

## Professor Kang Zhenhui

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### Academic Qualification:

- Ph.D. in Inorganic Chemistry, Northeast Normal University, 2005
- B.S. in Applied Chemistry, Northeast Normal University, 1999

### Teaching Area

Catalytic Chemistry

### Research Area

- Catalytic applications of carbon nanomaterials
- Biological applications of carbon nanomaterials

### Working Experience

- 01/2021- now: Professor, Macau University of Science and Technology, Macau, China,
- 07/2006–01/2009: Research Fellow, Center of Super-Diamond and Advanced Films (COSDAF) and Department of Physics and Materials Science, City University of Hong Kong, Hong Kong SAR.
- 06/2008 – now: Professor, Institute of Functional Nano & Soft Materials (FUNSOM), Soochow University, Suzhou, China.

### Academic Publication (selected)

- Qingyao Wu, Jingjing Cao, Xiao Wang, Yan Liu, Yajie Zhao, Hui Wang, Yang Liu, Hui Huang, Fan Liao, Mingwang Shao, Zhenghui Kang “A metal-free photocatalyst for highly efficient hydrogen peroxide photoproduction in real seawater”, *Nat. Commun.* 12: 483 (2021).
- Naiyun Liu, Mumei Han, Yue Sun, Cheng Zhu, Yunjie Zhou, Yalin Zhang, Hui Huang, Vladimir Kremnican, Yang Liu, Yeshayahu Lifshitz, Zhenhui Kang “A g-C<sub>3</sub>N<sub>4</sub> based photoelectrochemical cell using O<sub>2</sub>/H<sub>2</sub>O redox couples”, *Energy & Environmental Science* 11: 1841 (2018).

- Sijie Guo, Siqi Zhao, Xiuqin Wu, Hao Li, Yunjie Zhou, Cheng Zhu, Nianjun Yang, Xin Jiang, Jin Gao, Liang Bai, Yang Liu, Yeshayahu Lifshitz, Shuitong Lee, Zhenhui Kang "A  $\text{Co}_3\text{O}_4$ -CDots- $\text{C}_3\text{N}_4$  three component electrocatalyst design concept for efficient and tunable  $\text{CO}_2$  reduction to syngas", *Nat Commun.* 8: 1828 (2017).
- Cheng Zhu, Yijun Fu, Changan Liu, Yang Liu, Lulu Hu, Juan Liu, Igor Bello, Hao Li, Naiyun Liu, Sijie Guo, Hui Huang, Yeshayahu Lifshitz, Shuitong Lee, Zhenhui Kang "Carbon Dots as Fillers Inducing Healing/Self-Healing and Anticorrosion Properties in Polymers", *Adv. Mater.* 29: 1701399 (2017).
- Juan Liu, Yang Liu, Naiyun Liu, Yuzhi Han, Xing Zhang, Hui Huang, Yeshayahu Lifshitz, Shuitong Lee, Jun Zhong, Zhenhui Kang "Metal-free efficient photocatalyst for stable visible water splitting via a two-electron pathway", *Science* 347: 970 (2015).

#### Professional Society Membership

- Fellow, The Royal Society of Chemistry