

Department: School of Chemical Engineering  
 Professional field: Chemical Engineering and Technology  
 E-mail: qiaowm@ecust.edu.cn

## Profile

### Education

2002: PhD, Organic Chemical Engineering, Kyushu University, Japan.  
 1993: MS, Organic Chemical Engineering, Institute of Coal Chemistry, Chinese Academy of Sciences.  
 1990: BS, Fine Chemical Engineering, Nanjing University of Science and Technology, China.

### Academic Experience

2006-present: Professor, School of Chemical Engineering, ECUST, China.  
 2002-2006: Research Assistant, Institute of Materials Chemistry and Engineering, Kyushu University, Japan.  
 1999.04-10: Visiting Scholar, Institute of Materials Chemistry and Engineering, Kyushu University, Japan.  
 1993-1999: Research Assistant, Institute of Coal Chemistry, Chinese Academy of Sciences.

## Research Field

1. Carbon material chemical industry
2. Energy storage materials
3. Pollution control

## Research results and selected published papers

- 1. XN Jiang, XH Li, JTWang, DH Long, LC Ling, WM Qiao\*, Three-dimensional Mn-Cu-Ce ternary mixed oxide networks prepared by polymer-assisted deposition for HCHO catalytic oxidation. *Catalysis Science & Technology*, 8, 2740-2749 (2018)
- 2. D Yin, J Li, JTWang, LC Ling, WM Qiao\*, Low-temperature selective catalytic reduction of NO<sub>x</sub> with urea supported on carbon xerogels. *Industrial & Engineering Chemistry Research*, 57 (20), 6842-6852 (2018)
- 3. YJ Wei, ZK Kong, YK Pan, YQ Cao, DH Long, JT Wang, WM Qiao, LC Ling\*, Sulfur film sandwiched between few-layered MoS<sub>2</sub> electrocatalyst and conductive reduced graphene oxide as a robust cathode for advanced lithium-sulfur batteries. *J. Mater. Chem. A*, 2018,6, 5899-5909
- 4. XF Bing, X Jiang, M Tian, JT Wang, WM Qiao, LC Ling\*, Metal chloride-assisted synthesis of hierarchical porous carbons for high rate performance supercapacitor. *RSC Advances*, 7(43), 26650-26657(2017)
- 5. M Wang, YX Li, M Pan, XF Jia, D Yin, DH Long\*, JT Wang, WM Qiao, LC Ling\*, Shape-customizable macro-/microporous carbon monoliths for structure-to-functionality CO<sub>2</sub> adsorption and novel electrical regeneration. *Advanced Materials Technology*, 2(10), 1700088 (2017)
- 6. HP Su, YP Chong, DH Long, WM Qiao, LC Ling\*, Nanocrystalline celluloses-assisted preparation of hierarchical carbon monoliths for hexavalent chromium removal, *Journal of Colloid and Interface Science*, 510,77-85 (2017)
- 7. M Tian, YQ Sun, CF Zhang, JT Wang, WM Qiao, LC Ling, DH Long Enabling high-rate electrochemical flow capacitors based on mesoporous carbon microspheres suspension electrodes. *Journal of Power Sources*, 364,183-190 (2017)
- 8. YP Chong, L Liu, Y Liu, JT Wang, WM Qiao, LC Ling, DH Long, ZS Bai, Highly efficient removal of bulky tannic acid by millimeter-sized nitrogen-doped mesoporous carbon beads. *AIChE Journal*, 63(7), 3016-3025 (2017)
- 9. C Ma, XY Chen, Dh Long\*, JT Wang, WM Qiao, LC Ling\*, High-surface-area and high-nitrogen-content carbon microspheres prepared by a pre-oxidation and mild KOH activation for superior supercapacitor. *Carbon*, 118,699-708 (2017)
- 10. ZX Zhang, WY Jiang, DH Long\*, JT Wang, WM Qiao, LC Ling\*, A general silica-templating synthesis of alkaline mesoporous carbon catalysts for highly efficient H<sub>2</sub>S oxidation at room temperature, *ACS Applied Materials & Interfaces*, 9 (3), 2477-2484 (2017)
- 11. XF Bing, YJ Wei, M Wang, S Xu, DH Long, JT Wang, WM Qiao, LC Ling\*. Template-free synthesis of nitrogen-doped hierarchical porous carbons for CO<sub>2</sub> adsorption and supercapacitor electrodes. *Journal of Colloid and Interface Science*, 488,207-217 (2017)
- 12. Y Ohata, DH Long, WM Qiao, LC Ling, K Nakabayashi, K Miyawaki, I Mochida, SH Yoon\*, Dimensional control of tubular-type carbon nanofibers via pyrolytic carbon coating. *Journal of Materials Science*, 52(9), 5165-5178 (2017).
- 13. RY Wang, GM Lu\*, WM Qiao\*, JG Yu, Catalytic graphitization of coal-based carbon materials with light rare earth elements, *Langmuir*, 32(34), 8583-8592 (2016)
- 14. J Li, D Yin, DH Long, JT Wang, LC Ling, WM Qiao\*, Design of a dual-bed catalyst system with microporous carbons and urea-supported mesoporous carbons for highly effective removal of NO<sub>x</sub> at room temperature, *RSC Advances*, 6(33), 27272-27281 (2016)
- 15. X Ge, MQ Chen, JT Wang, DH Long, LC Ling, WM Qiao\*, I Mochida, SH Yoon, Fabrication of monolithic carbon nano?ber/carbon composites. *RSC Advances*, 6(8), 6443-6450 (2016)
- 16. YJ Wei, YQ Tao, ZK Kong, JT Wang, WM Qiao, LC Ling, DH Long, Unique electrochemical behavior of heterocyclic selenium-sulfur cathode materials in ether-based electrolytes for rechargeable lithium batteries, *Energy Storage Materials*, 5,171-179 (2016)
- 17. YQ Tao, YJ Wei, Y Liu, JT Wang, WM Qiao, LC Ling, DH Long\*, Kinetically-enhanced polysulfide redox reactions by Nb<sub>2</sub>O<sub>5</sub> nanocrystals for high-rate lithium-sulfur battery, *Energy & Environmental Science*, 9(10): 3230-3239 (2016)
- 18. XF Jia, BW Dai, ZX Zhu, JT Wang, WM Qiao, DH Long, LC Ling, Strong and machinable carbon aerogel monoliths with low thermal conductivity prepared via ambient pressure drying, *Carbon*, 108,551-560 (2016)
- 19. JG Zhou, ZL Sun, MQ Chen, JT Wang, WM Qiao, DH Long, LC Ling, Macroscopic and mechanically robust hollow carbon spheres with superior oil adsorption and light-to-heat evaporation properties, *Advanced Functional Materials*, 26(29),5368-5375 (2016)
- 20. CF Zhang, M Beidaghi, M Naguib, MR Lukatskaya, MQ Zhao, B Dyatkin, KM Cook, SJ Kim, B Eng, X Xiao, DH Long, WM Qiao, B Dunn, Y Gogotsi, Synthesis and charge storage properties of hierarchical niobium pentoxide/carbon/niobium carbide (MXene) hybrid materials, *Chemistry of Materials*, 28 (11), 3937-3943 (2016)
- 21. WC Li, ZX Zhang, JT Wang\*, WM Qiao, DH Long\*, LC Ling, Low temperature catalytic combustion of ethylene over cobalt oxide supported mesoporous carbon spheres. *Chemical Engineering Journal*, 293, 243-251 (2016)
- 22. LP Kong, XD Cao, JT Wang, WM Qiao, LC Ling, DH Long, Revisiting Li<sup>+</sup> intercalation into various crystalline phases of Nb<sub>2</sub>O<sub>5</sub> anchored on graphene sheets as pseudocapacitive electrodes, *Journal of Power Sources*, 309, 42-49 (2016)
- 23. LP Kong, CF Zhang, JT Wang, WM Qiao, LC Ling, DH Long, Nanoarchitected Nb<sub>2</sub>O<sub>5</sub> hollow, Nb<sub>2</sub>O<sub>5</sub>@carbon and NbO<sub>2</sub>@carbon core-shell microspheres for ultrahigh-rate intercalation pseudocapacitors, *Scientific Reports*, 6, 21177 (2016)
- 24. JT Wang, LW Yao, C Ma, XH Guo, WM Qiao, LC Ling, DH Long, Organic amine-mediated synthesis of polymer and carbon microspheres mechanism insight and energy-related applications, *ACS Applied Materials & Interfaces*, 8, 4851-4861 (2016)