







H. Zhou

The author presented on this page has published more than 10 articles in Angewandte Chemie in the last 10 years, most recently: "Polyanthraquinone as a Reliable Organic Electrode for Stable and Fast Lithium Storage": Z. Song, Y. Qian, M. L. Gordin, D. Tang, T. Xu, M. Otani, H. Zhan, H. Zhou, D. Wang, Angew. Chem. Int. Ed. 2015, 54, 13947; Angew. Chem. 2015, 127, 14153.

## Haoshen Zhou

**Date of birth**: October 29, 1964

Position: Professor, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba,

and Nanjing University

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**Education**: 1985 BS, Physics Department, Nanjing University

1994 PhD with Prof. Hiroshi Komiyama, The University of Tokyo 1994–1997 Postdoctoral fellow with Prof. Hiroyuki Sasabe, RIKEN

**Research**: Energy technology; energy transfer; energy storage materials and devices; rechargeable

batteries; fuel cells; solar cells

**Hobbies**: History, reading, walking, traveling, playing the game of Go

## My favorite painter is Pablo Picasso.

My favorite book is The Complete Sherlock Holmes.

If I had one year of paid leave I would spend more time with my family.

The principal aspects of my personality are precision and diligence.

When I was eighteen I wanted to be a historian.

My favorite drinks are water and tea.

The most important future applications of my research are electric vehicles and smart grids for energy storage.

n a spare hour, I read historical articles or novels.

If I could be any age, I would be a university student. I could take interesting courses not only in physics, chemistry, and engineering, but also in history, sociology, and art.

My biggest inspiration is discussions with my students and colleagues.

My favorite time of day is morning.

admire the use of a simple concept to solve a complex problem.

My favorite way to spend a holiday is traveling with my wife and reading her poems, prose, and essays.

My science "heroes" are every young student. All of you can be science "heroes" if you enjoy discovery.

## My 5 top papers:

- "A reversible long-life lithium air battery in ambient air": T. Zhang, H. Zhou, Nat. Commun. 2013, 4, 1817.
  (A non-aqueous Li – air battery based on the electrochemical reaction of O<sub>2</sub> and CO<sub>2</sub> in air shows a stable cycling performance.)
- "The water catalysis at oxygen cathodes of lithium-oxygen cells": F. Li, S. Wu, D. Li, T. Zhang, P. He, A. Yamada, H. Zhou, Nat. Commun. 2015, 6, 7843. (The use of water as a catalyst results in an extremely low overpotential of about 0.21 V.)
- "An Ultrastable Anode for Long-Life Room-Temperature Sodium-Ion Batteries": H. Yu, Y. Ren, D. Xiao, S. Guo, Y. Zhu, Y. Qian, L. Gu, H. Zhou, Angew. Chem. Int. Ed. 2014, 53, 8963; Angew. Chem. 2014, 126, 9109.
- (The layered sodium oxide  $Na_{2/3}Co_{1/3}Ti_{2/3}O_2$  is a stable anode active material.)
- 4. "A Layered P2 and O3-type Composite as a High-Energy Cathode for Rechargeable Sodium-Ion Batteries": S. Guo, P. Liu, H. Yu, Y. Zhu, M. Chen, M. Ishida, H. Zhou, Angew. Chem. Int. Ed. 2015, 54, 5894; Angew. Chem. 2015, 127, 5992. (The structure of the material was confirmed by X-ray diffraction and (S)TEM images.)
- "Integrating a Photocatalyst into a Hybrid Lithium—Sulfur Battery for Direct Storage of Solar Energy": N. Li, Y. Wang, D. Tang, H. Zhou, *Angew. Chem. Int. Ed.* 2015, 54, 9271; *Angew. Chem.* 2015, 127, 9403. (Solar energy is captured and stored by oxidizing S<sup>2-</sup> ions to polysulfide ions.)

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