

Professor Li Youyong

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Academic Qualification:

- Ph.D. in Chemistry, California Institute of Technology, 2004
- M.S. in Chemistry, Peking University, 2000
- B.S. in Chemistry, Peking University, 1997

Teaching Area

Materials science, Chemistry

Research Area

- Computational Chemistry
- Materials Simulations

Working Experience

- 2021 ~, Professor, Macau University of Science and Technology, Macau, China
- 2009 ~, Professor, Institute of Functional Nano and Soft materials, Soochow University, China
- 2006 ~ 2009, Director of functional material and biotech, Materials Simulation Center, California Institute of Technology
- 2004 ~ 2005, Postdoctoral Scholar, California Institute of Technology,

Academic Publication (selected)

- Lu Wang*, Hai Xiao, Tao Cheng, Youyong Li*, William A. Goddard III*, " Pb-activated Amine-assisted Photocatalytic Hydrogen Evolution Re-action on Organic-Inorganic Perovskites ", **J. Am. Chem. Soc.**, 2018, 140, 1994-1997.
- Junqing Yan, Lingqiao Kong, Yujin Ji, Jai White, Youyong Li*, Jing Zhang, Pengfei An, Shengzhong Liu*, Shuit-Tong Lee, Tianyi Ma*, "Single atom tungsten doped ultrathin α -Ni(OH)₂

for enhanced electrocatalytic water oxidation ", **Nature Communications**, 2019, 10:2149.

- Ji, Yujin*; Li, Yifan; Dong, Huilong; Ding, Lifeng; Li, Youyong*; Ruthenium single-atom catalysis for electrocatalytic nitrogen reduction unveiled by grand canonical density functional theory , **Journal of Materials Chemistry A**, 2020, 8(39): 20402-20407
- Yunxia Liu, Krisztian Palotas, Xiao Yuan, Tingjun Hou, Haiping Lin*, Youyong Li*, and Shuit-Tong Lee, "Atomistic Origins of Surface Defects in CH₃NH₃PbBr₃ Perovskite and Their Electronic Structures," **Acs Nano** 11 (2), 2060-2065 (2017).
- Lili Zhu, Haiping Lin, Youyong Li*, Fan Liao, Yeshayahu Lifshitz, Minqi Sheng, Shuit-Tong Lee, and Mingwang Shao*, "A rhodium/silicon co-electrocatalyst design concept to surpass platinum hydrogen evolution activity at high overpotentials," **Nature Communications** 7 (2016).

Professional Society Membership

- Member of computational chemistry committee of Chinese Chemical Society
- Editorial Board Member of "Scientific Reports"
- Editorial Board Member of "Frontiers in Materials"