

Basic Information

Dr. Jun Wang, Ph.D, Professor of Chemical Engineering

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Education Background

2007.09-2012.06 Zhejiang University Chemical Engineering (Bachelor)

2012.08- 2015.07 New Mexico State University Chemical Engineering (Ph. D)

2015.08- 2016.05 Arizona State University Post doc. Researcher

Research Interest

- ◆ Adsorptive Separations (CO₂ capture, hydrocarbon purifications)
- ◆ Photo/Electrocatalysis
- ◆ Energy Storage Devices

Servings and Honors

1. Early Carrer Editorial Board of *Separation & Separation Technology* and *Chinese Journal of Chemical Engineering*
2. 2nd Class Prize of Nature Science of Jiangxi Province (2021)

Publications

3. **Jun Wang**; Yan Zhang; Yun Su; Xing Liu; Peixin Zhang; Ruibiao Lin*; Shixia Chen; Qiang Deng; Zheling Zeng; Shuguang Deng*; and Banglin Chen*. Fine Pore Engineering in a Series of Isoreticular Metal-Organic Frameworks for Efficient C₂H₂/CO₂ Separation. *Nat. Commun*, **2022**, 13, 200. (高被引论文、热点论文)
4. Yuan Liu; Junhui Liu; Hanting Xiong; Jingwen Chen; Shixia Chen; Zheling Zeng; Shuguang Deng; **Jun Wang***. Negative electrostatic potentials in a Hofmann-type metal-organic framework for efficient acetylene separation. *Nat. Commun*, **2022**, 13, 5515.
5. Peixin Zhang[#]; Yao Zhong[#]; Yan Zhang; Zhenliang Zhu; Yuan Liu; Yun Su; Jingwen Chen; Shixia Chen; Zheling Zeng; Huabin Xing; Shuguang Deng; **Jun Wang***. Synergistic Binding Sites in a Hybrid Ultramicroporous Material for One-step Ethylene Purification from Ternary C₂ Hydrocarbon Mixtures. *Science Advances*, **2022**, 8, eabn9231.

6. Xing Liu; Peixin Zhang; Hanting Xiong; Yan Zhang; Ke Wu; Junhui Liu; Rajamani Krishna; Jingwen Chen; Shixia Chen; Zheling Zeng; Shuguang Deng; **Jun Wang***. Engineering Pore Environments of Sulfate-pillared Metal-Organic Framework for Efficient C₂H₂/CO₂ Separation with Record Selectivity. *Advanced Materials*, **2023**, 2210415.
7. **Jun Wang#**; Yan Zhang[#]; Peixin Zhang; Jianbo Hu; Ruibiao Lin*; Qiang Deng; Zheling Zeng; Huabin Xing*; Shuguang Deng*; Banglin Chen*. Optimizing Pore Space for Flexible-Robust Metal-Organic Framework to Boost Trace Acetylene Removal. *J. Am. Chem. Soc.*, **2020**, 142, 9744-9751. (高被引论文)
8. Fangqi Yang; Caihong Liang; Haoming Yu; Zheling Zeng; Yeng Ming Lam*; Shuguang Deng; **Jun Wang***. Phosphorus-Doped Graphene Aerogel as Self-Supported Electrocatalyst for CO₂-to-Ethanol Conversion. *Advanced Science*, **2022**, 9, 2202006.
9. Ze Dong, Bei Li, Hua Shang, Peixin Zhang, Shixia Chen, Jiangfeng Yang, Zheling Zeng, **Jun Wang***, Shuguang Deng, Ultramicroporous Carbon Granules with Narrow Pore Size Distribution for Efficient CH₄ Separation from Coal-bed Gases. *AIChE Journal*, **2021**. e17281.
10. Zhenliang Zhu, Peixin Zhang, Bei Li, Shixia Chen, Qiang Deng, Zheling Zeng, **Jun Wang***, Shuguang Deng, Chemical Immobilization of Amino-acids into Robust Metal-Organic Framework for Efficient SO₂ Removal. *AIChE Journal*, **2021**. e17300.
11. Zhenliang Zhu; Ke Wu; Xing Liu; Peixin Zhang; Shixia Chen; Jingwen Chen; Qiang Deng; Zheling Zeng; Shuguang Deng; **Jun Wang***. Dense Open Metal Sites in a Microporous Metal–Organic Framework for Deep Desulfurization with Record-high SO₂ Storage Density. *AIChE Journal*, **2022**. e17811.
12. Yun Su[#], Rundao Chen[#], Peixin Zhang, He Xiao, Xing Liu, Yuan Liu, Hanting Xiong, Zhiwei Zhao, Junhui Luo, Jingwen Chen, Shixia Chen, Zheling Zeng, Zongbi Bao, Shuguang Deng, **Jun Wang***. Dual Pore-size Sieving in a Novel Oxygenate-Pillared Microporous Adsorbent for C₆ Alkane Isomers Separation. *AIChE Journal*, **2023**. e17937.
13. Zhiwei Zhao[#], Yueyue Liu[#], Xing Liu, Yuan Liu, Jingwen Chen*, Shixia Chen, Shuguang Deng, **Jun Wang***. One-step Purification of Ethylene from Acetylene and Carbon Dioxide by Ultramicroporous Carbons. *AIChE Journal*, **2023**. e18046.
14. Meng, Q.-G[#]; Hou, Y.-P[#]; Yang, F.-Q; Cao, C.-L; Zou, Z.; Luo, J.-H; Zhou, W.-Z; Tong, Z.-K; Chen, S.-X; Zhou, S.-D*; **Wang, J.***; Deng, S.-G., Modulation of Surface Properties on Cobalt Phosphide for High-performance Ambient Ammonia Electrosynthesis. *Appl. Catal. B.* **2022**, 303, 120847.
15. Xinxin Han, Bingjie Lu, Xin Huang, Cheng Liu, Shixia Chen*, a, Jingwen Chen, Zheling Zeng, Shuguang Deng, **Jun Wang***. Novel p- and n-type S-scheme Heterojunction Photocatalyst for Boosted CO₂ Photoreduction Activity. *Appl. Catal. B.* **2022**, 316, 121587.
16. Fangqi Yang, Haoming Yu, Yun Su, Jingwen Chen, Shixia Chen, Zheling Zeng, Shuguang Deng, **Jun Wang***. Low-coordinated Ni-N₁-C₃ sites atomically dispersed on hollow carbon nanotubes for efficient CO₂ reduction. *Nano Res.* **2023**, 16, 146-154.
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38. Zeliang Wu, Liang Wang, Shixia Chen, Xiaomin Zhu, Qiang Deng, **Jun Wang***, Zheling Zeng, Shuguang Deng*. Facile and low-temperature strategy to prepare hollow ZIF-8/CNT polyhedraons as high-performance lithium-sulfur cathodes. *Chemical Engineering Journal*. 2021, 404, 126579. (高被引论文)
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