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研究方向

1. 分子筛合成与催化
2. 甲烷 - 二氧化碳重整催化
3. 多孔材料合成与吸附分离

研究成果及主要发表文章

- 1.Liu Q., Liu Y., Zhou N., Zhang P. H., Liu Z. C., Vovk E. I., Zhu Y.-A.*, Yang Y.*., Zhu K. K.*., Realization of High-Pressure Dry Methane Reforming by Suppressing Coke Deposition with Co-Rh Intermetallic Clusters, *Appl. Catal. B-Environ.*, 2023, in press.
- 2.Zhou Y. J., Deng Q. Z., Deng D. H., Liu W., Zhai M., Wang Z. D.*., Han L.*., Zhu K. K.*., Multiscale structural control of MFI zeolite using poly-quaternary ammonium cation, *J. Mater. Chem. A*, 2023, 11, 15702 - 15716 (Hot papers).
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- 8.Zhai M., Wu W. X., Xing E. H.*., Zhang Y. F., Ding H. X., Zhou J. H., Luo Y. B., Liu J. C., Zhu K. K.*., Zhu X. D., Generating TON zeolites with reduced [0 0 1] length through combined mechanochemical bead-milling and porogen-directed recrystallization with enhanced catalytic property in hydroisomerization, *Chem. Eng. J.*, 2022, 440, 135874.
- 9.Ding H. X., Zhou Q., Li J., Zhu K. K.*., Fan W.*., Self-assembly of Silicoaluminophosphate nanocrystals in biphasic media with water-insoluble structure-directing agent, *Catal. Sci. Technol.*, 2021, 11, 5135-5146. (他引频次 0)
- 10.Zhao X. L., Zeng S., Zhang X. L., Deng Q. Z., Li X. J., Yu W. G., Zhu K. K.*., Xu S. T.*., Liu J. C., Han L.*., Generating assembled MFI nanocrystals with reduced b-axis through structure-directing agent exchange induced recrystallization, *Angew. Chem. Int. Ed.*, 2021, 60, 13959-13968. (Hot Paper). (他引频次 4)
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