

## Professor Hua Chun Zeng

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Faculty of Engineering, National University of Singapore  
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### Research Areas:

- Synthetic Architecture of Nanomaterials
- Self-Assembly for Complex Nanostructures

### Teaching Areas:

- Electronic Materials, Physical Chemistry, Nanoscience
- Chemical Engineering Principles

### Academic/Professional Qualifications:

- PhD, 1989, University of British Columbia, Canada
- BSc, 1982, Xiamen University, China

### Recent Honors/Awards:

- Top 100 Chemists 2000-2010, Thomson Reuters & Times Higher Education
- Faculty Research Award 2010, Faculty of Engineering, National University of Singapore

### Journal Editorial Boards:

- Section Editor (Nanotechnology), Current Opinion in Chemical Engineering, Elsevier
- Editorial Advisory Board, Current Opinion in Chemical Engineering, Elsevier
- Editorial Advisory Board, Science of Advanced Materials, American Scientific Publishers
- Editorial Advisory Board, Particle and Particle Systems Characterization, Wiley-VCH

### Professional/Consulting Activities:

- Member of American Chemical Society, Materials Research Society, and American Vacuum Society
- Member of Management Committee, Singapore Catalysis Society
- Special Academic Partner, 2008-, King Abdullah University of Science and Technology, SA

### Career History:

- Professor, 2006-, National University of Singapore, Singapore
- NGS Senior Faculty Member, 2003-, National University of Singapore, Singapore
- Associate Professor, 1999-2006, National University of Singapore, Singapore
- JSPS Visiting Scientist, 1995, Kyoto University, Japan
- Senior Lecturer, 1995-1999, National University of Singapore, Singapore
- Visiting Scientist, 1992, Asahi Glass, Japan
- Lecturer, 1991-1995, National University of Singapore, Singapore
- Postdoctoral Fellow, 1989-1991, University of Toronto, Canada
- Assistant Lecturer, 1982-1984, Xiamen University, China

### Publication Record:

- 165 papers in prime international chemical/materials journals
- Citations: about 9500
- 4 invited book chapters in nanotechnology
- 4 patents
- *h*-index: 52

### Recent Representative Publications:

- S.L. Xiong and H.C. Zeng, *Angew. Chem. Int. Ed.* 51 (2012) 945-952.
- H.C. Zeng, "Synthesis and Self-Assembly of Complex Hollow Materials", *Journal of Materials Chemistry*, Vol. 21 (2011) pp. 7511-7526 (Feature Article).
- M.L. Pang, J.Y. Hu and H.C. Zeng, "Synthesis, Morphological Control and Antibacterial Properties of Hollow/Solid Ag<sub>2</sub>S/Ag Heterodimers", *Journal of the American Chemical Society*, Vol. 132 (2010) pp. 10771-10785.
- K.X. Yao, X.M. Yin, T.H. Wang and H.C. Zeng, "Synthesis, Self-assembly, Disassembly, and Reassembly of Two Types of Cu<sub>2</sub>O Nanocrystals Unifaceted with {001} or {110} Planes", *Journal of the American Chemical Society*, Vol. 132 (2010) pp. 6131-6144.
- Y.X. Zhang and H.C. Zeng, "Gold(I)-Alkanethiolate Nanotubes", *Advanced Materials*, Vol. 21 (2009) pp. 4962-4965.
- J. Li and H.C. Zeng, "Hollowing Sn-Doped TiO<sub>2</sub> Nanospheres *via* Ostwald Ripening", *Journal of the American Chemical Society*, Vol. 129 (2007) pp. 15839-15847.
- J. Li, S.B. Tang, L. Lu and H.C. Zeng, "Preparation of Nanocomposites of Metals, Metal Oxides and Carbon Nanotubes *via* Self-Assembly", *Journal of the American Chemical Society*, Vol. 129 (2007) pp. 9401-9409.
- H.C. Zeng, "Synthetic Architecture of Interior Space for Inorganic Nanostructures", *Journal of Materials Chemistry*, Vol. 16 (2006) pp. 649-662 (Feature Article).
- H.M. Chen, R.-S. Liu, H.L. Li and H.C. Zeng, "Generating Isotropic Superparamagnetic Interconnectivity for Two-dimensional Organization of Nanostructured Building Blocks", *Angewandte Chemie, International Edition*, Vol. 45 (2006) pp. 2713-2717.
- B. Liu and H.C. Zeng, "Semiconductor Rings Fabricated by Self-Assembly of Nanocrystals", *Journal of the American Chemical Society*, Vol. 127 (2005) pp. 18262-18268.