

EDUCATION

Department of Chemistry, Tsinghua University	Aug 2012 - July 2016
Department of Chemistry, University of California, Berkeley	Aug 2016 - Present

RESEARCH EXPERIENCE

High energy density Lithium-Sulfur and Sodium-Sulfur battery Sept 2013 - Aug 2016

Supervisor: Prof. Qiang Zhang, Department of Chemical Engineering, Tsinghua University

Research assistant

- Noncovalent functionalized graphene synthesis and its application in Li-S battery
- Self-discharge behavior of lithium-sulfur and sodium-sulfur battery
- Membrane and electrolyte for room-temperature sodium-sulfur battery

Cucurbit[n]urils characterization by NMR and electrochemistry July 2015 - Sept 2015

Supervisor: Prof. Oren A. Scherman, Department of Chemistry, University of Cambridge

Summer Intern Program

- Characterized guest molecules exchange in cucurbit[n]uril by $^1\text{H-NMR}$
- Tested the electrocatalysis property of cucurbit[n]urils in oxygen reduction reaction

HONORS AND AWARDS

Member of Tsinghua Xuetao Program

T.P. Hou Award

Hengda Scholarship

Tsinghua Xuetao Scholarship

PUBLICATIONS

W. Xu, H. Peng, J. Huang*, C. Zhao, X. Cheng, Q.Zhang*, "Towards Stable Lithium-Sulfur Batteries with a Low Self-Discharge Rate: Ion Diffusion Modulation and Anode Protection", *ChemSusChem*, 2015, 8, 2892–2901

H. Peng[#], W. Xu[#], L. Zhu, D. Wang, J. Huang*, X. Cheng, Z. Yuan, F. Wei, Q.Zhang*, "3D Carbonaceous Current Collectors: The Origin of Enhanced Cycling Stability for High-Sulfur-Loading Lithium-Sulfur Batteries", *Adv. Funct. Mat.*, 2016, 35, 6351–6358