



X. W. Lou

## Xiong Wen (David) Lou

<b>Date of birth:</b>	October 27, 1978
<b>Position:</b>	Associate Professor, Nanyang Technological University
<b>E-mail:</b>	xwlou@ntu.edu.sg
<b>Homepage:</b>	http://www.ntu.edu.sg/home/xwlou/
<b>Education:</b>	2002 BEng, National University of Singapore 2008 PhD with Prof. Lynden A. Archer, Cornell University
<b>Awards:</b>	<b>2012</b> Young Scientist Award (Singapore National Academy of Science); <b>2012</b> Nanyang Award for Research Excellence; <b>2013</b> World Cultural Council (WCC) Special Recognition
<b>Research:</b>	Nanostructured materials, lithium-ion batteries, supercapacitors, electrocatalysis, photocatalysis
<b>Hobbies:</b>	Walking, fishing

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

"Highly Concave Platinum Nanoframes with High-Index Facets and Enhanced Electrocatalytic Properties": B. Y. Xia, H. B. Wu, X. Wang, X. W. Lou, *Angew. Chem.* **2013**, 125, 12563–12566; *Angew. Chem. Int. Ed.* **2013**, 52, 12337–12340.

**In a spare hour, I ...** like to watch TV.

**My favorite way to spend a holiday is ...** to go fishing.

**My favorite quote is ...** "Be bold, be bold, everywhere be bold, but be not too bold!" (Edmund Spenser).

**If I could be any age I would be ...** 10 years old.

**I get advice from ...** my wife, although very often I have my own preformed opinions.

**I advise my students to ...** work hard, and do not waste time when you are in the lab.

**If I had one year of paid leave I would ...** stay in a remote village without phone and internet access.

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

**The principal aspect of my personality is ...** perseverance.

**The natural talent I would like to be gifted with is ...** the ability to sing and dance.

**If I could be described as an animal it would be ...** a dinosaur.

**I am waiting for the day when someone will discover ...** a new method to store electricity.

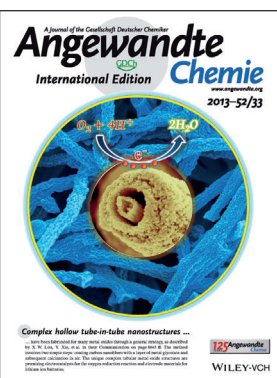
**The secret of being a successful scientist is ...** to work hard and try your best.

**Looking back over my career, I ...** chose the right advisors and research field.

**If I were a car I would be ...** a Ferrari.

### My 5 top papers:

1. "Template-Free Synthesis of SnO<sub>2</sub> Hollow Nanostructures with High Lithium Storage Capacity": X. W. Lou, Y. Wang, C. Yuan, J. Y. Lee, L. A. Archer, *Adv. Mater.* **2006**, 18, 2325–2329. (One of the early works in this area, also my most cited research paper.)
2. "Constructing Hierarchical Spheres from Large Ultrathin Anatase TiO<sub>2</sub> Nanosheets with Nearly 100% Exposed (001) Facets for Fast Reversible Lithium Storage": J. S. Chen, Y. L. Tan, C. M. Li, Y. L. Cheah, D. Luan, S. Madhavi, F. Y. C. Boey, L. A. Archer, X. W. Lou, *J. Am. Chem. Soc.* **2010**, 132, 6124–6130. (One of the first reported syntheses of uniform hierarchical structures of anatase nanosheets.)
3. "Building Hematite Nanostructures via Oriented Attachment": J. S. Chen, T. Zhu, C. M. Li, X. W. Lou, *Angew. Chem.* **2011**, 123, 676–679; *Angew. Chem. Int. Ed.* **2011**, 50, 650–653. (Observation of oriented attachment with nanocrystals larger than 100 nm.)
4. "LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> Hollow Structures as High-performance Cathodes for Lithium-Ion Batteries": L. Zhou, D. Y. Zhao, X. W. Lou, *Angew. Chem.* **2012**, 124, 243–245; *Angew. Chem. Int. Ed.* **2012**, 51, 239–241. (Hierarchical hollow structures of cathode materials can be made despite the high calcination temperature required.)
5. "Metal–Organic-Frameworks-Derived General Formation of Hollow Structures with High Complexity": L. Zhang, H. B. Wu, X. W. Lou, *J. Am. Chem. Soc.* **2013**, 135, 10664–10672. (New concepts and materials platform for hollow-structure synthesis.)



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

"General Formation of Complex Tubular Nanostructures of Metal Oxides for the Oxygen Reduction Reaction and Lithium-Ion Batteries": G. Zhang, B. Y. Xia, C. Xiao, L. Yu, X. Wang, Y. Xie, X. W. Lou, *Angew. Chem.* **2013**, 125, 8805–8809; *Angew. Chem. Int. Ed.* **2013**, 52, 8643–8647.

DOI: 10.1002/anie.201310521