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## 人才队伍

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## 人才队伍

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### 简历：

2005-今国家纳米科学中心研究员  
2003-2005 加拿大多伦多大学博士后  
2002-2003 加拿大渥太华大学博士后  
2000-2002 德国界面与胶体马普所博士后  
1998-2000 南开大学副教授  
韩宝航课题组主页 (<http://www.nanoctr.cn/hanbh/>)

### 研究领域：

超分子纳米材料化学

基于丰富的共轭有机分子、生物分子建筑块设计，结合纳米建筑块，利用多种共价键或非共价键的温和且可持续的方法，构建有机(杂化)多孔功能材料，通过纳米孔道的精准调控以及多级次组装，优化多孔材料的孔隙参数，实现吸附分子与孔道结构的尺寸匹配并加强两者之间的非共价相互作用，达到高效与选择性吸附的目标，探索在能源、环境、卫生健康等领域中的应用。

### 获奖及荣誉：

教育部科技进步二等奖

### 代表论著：

Ding Zhou, Yi Cui, Pei-Wen Xiao, Mei-Yang Jiang, Bao-Hang Han\* "A General and Scalable Synthesis Approach to Porous Graphene" *Nature Commun.* **2014**, 5 (Sept. 2), 4716 (1? 7)

Qi Chen, Min Luo, Peter Hammerst? j, Ding Zhou, Ying Han, Bo WeggeLaursen, Chao-Guo Yan, Bao-Hang Han\* "Microporous Polycarbazole with High Specific Surface Area for Gas Storage and Separation" *J. Am. Chem. Soc.* **2012**, 134 (14), 6084? 6087

Xuesong Ding, Bao-Hang Han\* "Novel Metallophthalocyanine-Based Conjugated Microporous Polymers as High Efficient Photosensitizers for Singlet Oxygen Generation" *Angew. Chem., Int. Ed.* **2015**, published online  
<http://dx.doi.org/10.1002/anie.201501732>

AbdelhamidSayari,\*Bao-Hang Han, Yong Yang "Simple Synthesis Route to Monodispersed SBA-15 Silica Rods" *J. Am. Chem. Soc.* **2004**, 126 (44), 14348? 14349

Bao-Hang Han, Wuzong Zhou, AbdelhamidSayari\* "Direct Preparation of Nanoporous Carbon by Nanocasting" *J. Am. Chem. Soc.* **2003**, 125 (12), 3444? 3445

Zhu-Yin Sui, Caiyun Wang, KeweiShu, Quan-Sheng Yang, Yu Ge, Gordon G. Wallace,\* Bao-Hang Han\* "Manganese Dioxide-Anchored Three-Dimensional Nitrogen-Doped Graphene Hybrid Aerogels as Excellent Anode Materials for Lithium Ion Batteries" *J. Mater. Chem. A* **2015**, 3 (19), 10403? 10412

Ting Jiang, Zhu-Yin Sui, Quan-Sheng Yang, Xue-Tong Zhang,\* Bao-Hang Han\* "Preparation and Characterization of a Composite Hydrogel with Graphene Oxide as an Acid Catalyst" *Soft Matter* **2015**, 11 (16), 3215? 3221

Long Pan, Qi Chen,\* Jian-Hua Zhu, Jia-Guo Yu, Yu-Jian He,\* Bao-Hang Han\* "Hypercrosslinked Porous Polycarbazoles via One-Step Oxidative Coupling Reaction and Friedel-Crafts Alkylation" *Polym. Chem.* **2015**, 6 (13), 2478? 2487

Tao Wang, Yan-Chao Zhao, Min Luo, Li-Min Zhang, Yi Cui, Chang-Shan Zhang,\* Bao-Hang Han\* "Facile One-Pot Synthesis of Glycoluril-Based Porous Organic Polymers" *Polymer* **2015**, 60, 26? 31

Zhu-Yin Sui, Yue-Na Meng, Xiao, Pei-Wen, Zhao, Zhi-Qiang, Zhi-Xiang Wei,\* Bao-Hang Han\* "Nitrogen-Doped Graphene Aerogels as Efficient Supercapacitor Electrodes and Gas Adsorbents" *ACS Appl. Mater. Interfaces* **2015**, 7 (3), 1431? 1438

Yan-Chao Zhao, Tao Wang, Li-Min Zhang, Yi Cui, Bao-Hang Han\* "Microporous Spiro-Centered Poly(benzimidazole) Networks: Preparation, Characterization, and Gas Sorption Properties" *Polym. Chem.* **2015**, 6 (5), 748? 753

Zhu-Yin Sui, Bao-Hang Han\* "Effect of Surface Chemistry and Textural Properties on Carbon Dioxide Uptake in Hydrothermally Reduced Graphene Oxide" *Carbon* **2015**, 82, 590? 598

Jian-Hua Zhu, Qi Chen,\* Zhu-Yin Sui, Long Pan, Jianguo Yu,\* Bao-Hang Han\* "Preparation and Adsorption Performance of Cross-Linked Porous Polycarbazoles" *J. Mater. Chem. A* **2014**, 2 (38), 16181? 16189

Qi Chen, De-Peng Liu, Jian-Hua Zhu, Bao-Hang Han\* "Mesoporous Conjugated Polycarbazole with High Porosity via Structure Tuning" *Macromolecules* **2014**, 47 (17), 5926? 5931

Paul N. Diagboya, Bamidele I. Olu-Owolabi, Ding Zhou, Bao-Hang Han\* "Graphene Oxide- Tripolyphosphate Hybrid used as a Potent Sorbent for Cationic Dyes" *Carbon* **2014**, 79, 174? 182

Xin-Ming Hu, Qi Chen, Yan-Chao Zhao, Bo Wegge Laursen, Bao-Hang Han\* "Straightforward Synthesis of a Triazine-Based Porous Carbon with High Gas-Uptake Capacities" *J. Mater. Chem. A* **2014**, 2 (34), 14201? 14208

Zhu-Yin Sui, Qinghan Meng, Ji-Tao Li, Jian-Hua Zhu, Yi Cui, Bao-Hang Han\* "High Surface Area Porous Carbons Produced by Steam Activation of Graphene Aerogels" *J. Mater. Chem. A* **2014**, 2 (25), 9891? 9898

Li-Juan Feng, Qi Chen,\* Jian-Hua Zhu, De-Peng Liu, Yan-Chao Zhao, Bao-Hang Han\* "Adsorption Performance and Catalytic Activity of Porous Conjugated Polyporphyrins via Carbazole-Based Oxidative Coupling Polymerization" *Polym. Chem.* **2014**, 4 (5), 3081? 3088

Qi Chen, De-Peng Liu, Min Luo, Li-Juan Feng, Yan-Chao Zhao, Bao-Hang Han\* "Nitrogen-Containing Microporous Conjugated Polymers via Carbazole-Based Oxidative Coupling Polymerization: Preparation, Porosity, and Gas Uptake" *Small* **2014**, 10 (2), 308? 315

Yan-Chao Zhao, Li-Min Zhang, Tao Wang, Bao-Hang Han\* "Microporous Organic Polymers with Acetal Linkages: Synthesis, Characterization, and Gas Sorption Properties" *Polym. Chem.* **2014**, 5 (2), 614? 621

Ding Zhou, Qian-Yi Cheng, Yi Cui, Tao Wang, Xinxin Li,\* Bao-Hang Han\* "Graphene-Terpyridine Complex Hybrid Porous Material for Carbon Dioxide Adsorption" *Carbon* **2014**, 66, 592? 598

Zhu-Yin Sui, Yi Cui, Jian-Hua Zhu, Bao-Hang Han\* "Preparation of Three-Dimensional Graphene Oxide-Polyethylenimine Porous Materials as Dye and Gas Adsorbents" *ACS Appl. Mater. Interfaces* **2013**, 5 (18), 9172? 9179

Ding Zhou, Haiping Wu, Zhixiang Wei,\* Bao-Hang Han\* "Graphene? Molybdenum Oxynitride Porous Material with Improved Cyclic Stability and Rate Capability for Rechargeable Lithium Ion Battery" *Phys. Chem. Chem. Phys.* **2013**, 15 (39), 16898? 16906

Yi Cui, Qian-Yi Cheng, Hai-Ping Wu, Zhi-Xiang Wei,\* Bao-Hang Han\* "Graphene Oxide-based Benzimidazole-crosslinked Networks for High Performance Supercapacitor" *Nanoscale* **2013**, 5 (18), 8367? 8374

- Yan-Chao Zhao, Li Zhao, Li-Juan Mao, Bao-Hang Han\* "One-step Solvothermal Carbonization to Microporous Carbon Materials Derived from Cyclodextrins" *J. Mater. Chem. A* **2013**, 1 (33), 9456? 9461
- Luqi Liu,\* Yun Gao, Qing Liu, Jun Kuang, Ding Zhou, Siting Ju, Bao-Hang Han,\* Zhong Zhang\* "High Mechanical Performance of Layered Graphene Oxide/Poly(vinyl alcohol) Nanocomposite Films" *Small* **2013**, 9 (14), 2466? 2472
- De-Peng Liu, Qi Chen,\* Yan-Chao Zhao, Li-Min Zhang, Ai-Di Qi,\* Bao-Hang Han\* "Fluorinated Porous Organic Polymers via Direct C? H ArylationPolycondensation" *ACS Macro Lett.* **2013**, 2 (6), 522? 526
- Ying Han, Li-Min Zhang, Yan-Chao Zhao, Tao Wang, Bao-Hang Han\* "Microporous Organic Polymers with Ketal Linkages: Synthesis, Characterization and Gas Sorption Properties" *ACS Appl. Mater. Interfaces* **2013**, 5 (10), 4166? 4172
- Mei-Yang Jiang, Qiu Wang, Qi Chen,\*Xin-Ming Hu, Xiao-Liang Ren,\* Zhong-Hua Li, Bao-Hang Han\* "Preparation and Gas Uptake of Microporous Organic Polymers Based on Binaphthalene-Containing SpirocyclicTetraether" *Polymer* **2013**, 54 (12), 2952? 2957
- Yan-Chao Zhao, Tao Wang, Li-Min Zhang, Yi Cui, Bao-Hang Han\* "Facile Approach to Preparing Microporous Organic Polymers through Benzoin Condensation" *ACS Appl. Mater. Interfaces* **2012**, 4 (12), 6975? 6981
- Yi Cui, Tao Wang, Ding Zhou, Qian-Yi Cheng, Chang-Shan Zhang, Shu-Qing Sun,\* Wei Liu,\* Bao-Hang Han\* "Growth of Silver Film on Graphene Oxide Pattern" *J. Phys. Chem. C* **2012**, 116 (33), 17698? 17704
- Yan-Chao Zhao, Qian-Yi Cheng, Ding Zhou, Tao Wang, Bao-Hang Han\* "Preparation and Characterization of Triptycene-Based Microporous Poly(benzimidazole) Networks" *J. Mater. Chem.* **2012**, 22 (23), 11509? 11514
- Qi Chen, Qiu Wang, Min Luo, Li-Juan Mao, Chao-Guo Yan, Zhong-Hua Li, Bao-Hang Han\* "Microporous Polymeric Microsphere via Surfactant-free Suzuki Coupling Polymerization in a Single-Phase: Porosity and Gas Uptake" *Polymer* **2012**, 53 (10), 2032? 2037
- Qian-Yi Cheng, Ding Zhou, Yun Gao, Qi Chen, Zhong Zhang,\*Bao-Hang Han\* "Supramolecular Self-Assembly Induced Graphene Oxide-based Hydrogels and Organogels" *Langmuir* **2012**, 28 (5), 3005? 3010
- Fen Yang, Qi Chen, Qian-Yi Cheng, Chao-Guo Yan,\*Bao-Hang Han\* "Sugar-Functionalized Water-Soluble Cyclotrimerarylene Derivatives: Preparation and Interaction with Fullerene" *J. Org. Chem.* **2012**, 77 (2), 971? 976
- Chong Wu, Qian-Yi Cheng, Shu-Qing Sun,\*Bao-Hang Han\* "Templated Patterning of Graphene Oxide Using Self-Assembled Monolayers" *Carbon* **2012**, 50 (3), 1083? 1089
- Qi Chen, Jin-Xiang Wang, Qiu Wang, NingBian, Ding Zhou, Zhong-Hua Li, Chao-Guo Yan, Bao-Hang Han\* "Spiro(fluorene-9,9'-xanthene)-Based Porous Organic Polymers: Preparation, Porosity, and Exceptional Hydrogen Uptake at Low Pressure" *Macromolecules* **2011**, 44 (20), 7987? 7993
- Sheng-Zhen Zu, Xu-Xia Sun, Ding Zhou, Bao-Hang Han\* "Supramolecular Modification of Single-Walled Carbon Nanotubes with a Water-Soluble Triptycene Derivative" *Carbon* **2011**, 49 (15), 5339? 5347
- Qi Chen, Jin-Xiang Wang, Fen Yang, Ding Zhou, NingBian, Xin-Jian Zhang, Chao-Guo Yan, Bao-Hang Han\* "Tetraphenylethylene-Based Fluorescent Porous Organic Polymers: Preparation, Gas Sorption Properties and Photoluminescence Properties" *J. Mater. Chem.* **2011**, 21 (35), 13554? 13560
- Yan-Chao Zhao, Ding Zhou, Qi Chen, Xin-Jian Zhang, NingBian, Ai-Di Qi, Bao-Hang Han\* "Thionyl Chloride-Catalyzed Preparation of Microporous Organic Polymers through Aldol Condensation" *Macromolecules* **2011**, 44 (16), 6382? 6388
- Xin-Ming Hu, Qi Chen, Jin-Xiang Wang, Qian-Yi Cheng, Chao-Guo Yan, Jie Cao,\* Yu-Jian He,\* Bao-Hang Han\* "Tetraphenylethylene-based Glycoconjugate as a Novel Fluorescence"Turn-on" Sensor for Cholera Toxin" *Chem. ? Asian J* **2011**, 5 (9), 2376? 2381
- Qi Chen, Min Luo, Tao Wang, Jin-Xiang Wang, Ding Zhou, Ying Han, Chao-Guo Yan, Chang-Shan Zhang, Bao-Hang Han\* "Porous Organic Polymers Based on Propeller-Like Hexaphenylbenzene Building Units" *Macromolecules* **2011**, 44 (14), 5573? 5577
- Ding Zhou, Qian-Yi Cheng, Bao-Hang Han\* "Solvothermal synthesis of homogeneous graphene dispersion with high concentration" *Carbon* **2011**, 49 (12), 3920? 3927
- Xin-Ming Hu, Qi Chen, Ding Zhou, Jie Cao,\* Yu-Jian He,\* Bao-Hang Han\* "One-step Preparation of Fluorescent Inorganic? Organic Hybrid Material Used for Explosive Sensing" *Polym. Chem.* **2011**, 2 (5), 1124? 1128
- Yun Gao, Lu-Qi Liu,\* Sheng-Zhen Zu, KePeng, Ding Zhou, Bao-Hang Han,\* Zhong Zhang\* "The Effect of Interlayer Adhesion on the Mechanical Behaviors of Macroscopic Graphene Oxide Papers" *ACS Nano* **2011**, 5 (3), 2134? 2141
- Qi Chen, Yi Cui, Jie Cao, Bao-Hang Han\* "Water-soluble Conjugated Polyelectrolyte with Pendant Glycocluster: Synthesis and Its Interaction with Heparin" *Polymer* **2011**, 52 (2), 383? 390
- Pingping Yao, Penglei Chen,\* Lang Jiang, Huaping Zhao, Hongfei Zhu, Ding Zhou, Wenping Hu,\* Bao-Hang Han,\* Minghua Liu\* "Electric Current Induced Reduction of Graphene Oxide and Its Application as Gap Electrdes in Organic Photoswitching Devices" *Adv. Mater.* **2010**, 22 (44), 5008? 5012

- JingjingXu, Kai Wang, Sheng-Zhen Zu, Bao-Hang Han,\*Zhixiang Wei\* "Hierarchical Nanocomposites of Polyaniline Nanowire Arrays on Graphene Oxide Sheets with Synergetic Effect for Energy Storage" *ACS Nano***2010**, *4* (9), 5019? 5026
- Ding Zhou, Bao-Hang Han\* "Graphene-based Nanoporous Materials Assembled by Mediation of Polyoxometalate Nanoparticles" *Adv. Funct. Mater.* **2010**, *20* (16), 2717? 2722
- Qi Chen, NingBian, Chun Cao, Xi-Long Qiu, Ai-Di Qi, Bao-Hang Han\* "Glucosamine Hydrochloride Functionalized Tetraphenylethylene: A Novel Fluorescent Probe for Alkaline Phosphatase Based on the Aggregation-Induced Emission" *Chem. Commun.* **2010**, *46* (23), 4067? 4069
- Tian-Long Zhang, Bao-Hang Han\* "The Visualized Polarity-Sensitive Magnetic Nanoparticles" *Langmuir* **2010**, *26* (11), 8893? 8900
- Miao Yu, Sheng-Zhen Zu, Yong Chen, Yu-Ping Liu, Bao-Hang Han,\*Yu Liu\* "Spatially Controllable DNA Condensation by Water-soluble Supramolecular Hybrid of Single-Walled Carbon Nanotubes and  $\beta$ -Cyclodextrin-tethered Ruthenium Complexes" *Chem. ? Eur. J.***2010**, *16* (4), 1168? 1174
- Qi Chen, Yi Cui, Jie Cao,\*Bao-Hang Han\* "Fluorescent Conjugated Polyfluorene with Pendant Lactopyranosyl Ligands for Studies of  $Ca^{2+}$ -Mediated Carbohydrate? Carbohydrate Interaction" *Biomacromolecules***2010**, *11* (1), 13? 19
- Sheng-Zhen Zu, Xu-Xia Sun, Yuanqin Liu, Bao-Hang Han\* "Supramolecular Surface Modification and Solubilization of Single-Walled Carbon Nanotubes with Cyclodextrin Complexation" *Chem. ? Asian J.***2009**, *4* (10), 1562? 1572
- Qi Chen, Qian-Yi Cheng, Yan-Chao Zhao, Bao-Hang Han\* "Glucosamine Hydrochloride Functionalized Water-soluble Conjugated Polyfluorene: Synthesis, Characterization, and Interactions with DNA" *Macromol. Rapid Commun.***2009**, *30* (19), 1651? 1655
- Dan-Dan Zhang, Sheng-Zhen Zu, Bao-Hang Han\* "Inorganic? Organic Hybrid Porous Materials Based on Graphite Oxide Sheets" *Carbon***2009**, *47* (13), 2993? 3000
- Sheng-Zhen Zu, Bao-Hang Han\* "Aqueous Dispersion of Graphene Sheets Stabilized by Pluronic Copolymers: Formation of Supramolecular Hydrogel" *J. Phys. Chem. C***2009**, *113* (31), 13651? 13657
- Qi Chen, Yonghua Xu, Yuguo Du, Bao-Hang Han\* "Triphenylamine-based Fluorescent Conjugated Glycopolymers: Synthesis, Characterization and Interactions with Lectins" *Polymer***2009**, *50* (13), 2830? 2835
- Gerhard Wenz,\*Bao-Hang Han, Axel Müller "Cyclodextrin Rotaxanes and Polyrotaxanes" *Chem. Rev.***2006**, *106* (3), 782? 817
- Bao-Hang Han,\*Markus Antonietti "Cyclodextrin-Based Pseudopolyrotaxanes as Templates for the Generation of Porous Silica Materials" *Chem. Mater.***2002**, *14* (8), 3477? 3485

**承担科研项目情况：**

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