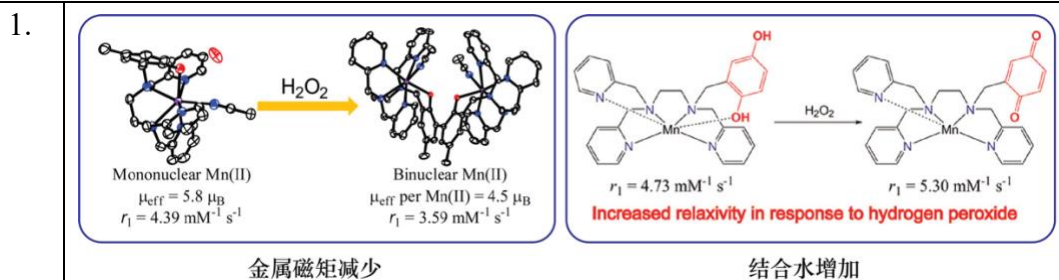


<u>基本信息</u>	
姓名	余蒙
职称	特别研究员/博士生导师
联系电话	
电子邮件	mengyu@bit.edu.cn
系/研究所	无机化学研究所
	
<u>教育背景</u>	
2010.08-2015.08	奥本大学（美国），化学专业，理学博士
2006.09-2010.06	武汉大学，化学专业，理学学士
<u>工作履历</u>	
2021.01-至今	北京理工大学，化学与化工学院，特别研究员，博士生导师
2019.08-2020.10	卡尔加里大学（加拿大），化学学院，博士后研究员
2015.09-2019.04	德州大学奥斯汀分校（美国），化学学院，博士后研究员
<u>研究方向</u>	
<p>课题组主要致力于金属配合物分子磁性的基础研究及其核磁共振成像方面的应用。通过设计合成新颖的金属配合物，深入发掘配合物结构以及分子空间排布与磁性之间的关系，探索分子磁性调控的新途径，并创造性地应用于新型核磁共振造影剂和核磁探针的设计中。</p>	
1.	磁交换多核金属配合物在核磁造影剂中的应用
2.	响应型多稳态分子材料的构建
3.	金属配合物超分子自组装和磁性研究
<u>荣誉奖励</u>	
1.	Outstanding International Graduate Student Award, Auburn University, 2015
2.	AU-CMB/NSF EPSCoR program summer Graduate Research Fellowship, Auburn University, 2013
3.	“Dow” fellowship, Auburn University 2013
<u>承担项目</u>	

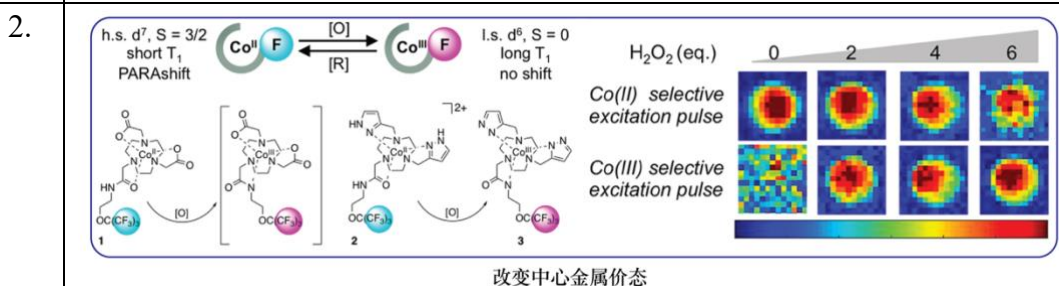
1. 北京理工大学青年教师学术启动计划（2021-2023），主持

研究成果

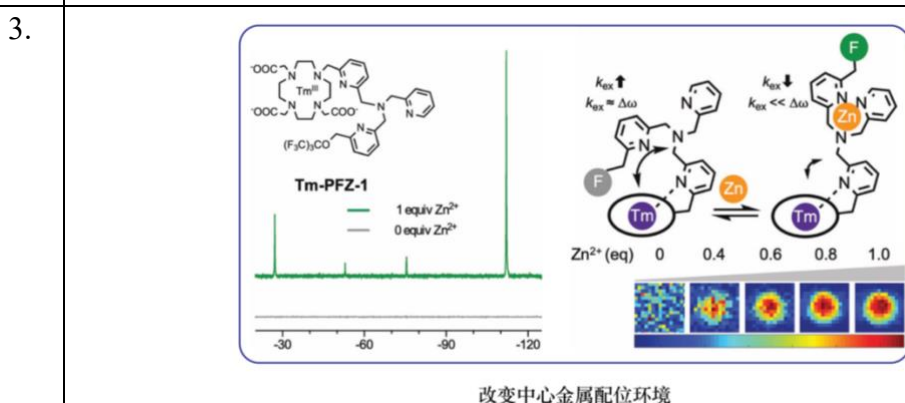
迄今在 *Nature Chem.*, *Acc. Chem. Res.*, *J. Am. Chem. Soc.*, *Chem. Commun.*, *Inorg. Chem.* 等学术刊物共发表学术论文 16 篇，其中 SCI 收录 16 篇，获授权美国专利 1 项。



通过配合物配体结构变化改变配合物磁性大小或中心金属配位环境，产生 ^1H MRI 信号变化来检测 H_2O_2 。



将 ^{19}F MRI 运用于氧化应激 (oxidative stress) 的检测。通过改变配位金属离子的氧化还原价态实现配合物抗磁性和顺磁性的相互转化，导致配合物中氟原子弛豫时间和化学位移的变化。



可否通过改变动态交换的速率调控 MRI 信号强弱？该工作以镧系金属配合物为模版，通过锌离子的结合增加整体结构的刚性、减缓了各构象异构体之间的动态交换，使 ^{19}F MRI 信号显著增强。这项研究为金属离子以及其他生物靶标的检测提供了一种新的设计思路。

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9.	Meghan B. Ward, Andreas Scheitler, Meng Yu , Laura Senft, Annika S. Zillmann, John D. Gorden, Dean D. Schwartz, Ivana Ivanović-Burma*, Christian R. Goldsmith*, Superoxide Dismutase Activity Enabled by a Redox-Active Ligand rather than a Metal, <i>Nature Chem.</i> , 2018, 10, 1207-1212. Featured by 22 news outlets.
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14.	Rahul T Kadakia, Da Xie, Hongyu Guo, Bailey Bouley, Meng Yu , Emily L. Que*, Responsive fluorinated nanoemulsions for ¹⁹ F magnetic resonance detection of cellular hypoxia, <i>Dalton Trans.</i> , 2020 , 49, 16419-16424.
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