

简 历

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教育背景

2004 年 9 月 – 2009 年 7 月 北京大学无机化学博士学位
导师：严纯华 院士

2000 年 9 月 – 2004 年 7 月 武汉大学化学学士学位

工作经历

2012 年 6 月– 现在 武汉大学化学学院 教授

2009 年 9 月 – 2012 年 5 月 博士后 佛罗里达大学化学系
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获奖情况

2015 第二批中组部青年拔尖人才支持计划

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2012 湖北省楚天学者

2011 全国优秀百篇博士论文奖

2011 北京大学优秀博士论文一等奖

2008 北京大学 拜耳奖学金

2008 北京大学 创新奖

2007 北京大学 康宁奖学金

- 2007 北京大学 钟陈玉澜奖学金
2004 武汉大学 宝钢奖学金

代表性工作:

- (1) Jie Wang, Yurong Wei, Xiaoxia Hu, Yu-Yan Fang, Xinyang Li, Jian Liu, Shengfu Wang, and **Quan Yuan***, *J. Am. Chem. Soc.* **2015**, *137*, 10576.
- (2) Jie Wang, Ting Wei, Xinyang Li, Binhao Zhang, Jiayi Wang, Chi Huang, and **Quan Yuan***, *Angew. Chem. Int. Ed.* **2014**, *126*, 1642.
- (3) **Quan Yuan**, Yuan Wu, Jie Wang, Danqing Lu, Zilong Zhao, Tao Liu, Xiaobing Zhang, Weihong Tan*, *Angew. Chem. Int. Ed.* **2013**, *52*, 1.
- (4) **Quan Yuan**, Yun-Fei Zhang, Yan Chen, Ruo-Wen Wang, Chao-Lin Du, Emir Yasun, and Wei-Hong Tan*, *Proc. Natl. Acad. Sci. U. S. A.* **2011**, *108*, 9331.
- (5) **Quan Yuan**, Hao-Hong Duan, Le-Le Li, Zhen-Xing Li, Wen-Tao Duan, Le-Sheng Zhang, Wei-Guo Song, and Chun-Hua Yan*, *Adv. Mater.* **2010**, *22*, 1475.
- (6) **Quan Yuan**, An-Xiang Yin, Chen Luo, Ling- Dong Sun, Ya-Wen Zhang, Wen-Tao Duan, Hai-Chao Liu*, and Chun-Hua Yan*, *J. Am. Chem. Soc.* **2008**, *130*, 3465.
- (7) **Quan Yuan**, Qiang Liu, Wei-Guo Song, Wei Feng, Ling-Dong Sun, Ya-Wen Zhang, and Chun-Hua Yan*, *J. Am. Chem. Soc.* **2007**, *129*, 6698.

论文发表情况

- (1) **Quan Yuan**, Qiang Liu, Wei-Guo Song, Wei Feng, Ling-Dong Sun, Ya-Wen Zhang, and Chun-Hua Yan*, “Highly Ordered Mesoporous $Ce_{1-x}Zr_xO_2$ Solid Solutions with Crystalline Walls” *J. Am. Chem. Soc.* **2007**, *129*, 6698.
- (2) **Quan Yuan**, An-Xiang Yin, Chen Luo, Ling- Dong Sun, Ya-Wen Zhang, Wen-Tao Duan, Hai-Chao Liu*, and Chun-Hua Yan*, “Facile Synthesis for Ordered Mesoporous γ -Aluminas with High Thermal Stability” *J. Am. Chem. Soc.* **2008**, *130*, 3465.
- (3) **Quan Yuan**, Le-Le Li, Shu-Liang Lu, Hao-Hong Duan, Zhen-Xing Li, Yue-Xiang Zhu, and Chun-Hua Yan*, “General and Facile Synthesis of Zr-based Functional Materials with Highly Ordered Mesoporous Structures” *J. Phys. Chem. C* **2009**, *113*, 4117.
- (4) **Quan Yuan**, Hao-Hong Duan, Le-Le Li, and Chun-Hua Yan*, “Controlled Synthesis and Assembly of Ceria-based Nanomaterials” *J. Colloid Interf. Sci.* **2009**, *335*, 151. (Invited review)
- (5) **Quan Yuan**, Yang Liu, Le-Le Li, Zhen-Xing Li, Chen-Jie Fang, Wen-Tao Duan, Xing-Guo Li, and Chun-Hua Yan*, “Highly Ordered Mesoporous

- Titania-Zirconia Photocatalyst for Applications in Water Splitting and Degradation of Rhodamine-B” *Micropor. Mesopor. Mater.* **2009**, *124*, 169.
- (6) **Quan Yuan**, Hao-Hong Duan, Le-Le Li, Zhen-Xing Li, Wen-Tao Duan, Le-Sheng Zhang, Wei-Guo Song, and Chun-Hua Yan*, “Homogeneous Dispersed Ceria Nanocatalyst Stabilized with Ordered Mesoporous Alumina” *Adv. Mater.* **2010**, *22*, 1475.
 - (7) **Quan Yuan**, Yun-Fei Zhang, Yan Chen, Ruo-Wen Wang, Chao-Lin Du, Emir Yasun, and Wei-Hong Tan*, “Using Silver Nanowire Antennas to Enhance the Conversion Efficiency of Photoresponsive DNA Nanomotors” *Proc. Natl. Acad. Sci. U. S. A.* **2011**, *108*, 9331.
 - (8) **Quan Yuan**, Yunfei Zhang, Tao Chen, Danqing Lu, Zilong Zhao, Xiaobing Zhang, Zhenxing Li, Chun-Hua Yan*, and Weihong Tan*, “Photon-manipulated Drug Release from Mesoporous Nanocontainer Controlled by Azobenzene-modified Nucleic Acid” *ACS Nano.* **2012**, *6*, 6337.
 - (9) **Quan Yuan**, Danqing Lu, Xiaobing Zhang, Zhuo Chen, and Weihong Tan*, “Aptamer-conjugated Optical Nanomaterials for Bioanalysis” *Trends Anal. Chem.* **2012**, *39*, 72. (Invited review)
 - (10) Le-Le Li, Mengying Xie, Jie Wang, Xinyang Li, Cheng Wang, **Quan Yuan***, Dai-Wen Pang*, Yi Lu*, and Weihong Tan, “Vitamin-responsive Mesoporous Nanocarrier with DNA Aptamer-mediated Cell Targeting” *Chem. Commun.* **2013**, *49*, 5823.
 - (11) **Quan Yuan**, Yuan Wu, Jie Wang, Danqing Lu, Zilong Zhao, Tao Liu, Xiaobing Zhang, and Weihong Tan*, “Targeted Bioimaging and Photodynamic Therapy Nanoplatfrom Using an Aptamer-Guided G-Quadruplex DNA Carrier and Near-Infrared Light” *Angew. Chem. In. Ed.* **2013**, *52*, 13965.
 - (12) Jie Wang, Ting Wei, Xinyang Li, Binhao Zhang, Jiayi Wang, Chi Huang, and **Quan Yuan***, “Near-infrared Light Mediated Imaging of Latent Fingerprints based on Molecular Recognition” *Angew. Chem. In. Ed.* **2014**, *53*, 1616.
 - (13) Yanbing Yang, Enzheng Shi, Peixu Li, Dehai Wu, Shiting Wu, Yuanyuan Shang, Wenjing Xu, Anyuan Cao*, and **Quan Yuan***, “A Compressible Mesoporous SiO₂ Sponge Supported by Carbon Nanotube Network” *Nanoscale* **2014**, *6*, 3585.
 - (14) Xiaoxia Hu, Ting Wei, Jie Wang, Xinyang Li, Binhao Zhang, Zhihao Li, Lele Li*, and **Quan Yuan***, "A Near-Infrared-Light Mediated Ratiometric Luminescent Sensor for Multimode Visualized Assays of Explosives" *Anal. Chem.* **2014**, *86*, 10484.
 - (15) 彭叶青, 李志豪, 刘子恩, **袁荃***, 化学生物学和纳米生物学专刊核-壳型稀土上转换纳米材料的生物医学应用。 *中国科学: 化学*, **2014**, DOI: 10.1360/N032015-00074.
 - (16) Lin Cheng, Xuefeng Xu, Yuyan Fang, Yan Li, Jiayi Wang, Guojia Wan, Xueying Ge, Liangjie Yuan, Keli Zhang, Lei Liao*, and **Quan Yuan***, "Triblock copolymer-assisted construction of 20 nm-sized ytterbi-um-doped TiO₂ hollow nanostructures for enhanced solar energy utilization efficiency" *Science China Chemistry* **2015**, *58*, 850.
 - (17) Yanbing Yang, Peixu Li, Shiting Wu Xinyang Li, Enzheng Shi, Qicang Shen, Dehai Wu, Wen-jing Xu, Anyuan Cao*, and **Quan Yuan***, "Hierarchically Designed Three Dimensional Macro/Mesoporous Carbon Frameworks for Advanced Electrochemical Capacitance Storage" *Chem. Eur. J.* **2015**, *21*, 6157.
 - (18) Xueying Ge, Zhengxing Li, and **Quan Yuan***, "1D Ceria nanomaterials: Versatile Synthesis and Bio-application" *J. Mater. Sci. Technol.* **2015**, *31*, 645. (Invited Review)

- (19) Jie Wang, Yurong Wei, Xiaoxia Hu, Yu-Yan Fang, Xinyang Li, Jian Liu, Shengfu Wang, and **Quan Yuan***, "Protein Activity Regulation: Inhibition by Closed-loop Aptamer-based Structures and Restoration by Near-IR Stimulation" *J. Am. Chem. Soc.* **2015**, *137*, 10576.
- (20) Zi-en Liu, Jie Wang, Yan Li, Xiaoxia Hu, Junwen Yin, Yeqing Peng, Zhihao Li, Yawen Li, Baomin Li, and **Quan Yuan***, "Near-infrared Light Manipulated Chemoselective Reductions Enabled by an Upconversion Supersandwich Nanostructure" *ACS Applied Materials & Interfaces* **2015**, *7*, 19416.
- (21) 刘子恩, 葛雪莹, 荔雅文, 尹骏闻, 彭叶青, 李保民, **袁荃***, 不同结构类型贵金属-二氧化钨纳米材料的制备及催化性能。 *科学通报*, **2015**, *60*, 2288.
- (22) Dong Wang §, Jie Wang §, Zi-en Liu, Xiangdong Yang, Xiaoxia Hu, Jinqi Deng, Nianjun Yang, Qijin Wan*, and **Quan Yuan***, "High-Performance Electrochemical Catalysts Based on Three-Dimensional Porous Architecture with Conductive Interconnected Networks" *ACS Applied Materials & Interfaces* **2015**, DOI: 10.1021/acsami.5b08294.
- (23) Jie Wang, Haijing Shen, Xiaoxia Hu, Yan Li, Zhihao Li, Jinfan Xu, Xiufeng Song, Haibo Zeng and **Quan Yuan***, "A Targeted 'Capture' and 'Removal' Scavenger towards Multiple Pollutants for Water Remediation based on Molecular Recognition" *Advanced Science* **2015**, DOI: advs.201500289.
- (24) Le-Le Li, Chen-Jie Fang, **Quan Yuan**, and Chun-Hua Yan*, "Stabilization of Facial Isomer of Tris(8-hydroxyquinolate) Aluminum Though Confinement in Silica-Surfactant Mesopores" *Appl. Phys. Lett.* **2007**, *90*, 23198.
- (25) Lei Liao, Hao-Xin Mai, **Quan Yuan**, Hong-Bing Lu, Jin-Chai Li, Chang Liu, Chun-Hua Yan, Ze-Xiang Shen*, and Ting Yu*, "Single CeO₂ Nanowire Gas Sensor Supported with Pt Nanocrystals: Gas Sensitivity, Surface Bond States, and Chemical Mechanism" *J. Phys. Chem. C* **2008**, *112*, 9061.
- (26) Le-Le Li, Wei-Ming Zhang, **Quan Yuan**, Zhen-Xing Li, Cheng-Jie Fang, Ling-Dong Sun, Li-Jun Wan, and Chun-Hua Yan*, "Room Temperature Ionic Liquids Assisted Green Synthesis of Nanocrystalline Porous SnO₂ and Their Gas Sensor Behaviors" *Cryst. Growth Des.* **2008**, *8*, 4165.
- (27) Zhen-Xing Li, Le-Le Li, **Quan Yuan**, Wei Feng, Jun Xu, Ling-Dong Sun, Wei-Guo Song, and Chun-Hua Yan*, "Sustainable and Facile Route to Nearly Monodisperse Spherical Aggregates of CeO₂ Nanocrystals with Ionic Liquids and Their Catalytic Activities for CO Oxidation" *J. Phys. Chem. C* **2008**, *112*, 18405.
- (28) Le-Le Li, Jun Xu, **Quan Yuan**, Zhen-Xing Li, Wei-Guo Song, and Chun-Hua Yan*, "Facile Synthesis of Macrocellular Mesoporous Foamlike Ce-Sn Mixed Oxides with a Nanocrystalline Framework by Using Triblock Copolymer as the Single Template" *Small* **2009**, *5*, 2730.
- (29) Le-Le Li, Wen-Tao Duan, **Quan Yuan**, Zhen-Xing Li, Hao-Hong Duan, and Chun-Hua Yan*, "Hierarchical Gamma-Al₂O₃ Monoliths with Highly Ordered 2D Hexagonal Mesopores in Macroporous Walls" *Chem. Commun.* **2009**, *41*, 6174.
- (30) Le-Le Li, Hao Sun, Chen-Jie Fang, **Quan Yuan**, Ling-Dong Sun, and Chun-Hua Yan*, "Self-organization of Donor-Acceptor Hybrids with Molecular-Scale and Mesoscale Segregation and Periodicities" *Chem. Mater.* **2009**, *21*, 4589.
- (31) Zhen-Xing Li, Le-Le Li, Huan-Ping Zhou, **Quan Yuan**, Cheng Chen, Ling-Dong Sun, and Chun-Hua Yan*, "Colour Modification Action of An Upconversion Photonic Crystal" *Chem. Commun.* **2009**, *43*, 6616.
- (32) Tao Chen, Mohammed Ibrahim Shukoor, Yan Chen, **Quan Yuan**, Zhi Zhu, Zilong Zhao, Basri Gulbakan and Weihong Tan*, "Aptamer-conjugated Nanomaterials for Bioanalysis and Biotechnology Applications" *Nanoscale* **2011**,

3, 546.

- (33) Da Han, Jin Huang, Zhi Zhu, **Quan Yuan**, Mingxu You, Yan Chen, and Weihong Tan*, "Molecular Engineering of Photoresponsive Three-dimensional DNA Nanostructures" *Chem. Commun.* **2011**, 47, 4670.
- (34) Tao Chen, Mohammed Ibrahim Shukoor, Ruowen Wang, Zilong Zhao, **Quan Yuan**, Suwussa Bamrungsap, Xiangling Xiong, and Weihong Tan*, "Smart Multifunctional Nanostructure for Targeted Cancer Chemotherapy and Magnetic Resonance Imaging" *ACS Nano* **2011**, 5, 7866.
- (35) Xiangyou Liu, Wei Wei, **Quan Yuan**, Xin Zhang, Ning Li, Yuguang Du, Guanghui Ma, Chunhua Yan and Ding Ma*, "Apoferritin-CeO₂ nano-truffle that has excellent artificial redox enzyme activity" *Chem. Commun.* **2012**, 48, 3155.
- (36) Yunfei Zhang, **Quan Yuan**, Tao Chen, Xiaobing Zhang, Yan Chen, and Weihong Tan*, "DNA-capped mesoporous silica nanoparticles as an ion-responsive release system to determine the presence of mercury in aqueous solution" *Anal. Chem.* **2012**, 84, 1956.
- (37) Emir Yasun, Gulbakan Ocsoy, Ismail Basri, **Quan Yuan**, Mohammed Shukoor, Chunmei Li, Weihong Tan*, "Enrichment and Detection of Rare Proteins with Aptamer-conjugated Gold Nanorods" *Anal. Chem.* **2012**, 84, 6008.
- (38) Lu Peng, Mingxu You, **Quan Yuan**, Cuichen Wu, Da Han, Yan Chen, Zhihua Zhong,* Jiangeng Xue, and Weihong Tan* "Macroscopic Volume Change of Dynamic Hydrogels Induced by Reversible DNA Hybridization" *J. Am. Chem. Soc.* **2012**, 134, 12302.
- (39) Tao Chen, Ismail Öcsoy, **Quan Yuan**, Ruowen Wang, Mingxu You, Zilong Zhao, Erqun Song, Xiaobing Zhang*, and Weihong Tan*, "One-Step Facile Surface Engineering of Hydrophobic Nanocrystals with Designer Molecular Recognition" *J. Am. Chem. Soc.* **2012**, 134, 13164.
- (40) Jian Wang, Mingxu You, Guizhi Zhu, Mohammed Ibrahim Shukoor, Zhuo Chen, Zilong Zhao, Meghan B. Altman, **Quan Yuan**, Zhi Zhu, Yan Chen, Cheng Zhi Huang*, and Weihong Tan*, "Photosensitizer-Gold Nanorods Composite for Targeted Multimodal Therapy" *Small* **2013**, 9, 3678.
- (41) Peixu Li, Enzheng Shi, Yanbing Yang, Yuanyuan Shang, Qingyu Peng, Shiting Wu, Jinqian Wei, Kunlin Wang, Hongwei Zhu, **Quan Yuan**, Anyuan Cao*, and Dehai Wu*, "CNT-Polypyrrole Core-Shell Sponge and its Application as Highly Compressible Supercapacitor Electrode" *Nano Research* **2014**, 7, 209.
- (42) Wenqi Zhao, Shanshan Wang, Xiaodong He, Yuanyuan Shang, Qingyu Peng, Chao Wang, Shanyi Du, Xuchun Gui, Yanbing Yang, Quan Yuan, Enzheng Shi, Shiting Wu, Wenjing Xu, Anyuan Cao*, and Yibin Li*, "Elastic Improvement of Carbon Nanotube Sponges by Depositing Amorphous Carbon Coating" *Carbon* **2014**, 76, 19.