杭彦迪

出生日期: 1990 年 2 月 20 日　　华东理工大学精细化工所

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教育背景

2017.07 至今	华东理工大学	应用化学	博士研究生
2016.09-2017.06	**新加坡国立大学**	化学与生物工程	**联合培养博士生(CSC 奖学金)**
2012.09-2016.08	华东理工大学	应用化学	硕博连读研究生 (保送)
2008.09-2012.07	华东理工大学	应用化学	学士学位 (**Top 10%**)

科研经历及研究成果

从事科研 **5 年半**，已发表论文 **13 篇**均为 **SCI 收录(3 篇**一作)，还有 **2 篇**论文待发表

2016.09-2017.06　**新加坡国立大学　刘斌教授**课题组　**国家公派联合培养博士生**

- 获得国家留学基金委 2016 年公派联合培养博士生项目奖学金，前往新加坡国立大学(2016 年 QS 世界大学排行榜第 12 位)的刘斌教授课题组研究聚集诱导发光材料，**该组在同领域处于世界领先地位**(其中刘斌教授发表文章>250,他引次数>10000,H 因子 = 56)
- 设计并合成了一系列新的发射在近红外区域，基于吡咯并吡咯二酮的聚集诱导发光材料，分别用半乳糖和甘露糖修饰后，利用糖-蛋白相互作用能分别对三种不同癌细胞进行靶向定位及在近红外区域荧光成像，该研究成果正在整理待发表
- 课题组博士及博后近 30 人，通过工作和生活中交流，学会了理解、包容以及团队协作

2012.09-2016.09　**国家自然科学基金项目　导师：花建丽教授**

- 独立设计并合成了一系列新的基于吡咯并吡咯二酮的聚集诱导发光材料，可以根据不同需求对荧光团进行适当的修饰来实现不同的功能，目前已成功实现了对蛋白质(例如牛血清蛋白，凝集素)等的检测及近红外区细胞成像，对体内重要小分子柠檬酸在动物血清中的检测以及对亚细胞器的定位及成像，其中一些研究成果已发表在 ***Analytical Chemistry***, ***Biosensors and Bioelectronics*** 等 **SCI 收录国际**期刊上

获奖情况

2012.09-2016.12	东岳天鼎奖学金，华东理工高水平期刊论文奖学金(2 次)	
2008.09-2012.7	校综合课程一等奖学金 1 次	获奖比例 **3%**
	校综合课程二等奖学金 2 次	获奖比例 **10%**
	校综合课程三等奖学金 1 次	获奖比例 **20%**
	上海化学工业区理工教学助学金	
2011.10	以学院**第一名**成绩**保送**本校硕博连读研究生	

技能

科 研	✓ 熟练掌握查阅文献，并提炼创新点 ✓ 独立设计实验能力 ✓ 擅长有机合成(包括 Suzuki, Buchwald, Ullmann 等偶联方法)及纳米材料包裹修饰荧光材料 ✓ 熟练掌握紫外、荧光光谱，循环伏安法，SEM，DLS 等测试方法
外 语	✓ 英语水平良好 **IELTS 6.5**
计 算 机	✓ 熟练使用 Microsoft office，Chemoffice，MestReNova，Origin，Photoshop 以及 Endnote 等软件

主要发表文章

1. **Y. D. Hang**, J. Wang, T. Jiang, N. N. Lu, J. L. Hua. Diketopyrrolopyrrole-based ratiometric/turn-on fluorescent chemosensors for citrate detection in the near-infrared region by an aggregation-induced emission mechanism. ***Anal. Chem***. 2016, 88, 1696−1703. (**JCR 一区，IF: 6.32**)
2. **Y. D. Hang**, X. P. He, L. Yang, J. L. Hua. Probing sugar– lectin recognitions in the near-infrared region using glyco-diketopyrrolopyrrole with aggregation-induced-emission. ***Biosensors and Bioelectronics*** 2015, 65, 420-426. (**JCR 一区，IF: 7.78**)
3. **Y. D. Hang**, Lin Yang, Y. Qu, J. L. Hua. A new diketopyrrolopyrrole-based near-infrared (NIR) fluorescent biosensor for BSA detection and AIE-assisted bioimaging. ***Tetrahedron Letters*** 2014, 55, 6998–7001.
4. J. Wang, **Y. D. Hang**, H. Q. Tan, T. Jianga, X. Qu, J. L. Hua. Two new colorimetric and ratiometric fluorescent probes based on diketopyrrolopyrrole (DPP) for detecting and imaging of mitochondrial SO2 derivatives in cancer cells. ***Journal of Photochemistry and Photobiology A: Chemistry***, 2017, 346, 265-272.
5. X. Zhang, **Y. D. Hang**, W. S. Qu, Y. Yan, P. Zhao, J. L. Hua. Diketopyrrolopyrrole-based ratiometric fluorescent probe for the sensitive and selective detection of cysteine over homocysteine and glutathione in living cells. ***RSC Advances*****,** 2016, *6*, 20014-20020.
6. X. Zhang, Y. C. Yan, **Y. D. Hang**, J. Wang, J. L. Hua, H. Tian. A phenazine-barbituric acid based colorimetric and ratiometric near-infrared fluorescent probe for sensitively differentiating biothiols and its application in TiO 2 sensor devices. ***Chemical Communications*****,** 2017, *53*, 5760-5763.
7. T. Jiang, N. N. Lu, **Y. D. Hang,** J. Yang, J. Mei, J. Wang, J. L. Hua, H. Tian. Dimethoxy triarylamine-derived terpyridine–zinc complex: a fluorescence light-up sensor for citrate detection based on aggregation-induced emission. ***Journal of Materials Chemistry C***, 2016, 4, 10040-10046.
8. T. Jiang, D. Y. Li, **Y. D. Hang**, Y. T. Gao, H. Q. Zhang, X. Y. Zhao, X. Li, B. Li, J. Qian, J. L. Hua. Tetraphenylethene end-capped diketopyrrolopyrrole fluorogens with AIE and large two-photon absorption cross-sections features and application in bioimaging. ***Dyes and Pigments***, 2016, 133, 201-213.

Yandi Hang

Date of Birth: 1990. 0
Gender: Female

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EDUCATION

2017.07-Present	ECUST	Applied Chemistry	Ph.D candidate
2016.09-2017.06	**NUS**	Chemical and Biomolecular Engineering	**Visiting Ph.D(CSC Scholarship)**
2012.09-2016.08	ECUST	Applied Chemistry	Ph.D candidate
2008.09-2012.07	ECUST	Applied Chemistry	Bachelor (**Top 10%**)

RESEARCH EXPERIENCES

During 5.5-year of research, 13 scientific papers (3 were first author) were published, 2 papers are preparing

Sep 2016- Jun 2017 **National University of Singapore (NUS)** **Prof. Liu Bin**

- Supported by China Scholarship Council (CSC) for studying at NUS(top 12 in QS World Universities Rankings in 2016) as a visiting student supervised by Prof. Liu Bin who focus on aggregation induced emission (AIE) materials (Publications > 250; >10000 citations; H index = 56)
- Designed and synthesized a series of near-infrared (NIR) fluorescent dyes with AIE properties based on 1,4-Diketo-3,6-diphenylpyrrolo[3,4-c]pyrrole (DPP) derivatives. After functionalized with galactose and mannose, these materials has successfully targeted three different cancer cells and applied in cell imaging in NIR region. This work has been summarized and waiting for submition.
- Communicated with different people from different countries in the lab. Deeply know the importance of tolerance, understanding and cooperation.

Sep 2012-Aug 2016 **ECUST** **Ph.D Program** **Prof. Jianli Hua**

- Designed and synthesized a series of near-infrared (NIR) fluorescent dyes with AIE properties based on DPP derivatives for probing proteins, lectins and critical biological molecules and imaging organelles in cells. And some of outcomes were published in ***Analytical Chemistry***, ***Biosensors and Bioelectronics*** etc international journals (SCI)

HONORS & SCHOLARSHIP

Sep 2012-Dec 2016	Dongyuetianding Scholarship, High level journal Scholarship of ECUST（twice）	
Sep 2008-Jul 2012	Integrated first class scholarship of ECUST (once)	**Top 3%**
	Integrated second class scholarship of ECUST (twice)	**Top 10%**
	Integrated third class scholarship of ECUST (once)	**Top 20%**
	Shanghai Assistant Scholarship of chemical engineering	
Oct 2011	Got first place of postgraduate recommendation in ECUST	

SKILLS

Research	✓	Good at searching for literature and summering innovations
	✓	Design new experiment process for target
	✓	Master the technique of organic synthesis (including Suzuki, Buchwald, Ullmann coupling etc) and preparation of nano particles
	✓	Manipulation of frequently employed instruments such as UV-vis spectrometer, PL spectrometer, cyclic voltammetry, SEM, DLS, etc
Foreign language	✓	English **IELTS 6.5**
Computer	✓	Proficient in Microsoft office， Chemoffice， MestReNova， Origin， Photoshop and Endnote, etc.

PUBLICATIONS

1. **Y. D. Hang**, J. Wang, T. Jiang, N. N. Lu, J. L. Hua. Diketopyrrolopyrrole-based ratiometric/turn-on fluorescent chemosensors for citrate detection in the near-infrared region by an aggregation-induced emission mechanism. ***Anal. Chem***. 2016, 88, 1696−1703. (**SCI 一区，IF: 6.32**)
2. **Y. D. Hang**, X. P. He, L. Yang, J. L. Hua. Probing sugar– lectin recognitions in the near-infrared region using glyco-diketopyrrolopyrrole with aggregation-induced-emission. ***Biosensors and Bioelectronics*** 2015, 65, 420-426. (**SCI 一区，IF: 7.78**)
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4. J. Wang, **Y. D. Hang**, H. Q. Tan, T. Jianga, X. Qu, J. L. Hua. Two new colorimetric and ratiometric fluorescent probes based on diketopyrrolopyrrole (DPP) for detecting and imaging of mitochondrial SO2 derivatives in cancer cells. ***Journal of Photochemistry and Photobiology A: Chemistry***, 2017, 346, 265-272.
5. X. Zhang, **Y. D. Hang**, W. S. Qu, Y. Yan, P. Zhao, J. L. Hua. Diketopyrrolopyrrole-based ratiometric fluorescent probe for the sensitive and selective detection of cysteine over homocysteine and glutathione in living cells. ***RSC Advances*****,** 2016, *6*, 20014-20020.
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7. T. Jiang, N. N. Lu, **Y. D. Hang,** J. Yang, J. Mei, J. Wang, J. L. Hua, H. Tian. Dimethoxy triarylamine-derived terpyridine–zinc complex: a fluorescence light-up sensor for citrate detection based on aggregation-induced emission. ***Journal of Materials Chemistry C***, 2016, 4, 10040-10046.
8. T. Jiang, D. Y. Li, **Y. D. Hang**, Y. T. Gao, H. Q. Zhang, X. Y. Zhao, X. Li, B. Li, J. Qian, J. L. Hua. Tetraphenylethene end-capped diketopyrrolopyrrole fluorogens with AIE and large two-photon absorption cross-sections features and application in bioimaging. ***Dyes and Pigments***, 2016, 133, 201-213.