

<u>基本信息</u>	
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职 称	长聘教授/博士生导师
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<u>教育背景</u>	
2008.09-2013.03	北京理工大学，材料学专业，工学博士
2009.09-2012.03	日本自然科学研究机构分子科学研究所，物质分子科学专业，公派联合培养博士生
2004.09-2008.07	北京理工大学，材料化学专业，理学学士
<u>工作经历</u>	
2019.09-至今	北京理工大学化学与化工学院，长聘教授
2016.09-2019.09	北京理工大学，化学与化工学院，特别研究员
2015.09-2016.09	北京理工大学，化学学院，副教授
2013.09-2015.09	北京理工大学，化学学院，讲师
<u>研究方向</u>	
1.	共价有机框架材料等晶态多孔材料的构效关系
2.	多孔材料气体分离、海水淡化等膜分离相关应用领域
<u>承担项目</u>	
1.	共价有机框架，国家自然科学基金优秀青年基金项目，2020.01-2022.12，130 万，主持
2.	三维共价有机骨架材料的构筑及其在神经毒剂荧光检测中的应用，国家自然科学基金面上项目，2017.01-2020.12，65 万，主持
3.	以聚集诱导发光小分子为单元构筑的多孔结晶聚合物的结构与功能研

	究, 国家自然科学基金青年项目, 2015.01-2017.12, 27 万, 主持
4.	基于三键化学的高分子合成, 2015.01-2019.12, 150 万元 (个人部分), 参与
研究成果	
<p>围绕着多孔有机高分子材料孔道内的传质与分离行为, 系统地展开了研究, 从调控构筑单元、层间距离和孔内环境的角度出发, 取得了一系列的成果。迄今为止, 在国内外学术刊物上已发表学术论文 100 余篇, 其中以第一作者或通讯作者发表 5 篇 J. Am. Chem. Soc.、7 篇 Angew. Chem. Int. Ed.、1 篇 Nat. Commun.、2 篇 Adv. Mater.、2 篇 Chem. Soc. Rev. 等三十余篇文章, 全部论文他引八千余次。主持国家自然科学基金优秀青年科学基金项目、面上项目、青年项目各一项, 参与国家自然科学基金重大项目一项, 获授权专利 11 项。</p>	
1.	设计、构筑三十余种二维和三维 COF 材料, 突破刚性构筑基元的限制, 实现基于脂肪族柔性基元的三维 COFs 的合成, 为孔道内离子传输行为研究奠定材料基础, 成功建立 COF 结构与载流子传输构效关系, 并通过限域封装、剥层等手段实现载流子的高速传导。
2.	针对多孔材料不溶不熔、难以加工成型的问题, 开展成膜与器件化研究, 从骨架构筑基元调控、孔内环境调节、晶体颗粒编织等方面入手, 提出并发展“热致相转变-热压法”、“合成后聚合”、“柔性调控”等策略, 刚柔并济制备自支撑柔性多孔薄膜, 实现液相和气相分离性能上的突破。
代表性论文	
1.	Shao Pengpeng, Yao Ruxin, Li Ge, Zhang Mengxi, Yuan Shuai, Wang Xiaoqi, Zhu Yuhao, Zhang Xianming, Zhang Lin, Feng Xiao*, Bo Wang*. Molecular-Sieving Membrane by Partitioning the Channels in Ultrafiltration Membrane by In Situ Polymerization. <i>Angewandte Chemie International Edition</i> , 2020, 59: 4401-4405
2.	Li Jie, Jing Xuechun, Li Qingqing, Li Siwu, Gao Xing, Feng Xiao*, Wang Bo*. Bulk COFs and COF nanosheets for electrochemical energy storage and conversion. <i>Chemical Society Reviews</i> , 2020, 49:3565-3604.
3.	Huang Xin, Sun Chao, Feng Xiao*. Crystallinity and stability of covalent organic frameworks. <i>Science China Chemistry</i> , 2020, 63: 1367-1390
4.	Jiang Chenghao, Feng Xiao*, Wang Bo*. Preparation of covalent organic framework membranes and their applications in seawater desalination and water treatment. <i>Acta Chemical Sinica</i> , 2020, 78: 466-477
5.	Zhang Mengxi, Jing Xuechun, Zhao Shuang, Shao Pengpeng, Zhang

	Yuanyuan, Yuan Shuai, Li Yanshuo, Gu Cheng, Wang Xiaoqi, Ye Yanchun, Feng Xiao*, Wang Bo. Electropolymerization of molecular-sieving polythiophene membranes for H ₂ separation. <i>Angewandte Chemie International Edition</i> , 2019, 131: 8860-8864
6.	Wang Hang, Zhao Shuang, Liu Yi, Yao Ruxin, Wang Xiaoqi, Cao Yuhua, Ma Dou, Zou Mingchu, Cao Anyuan, Feng Xiao*, Bo Wang*. Membrane adsorbers with ultrahigh metal-organic framework loading for high flux separations. <i>Nature Communications</i> , 2019, 10, 4204.
7.	Ma Li, Liu Yilin, Liu Yi, Jiang Shuyi, Li Ping, Hao Yuchen, Shao Pengpeng, Yin Anxiang, Feng Xiao*, Wang Bo*. Ferrocene-linkage-facilitated charge separation in conjugated microporous polymers. <i>Angewandte Chemie International Edition</i> , 2019, 58: 4221-4226
8.	Guo Zhenbin, Zhang Yuanyuan, Dong Yu, Li Jie, Li Siwu, Shao Pengpeng, Feng Xiao*, Wang Bo*. Fast ion transport pathway provided by polyethylene glycol confined in covalent organic frameworks. <i>Journal of the American Chemical Society</i> , 2019, 141: 1923-1927
9.	Wang Shan, Ma Li, Wang Qianyou, Shao Pengpeng, Ma Dou, Yuan Shuai, Lei Peng, Li Pengfei, Feng Xiao*, Wang Bo. Covalent organic frameworks: A platform for the experimental establishment of the influence of intermolecular distance on phosphorescence. <i>Journal of Materials Chemistry C</i> , 2018, 6: 5369-5374
10.	Shao Pengpeng, Li Jie, Chen Fan, Ma Li, Li Qingbin, Zhang Mengxi, Zhou Junwen, Yin Anxiang, Feng Xiao*, Wang Bo*. Flexible films of covalent organic frameworks with ultralow dielectric constants under high humidity. <i>Angewandte Chemie International Edition</i> , 2018, 57: 16501-16505
11.	Li Haiwei, Feng Xiao*, Ma Dou, Zhang Mengxi, Zhang Yuanyuan, Liu Yi, Zhang Jinwei, Wang Bo*. Stable aluminum metal-organic frameworks (AL-MOFs) for balanced CO ₂ and water selectivity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10: 3160-3163
12.	王珊, 冯霄*, 王博. 共价有机框架材料的设计与制备。科学通报, 2018, 63, 2229-2245.
13.	Zhang Yuanyuan, Duan Jiyun, Ma Dou, Li Pengfei, Li Siwu, Li Haiwei, Zhou Junwen, Ma Xiaojie, Feng Xiao*, Wang Bo. Three-dimensional anionic cyclodextrin-based covalent organic frameworks. <i>Angewandte Chemie International Edition</i> , 2017, 129: 16531-16535
14.	Wang Shan, Wang Qianyou, Shao Pengpeng, Han Yuzhen, Gao Xing, Ma Li, Yuan Shuai, Ma Xiaojie, Zhou Junwen, Feng Xiao*, Bo Wang*. Exfoliation of covalent organic frameworks into few-layer redox-active nanosheets as cathode materials for lithium-ion batteries. <i>Journal of the American Chemical Society</i> , 2017, 139: 4258-4261
15.	Wang Shan, Wang Qianyou, Feng Xiao*, Wang Bo*, Yang Li. Explosives in the cage: Metal-organic frameworks for high-energy materials sensing and desensitization. <i>Advanced Materials</i> , 2017, 29: 1701898

16.	Wang Qianyou, Wang Shan, Feng Xiao*, Wu Le, Zhang Sheng-Han, Ding Nan, Tong Wen-Chao, Zhou Ming-Rui, Wang Bo, Yang Li*. A facile method to prepare energetic materials (EMs). <i>RSC Advances</i> , 2017, 7: 48161-48165
17.	Wang Qianyou, Wang Shan, Feng Xiao*, Wu Le, Zhang Guoying, Zhou Mingrui, Wang Bo*, Yang Li*. A heat-resistant and energetic metal-organic framework assembled by chelating ligand. <i>ACS Applied Materials & Interfaces</i> , 2017, 9: 37542-37547
18.	Ma Li, Feng Xiao*, Wang Shan, Wang Bo. Recent advances in AIEgen-based luminescent metal-organic frameworks and covalent organic frameworks. <i>Materials Chemistry Frontiers</i> , 2017, 1: 2474-2486
19.	Ding Nan, Li Haiwei, Feng Xiao*, Wang Qianyou, Wang Shan, Ma Li, Zhou Junwen, Wang Bo*. Partitioning MOF-5 into confined and hydrophobic compartments for carbon capture under humid conditions. <i>Journal of the American Chemical Society</i> , 2016, 138: 10100-10103
20.	Zhang Yuanyuan, Feng Xiao*, Li Haiwei, Chen Yifa, Zhao Jingshu, Wang Shan, Wang Lu, Wang Bo*. Photoinduced postsynthetic polymerization of a metal-organic framework toward a flexible stand-alone membrane. <i>Angewandte Chemie International Edition</i> , 2015, 54: 4259-4263
21.	Wang Lu, Feng Xiao, Ren Lantian, Piao Qiuhan, Zhong Jieqiang, Wang Yuanbo, Li Haiwei, Chen Yifa, Wang Bo*. Flexible solid-state supercapacitor based on a metal-organic framework interwoven by electrochemically-deposited pani. <i>Journal of the American Chemical Society</i> , 2015, 137: 4920-4923
22.	Zhao Jingshu, Li Haiwei, Han Yuzhen, Li Rui, Ding Xuesong, Feng Xiao*, Wang Bo*. Chirality from substitution: enantiomer separation via a modified metal-organic framework. <i>Journal of Materials Chemistry A</i> , 2015, 3: 12145-12148
23.	Guo Yuexin, Feng Xiao*, Han Tianyu, Wang Shan, Lin Zhengguo, Dong Yuping, Wang Bo*. Tuning the luminescence of metal-organic frameworks for detection of energetic heterocyclic compounds. <i>Journal of the American Chemical Society</i> , 2014, 136: 15485-15488
24.	Zhang Yijia, Han Ting, Gu Shangzhi, Zhou Tianye, Zhao Chuanzhen, Guo Yuexin, Feng Xiao*, Tong Bin, Shi Jianbing, Zhi Junge, Dong Yuping*. Mechanochromic behavior of aryl-substituted buta-1,3-diene derivatives with aggregation enhanced emission. <i>Chemistry-A European Journal</i> , 2014, 20: 8856-8861
25.	Han Ting, Zhang Yijia, Feng Xiao*, Lin Zhengguo, Tong Bin, Shi Jianbing, Zhi Junge, Dong Yuping*. Reversible and hydrogen bonding-assisted piezochromic luminescence for solid-state tetraaryl-buta-1,3-diene. <i>Chemical Communication</i> , 2013, 49: 7049-7051
26.	Feng Xiao, Dong Yuping, Jiang Donglin*. Star-shaped two-dimensional covalent organic frameworks. <i>CrystEngComm</i> , 2013, 15: 1508-1511

27.	Feng Xiao, Liu Lili, Honsho Yoshihito, Saeki Akinori, Seki Shu, Irle Stephan*, Dong Yuping*, Nagai Atsushi, Jiang Donglin*. High-rate charge-carrier transport in porphyrin covalent organic frameworks: switching from hole to electron to ambipolar conduction. <i>Angewandte Chemie International Edition</i> , 2012, 51: 2618-2622.
28.	Feng Xiao, Ding Xuesong, Jiang Donglin*. Covalent organic frameworks. <i>Chemical Society Reviews</i> , 2012, 41: 6010-6022
29.	Feng Xiao, Chen Long, Dong Yuping, Jiang Donglin*. Porphyrin-based two-dimensional covalent organic frameworks: Synchronized synthetic control of macroscopic structures and pore parameters. <i>Chemical Communication</i> , 2011, 47: 1979-1981
30.	Feng Xiao, Tong Bin*, Shen Jinbo, Shi Jianbing, Han Tianyu, Chen Long, Zhi Junge, Lu Ping, Ma Yuguang, Dong Yuping*. Aggregation-induced emission enhancement of aryl-substituted pyrrole derivatives. <i>The Journal of Physical Chemistry B</i> , 2010, 114: 16731-16736