. Chem.* **2010**, 122, 3443–3446; *Angew. Chem. Int. Ed.* **2010**, 49, 3371–3374. (Only one organometallic reagent was used as a “nucleophile”; the second generation of oxidative coupling reactions.)
3. “Transmetalation is the Rate-Limiting Step: Quantitative Kinetic Investigation of Nickel-Catalyzed Oxidative Coupling of Arylzinc Reagents”: L. Jin, J. Xin, Z. Huang, J. He, A. Lei, *J. Am. Chem. Soc.* **2010**, 132, 9607–9609. (The first example of quantitative measurements of the kinetic rate constants of transmetalation involving organozinc reagents from a live catalytic system.)
4. “Organocatalysis in Cross-Coupling: DMEDA-Catalyzed Direct C–H Arylation of Unactivated Benzene”: W. Liu, H. Cao, H. Zhang, H. Zhang, K. H. Chung, C. He, H. Wang, F. Y. Kwong, A. Lei, *J. Am. Chem. Soc.* **2010**, 132, 16737–16740. (Benzene as the direct “nucleophile” in a C–C-bond-forming reaction.)
5. “Palladium-Catalyzed Aerobic Oxidative Direct Esterification of Alcohols”: C. Liu, J. Wang, L. Meng, Y. Deng, Y. Li, A. Lei, *Angew. Chem.* **2011**, 123, 5250–5254; *Angew. Chem. Int. Ed.* **2011**, 50, 5144–5148. (An ideal bond-forming method: O₂ as oxidant and H₂O as the only side product; the third generation of oxidative coupling reactions.)

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