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职称/职务: 副教授/硕士生导师

专业: 有机化学

研究方向: 材料化学, 类石墨烯化学

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## 个人经历

教育背景:

2002.9-2006.7 学士 乐山师范学院

制药工程 指导老师: 刘志昌教授

2006.9-2009.7 硕士 新疆大学

有机化学 导师: 曹玲华教授

2009.9-2013.7 博士 中科院学院化学所-北京大学, 有机化学 导师: 甘良兵教授; 李玉良院士

工作经历:

2013.7-2014.6 波士顿学院 (美国, Boston College), 博士后, 合作导师: Lawrence T. Scott

2014.7-2017.3 里海大学 (美国, Lehigh University), 博士后, 合作导师: Steven L. Regen

2017.7-2019.9 新疆大学 化学化工学院 讲师

2019.09-至今新疆大学 化学化工学院 副教授

## 主讲课程

本科生: 有机化学, 有机化学实验, 中级有机化学

研究生: 高等有机合成, 金属有机化学

留学生课程: Advanced Structure Determination

## 研究内容

- 1、类石墨烯片段的合成及其光电性质研究;
- 2、新型杂原子掺杂的大 $\pi$ 芳香体系合成及其性质研究;
- 3、抗菌药物的结构修饰与合成;
- 4、香料化学。

## 主持科研项目

纵向项目:

2021/06-2023/06	上海合作组织科技伙伴计划	25 万	项目主持人
2019/01-2022/12	国家自然科学基金地区基金	40 万	项目主持人
2019/12-2022/03	大连理工大学国家精细化工重点实验室开放课题	5 万	项目主持人
2019/01-2022/12	深圳市基础研究学科布局项目	300 万	项目主持人
2019/01-2019/12	新疆自治区高校科研项目	5 万	项目主持人
2018/01-2020/12	新疆自治区“天池博士”计划	10 万	项目主持人
2018/01-2020/12	新疆大学博士科研启动基金	10 万	项目主持人

横向项目:

2020/01-2022/12,	香紫苏醇制备龙涎醚的小试合成技术开发	50 万	项目主持人
2020/05-2023/12,	香紫苏内酯的小试合成技术开发	250 万	项目主持人
2021/05-2023/06,	炭化粉废料的回收利用可行性研究	23.2 万	项目主持人

## 代表性研究成果

1. Chuan-Kun Ran,<sup>#</sup> Ya-Nan Niu,<sup>#</sup> Lei Song, Ming-Kai Wei, Yi-Fei Cao, Shu-Ping Luo, **Yu-Ming Yu**, Li-Li Liao,\* and Da-Gang Yu\*, Visible-Light Photoredox-Catalyzed Carboxylation of Activated C(sp<sup>3</sup>)—O Bonds with CO<sub>2</sub>, *ACS Catal.* **2022**, 12, 18–24
2. Ya-Nan Niu, Xing-Hao Jin, Li-Li Liao, He Huang, Bo Yu, Yu-Ming Yu\* & Da-Gang Yu\*, Visible-light-driven external-photocatalyst-free alkylative carboxylation of alkenes with CO<sub>2</sub>, *Sci. China Chem.* 2021, 64(7), 1164–1169
3. Yue-Ming Jiang, Jie Liu, Qiang Fu\*, **Yu-Ming Yu\***, Da-Gang Yu\*, Visible-Light-Driven phosphonoalkylation of alkenes, *Synlett*, **2021**, 32, 378–382
4. Hai-Ming Lan, Ru-Xia Yang, Li-Zhen Yang, Peng-Yin Zhu, Lu-Lu Wang, **Yu-Ming Yu**<sup>□</sup>, Duo-Zhi Wang<sup>□</sup>, Lanthanide complexes based on the linear bifunctional ligand: Synthesis, structure regulation and magnetic properties, *Inorganica Chimica Acta*, **2020**, 508, 119593
5. Ru-Xia Yang, Hai-Ming Lan, Peng-Yin Zhu, Li-Zhen Yang, **Yu-Ming Yu**, Lu-Lu Wang<sup>□</sup>, Duo-Zhi Wang<sup>□</sup>, Synthesis, structures, magnetic and electric properties of four new coordination polymers constructed with heterocyclic nitrogen ligands and multidentate organic acid, *Inorganica Chimica Acta*, **2020**, 506, 119410
6. Zhenying Wang, Li Li, **Yuming Yu**, Chao Yang, Porous Hybrid Nanosheets of g-C<sub>3</sub>N<sub>4</sub>/β-Ni(OH)<sub>2</sub> for asymmetric supercapacitor with enhanced specific capacitance, *Nano*, **2020**, 4, 2050052
7. Hongli Wu, Meng Zou, Lisheng Guo, Fengyun Ma\*, Wenlong Mo, **Yuming Yu**, Inamullah Mian, Jingmei Liu,

- Shuangjie Yin, Noritatsu Tsubaki \*, Effects of calcination temperatures on the structure–activity relationship of Ni–La/Al<sub>2</sub>O<sub>3</sub>catalysts for syngas methanation, *RSC Adv.*, **2020**, 10, 4166
8. **Yuming Yu**, Mary J. Sabulski, Wiley A. Schell, Marcos M. Pires, John R. Perfect, Steven L. Regen\*, Simple Strategy for Taming Membrane-Disrupting Antibiotics, *Bioconjugate Chemistry*, **2016**, 27, 2850–2853
  9. **Yuming Yu**, Liang Xu, Xincheng Huang, Sisi Liang, Liangbing Gan\*, Synthesis of C58 open-cage fullerene derivatives, *Synlett*. **2016**, 27, 2123-2127
  10. **Yuming Yu**, Liang Xu, Xincheng Huang, Liangbing Gan\*, Near-infrared absorbing compound based on  $\pi$ -extended tetrathiafulvalene open-cage fullerene, *J. Org. Chem.* **2014**, 79, 2156–2162
  11. **Yuming Yu**, Tong Zhang, Liangbing Gan\*, Synthesis of Open-cage Fullerenes with Terminal Alkyne Groups on the Rim of the Orifice, *Fullerenes, Nanotubes, Carbon Nanostruct.* **2014**, 22, 54-60
  12. **Yuming Yu**, Lijun Shi, Dazhi Yang, Liangbing Gan\*, Molecular containers with a dynamic orifice: open-cage fullerenes capable of encapsulating either H<sub>2</sub>O or H<sub>2</sub> under mild conditions, *Chem. Sci.* **2013**, 4, 814–818
  13. **Yuming Yu**, Xiang Xie, Tong Zhang, Shuming Liu, Yuanhua Shao, Liangbing Gan,\* and Yuliang Li, Synthesis of 18-membered Open-cage Fullerenes through Controlled Step-wise Fullerene Skeleton Bond Cleavage Processes and Substituent-mediated Tuning of the Redox Potential of Open-cage Fullerenes, *J. Org. Chem.* **2011**, 76, 10148–10153
  14. **Yuming Yu**, Jing Xiang, Linghua Cao, Synthesis of 2-Glycosylamino-5-(3,4,5-trimethoxyphenyl)-1,3,4-oxadiazole/1,3,4-thiadiazole and Their Fluorescent Properties, *Journal of Xinjiang University (Science & Engineering)*, **2012**, 29, 89-93
  15. Guihua Yang, **Yuming Yu**, Muhammad Usman Tahir, ShakiazAhmad, Xintai Su, Yahong Xie, Jide Wang, Promotion effect of Bi species in Cu/Bi/MCM-41catalysts for 1,4- butynediol synthesis by ethynylationof formaldehyde, *Reaction Kinetics, Mechanisms and Catalysis*, **2019**, 127, 425–436
  16. Yuanyuan Che, Lang Liu, Jianzhang Zhao, **Yuming Yu**, Xianmei Zhao, Photochromicbehavior and mechanism of indolethiosemicarbazidederivates in amorphous powder, solution and nanofiber, *Dyes and Pigments*, **2019**, 169, 105–110
  17. Sheng Ding, Yuanyuan Che, **Yuming Yu**, Lang Liu, Dianzeng Jia, Jianzhang Zhao, Interactive Aggregation-Induced Emission Systems Controlled byDynamic Covalent Chemistry, *J. Org. Chem.* **2019**, 84, 6752–6756
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  19. Chang Wang, **Yuming Yu**, Steven L. Regen\*, Lipid Raft Formation: Key Role of Polyunsaturated Phospholipids,

*Angew.Chem. Int. Ed.* **2017**, 56, 1639–1642

20. Mary Sabulski Feigman, Seonghoon Kim, Sean E. Pidgeon, **Yuming Yu**, George Mogambi Ongwae, Dhilon S. Patel, Steven R. Egen, Wonpil Im, Marcos M. Pires, Synthetic Immunotherapeutics against Gram-negative Pathogens, *Cell Chemical Biology*, **2018**, 25(10), 1185-1194
21. Yuqian Qiao, Yuanyuan Che, **Yuming Yu**, Yakun Tang, Lang Liu\*, Xianmei Zhao, Jianzhang Zhao, Solid-state photochromic properties, mechanism and electrospun membranes of (E)-2-(benzo[b]thiophen-2-ylmethylene)-N-ethylhydrazine-1-carbothioamide, *Dyes and Pigments*, **2018**, 156, 326–331.
22. Sheng Ding, He Lin, **Yuming Yu**, Lang Liu\*, Caiming Deng, Jianzhang Zhao, Dianzeng Jia\*, Molecular Orbital Delocalization/Localization-Induced Crystal-to-Crystal Photochromism of Schiff Bases without ortho-Hydroxyl Groups, *J Phys. Chem. C*, **2018**, 122 (43), 24933–24940
23. Vaclav Janout, Wiley A. Schell, Damien Th evenin, **Yuming Yu**, John R. Perfect, Steven L. Regen\*, Taming Amphotericin B, *Bioconjugate Chemistry*. **2015**, 26, 2021–2024
24. Lijun Shi, Dazhi Yang, Francesca Colombo, **Yuming Yu**, Wen-Xiong Zhang, Liangbing Gan\*, Punching a Carbon Atom of C60 into its Own Cavity to Form Endohedral Complex CO@C59O6 under Mild Conditions, *Chem. Eur. J.* **2013**, 19(49), 16545-16549
25. Liang Xu, Qianyan Zhang, Gang Zhang, Sisi Liang, **Yuming Yu**, Liangbing Gan\*, Regioselective Diels-Alder Reactions Directed by Carbonyl Groups on the Rim of Open-Cage Fullerene Derivatives, *Eur. J. Org. Chem.* **2013**, 7272–7276
26. Shuming Liu, Qianyan Zhang, **Yuming Yu**, and Liangbing Gan\*, Head-to-Tail and Back-to-Back Dimerization of an Open-Cage Fullerene Derivative through  $\pi$ - $\pi$  Interaction-Based Self-Assembly, *Org. Lett.* **2012**, 14(15), 4002-4005
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**授权专利：**

1.Reduced toxicity molecular conjugates of anti-fungal agents,publication date: Feb 16, 2017, USA, Steven L.Regen\*, Vaclav Janout, **Yuming Yu**, Patent No.US20170042923, ( 美国专利 )