



个人简介：

姓名：颜范勇 出生年月：1975.12
技术职务：副教授 专业及学历： 制药工程 博士
办公电话： 83955766
电子邮箱： yanfanyong@tjpu.edu.cn

工作及教育经历：

2007/01 - 至今，天津工业大学，环境与化学工程学院制药工程系，副教授
2017/03 - 2017/12，日本北海道大学，先端生命科学研究院，访问学者
2004/03 - 2007/01，天津大学，药物科学与技术学院，博士
2001/09 - 2004/03，天津大学，化工学院，硕士
1998/07 - 2001/09，沈阳化工研究院，研发工程师
1994/09 - 1998/07，大连理工大学，化工学院，学士

研究方向：

1. 荧光探针和分子传感器：荧光探针和分子传感器结构与功能的调控及其在环境监测、生物分析、医学诊断中的应用。
2. 精细化学品清洁制备技术：精细化学品合成新技术、功能微球的构建技术、精细化工节能降耗新技术。

荣誉称号：

1. 天津市高校“中青年骨干创新人才培养计划”人选
2. 天津工业大学“教学名师”

获奖与社会兼职：

1. 香港桑麻基金会“桑麻奖”
2. 天津市特种功能性聚酯薄膜材料企业重点实验室技术顾问

主持及参加的科研项目：

1. 碳点-罗丹明比率型荧光共振能量转移体系及传感响应性,天津市应用基础与前沿技术研究计划, 10万元, 主持
2. 温敏型超分子荧光凝胶材料制备及其性能研究,天津市科技特派员项目, 5万元, 主持
3. 双重功能化修饰的聚偏氟乙烯血液透析膜及其血液相容性研究, 国家自然科学基金面上项目, 83万元, 第二承担
4. 基于聚硅氧烷膜材料的碳点-罗丹明FRET 比率型荧光传感器的制备及性能研究, 天津市应用基础与前沿技术研究计划, 10万元, 第二承担
5. 快速吸附-超滤一体化单兵突发应急饮用水净化技术及装备研究, 2018年天津市科技军民融合重大专项项目, 100万元, 第三承担
6. 高分子薄膜聚酯材料的研制与开发, 企业委托, 30万元, 主持
7. 环氧丙烷生产装置废水分离可行性方案及成分检测, 企业委托, 12万元, 主持
8. 祛痰药物福多司坦的合成及中试研究, 企业委托, 10万元, 主持
9. 甲苯气相三氧化硫磺化工艺条件及动力学研究, 天津市应用基础与前沿技术研究计划, 10万元, 主要完成人

代表性学术论文：

1. **Fanyong Yan**, Fanlin Zu, Jinxia Xu, Xuguang Zhou, Zhangjun Bai, Cong Ma, Yunmei Luo, Liang Chen, **Sensors and Actuators B: Chemical**, 2019, 287:231-240
2. **Fanyong Yan**, Bai Zhangjun, Chen Yuan, Zu Fanlin, Li Xing, Xu Jinxia, Chen Liang, Ratiometric fluorescent detection of copper ions using coumarin-functionalized carbon dots based on FRET. **Sensors and Actuators B: Chemical**, 2018, 275: 86-94.
3. **Fanyong Yan**, Jiang Yingxia, Sun Xiaodong, Bai Zhangjun, Zhang Yan, Zhou Xuguang, Surface modification and chemical functionalization of carbon dots: a review[J]. **Microchimica Acta**, 2018, 185(9): 424.
4. **Fanyong Yan**, Sun Xiaodong, Zu Fanlin, Bai Zhangjun, Jiang Yingxia, Fan Keqing, Wang Jie, Fluorescent probes for detecting cysteine. **Methods and applications in fluorescence**, 2018, 6(4): 042001. WOS:000440931700001, ISSN: 2050-6120.

5. **Fanyong Yan**, Bai Zhangjun, Liu Fan, Zu Fanlin, Zhang Ruiqi, Xu Jinxia, Chen Li. Ratiometric Fluorescence Probes Based on Carbon Dots. **Current Organic Chemistry**, 2018, 22(1): 57-66.
6. Bai Zhangjun, **Fanyong Yan***, Xu Jinxia, Zhang Jin, Wei Junfu, Luo Yunmei, Chen Liang, Dual-channel fluorescence detection of mercuric (II) and glutathione by down- and up-conversion fluorescence carbon dots, **Spectrochimica Acta Part A-Molecular and Biomolecular Spectroscopy**, 2018, 205: 29-39
7. Wang Yinyin, **Fanyong Yan***, Kong Depeng, Zu Fanlin, Bai Zhangjun, Xu Jinxia, Chen Li. Carbon dots as fluorescent probe for selective and sensitive detection of cerium (III) ion. **Desalination and Water Treatment**, 2018, 107: 147-154
8. Xu Jinxia, Bai Zhangjun, Zu Fanlin, **Fanyong Yan***, Wei Junfu, Zhang Saihui, Luo Yunmei, A dual spectroscopic fluorescence probe based on carbon dots for detection of 2, 4, 6-trinitrophenol/Fe (III) ion by fluorescence and frequency doubling scattering spectra and its analytical applications. **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 2018, 200: 150-157
9. **Fanyong Yan***, Qianghua Ye, Jinxia Xu, Juanjuan He, Li Chen, Xuguang Zhou*, Carbon dots-bromoacetyl bromide conjugates as fluorescence probe for the detection of glutathione over cysteine and homocysteine, **Sensors and Actuators B-Chemical**, 2017, 251: 753-762
10. **Fanyong Yan**, Keqing Fan, Zhangjun Bai, Ruiqi Zhang, Fanlin Zu, Jinxia Xu, Xiang Li, Fluorescein applications as fluorescent probes for the detection of analytes, **TRAC - Trends in Analytical Chemistry**, 2017, (97) 15-35
11. Depeng Kong, **Fanyong Yan***, Yunmei Lu, Qianghua Ye, Siyushan Zhou, Li Chen*, Amphiphilic carbon dots for sensitive detection, intracellular imaging of Al³⁺, **Analytica Chimica Acta**, 2017, 953: 63-70
12. Juanjuan He, **Fanyong Yan***, Depeng Kong, Qianghua Ye, Xuguang Zhou*, Li Chen, Fluorescent probes for glutathione detection, **Current Organic Chemistry**, 2016, 20(25): 2718-2734
13. Qianghua Ye, **Fanyong Yan***, Yunmei Luo, Yinyin Wang, Xuguang Zhou*, Li Chen, Formation of N, S-codoped fluorescent carbon dots from biomass and their application for the selective detection of mercury and iron ion, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Spectrochim Acta A)**, 2017, 173: 854-862
14. Qianghua Ye, **Fanyong Yan***, Depeng Kong, Jin Zhang, Xuguang Zhou, Jinxia Xu, Li Chen, Constructing a fluorescent probe for specific detection of catechol based on 4-carboxyphenylboronic acid-functionalized carbon dots, **Sensors and Actuators B-Chemical**, 2017, 250: 712-720
15. Fanlin Zu, **Fanyong Yan***, Zhangjun Bai, Jinxia Xu, Yinyin Wang, Yicun Huang, Xuguang Zhou*, The quenching of the fluorescence of carbon dots: A review on mechanisms and applications. **Microchimica Acta**, 2017, 184(7):1899-1914 **ESI 高被引论文+热点论文**
16. Yicun Huang, **Fanyong Yan***, Jinxia Xu, Yuyao Bian, Ruiqi Zhang, Jie Wang, Xuguang Zhou,

The FRET performance and aggregation-induced emission of two-dimensional organic-inorganic perovskite, and its application to the determination of Hg (II). **Microchimica Acta**, **2017**, 184(9): 3513-3519

17. Yicun Huang, **Fanyong Yan***, Manman Fu, Ruiqi Zhang, Xuguang Zhou, Jinxia Xu, Silica-based optical chemosensors for detection and removal of metal ions, **Journal of the Iranian Chemical Society**, **2017**, 14(1): 157-176
18. Rui Xu, Qianqian Feng, Yang He, **Fanyong Yan**, Li Chen, Yiping Zhao, Dual functionalized poly(vinylidene fluoride) membrane with acryloylmorpholine and argatroban to improve antifouling and hemocompatibility, *Journal of Biomedical Materials Research Part A*, 2017, 105(1): 178-188
19. **Fanyong Yan***, Dechao Shi, Tancheng Zheng, Kaiyi Yun, Xuguang Zhou, Li Chen*, Carbon dots as nanosensor for sensitive and selective detection of Hg²⁺ and l-cysteine by means of fluorescence “Off-On” switching, **Sensors and Actuators B-Chemical I**, 2016, 224: 926-935
20. **Fanyong Yan***, Depeng Kong, Yang Fu, Qianghua Ye, Yinyin Wang, Li Chen*, Construction of carbon nanodots/tungsten trioxide and their visible-light sensitive photocatalytic activity, **Journal of Colloid and Interface Science**, 2016, 466: 268-274
21. **Fanyong Yan*** Depeng Kong, Yunmei Luo, Qianghua Ye, Juanjuan He, Xingfei Guo, Li Chen*. Carbon dots serve as an effective probe for the quantitative determination and for intracellular imaging of mercury(II), **Microchimica Acta**, 2016, 183(5): 1611-1618
22. **Fanyong Yan***, Depeng Kong, Yunmei Luo, Qianghua Ye, Yinyin Wang, Li Chen, Carbon nanodots prepared for dopamine and Al³⁺ sensing, cellular imaging and logic gate operation, **Materials Science & Engineering C-Materials for Biological Applications**, 2016, 68: 732-738
23. Depeng Kong, **Fanyong Yan***, Ziyi Han, Jinxia Xu, xingfei Guo, Li Chen, Cobalt(II) ions detection using carbon dots as an sensitive and selective fluorescent probe, **RSC Advances**., 2016, 6(72): 67481-67487 WOS:000380362700003 (2 X 3.289)
24. Ruiqi Zhang, **Fanyong Yan***, Yicun Huang, Depeng Kong, Qianghua Ye, Jinxia Xu, Li Chen, Rhodamine-based ratiometric fluorescent probes based on excitation energy transfer mechanism: construction and applications in ratiometric sensing, **RSC Advances**, 2016, 6(56): 50732-50760
25. Depeng Kong, **Fanyong Yan***, Yunmei Luo, Yinyin Wang, Li Chen*, Fenghai Cui, Carbon nanodots prepared for cellular imaging and turn-on detection of glutathione, **Analytical Methods**, 2016, 8(23): 4736-4743
26. Qianghua Ye, **Fanyong Yan***, Dechao Shi, Tancheng Zheng, Yinyin Wang, Xuguang Zhou*, Li Chen, N, B-doped carbon dots as a sensitive fluorescence probe for Hg²⁺ ions and 2,4,6-trinitrophenol detection for bioimaging, **Journal of Photochemistry and Photobiology B-Biology**, 2016, 162, 1-13
27. Qianghua Ye, **Fanyong Yan***, Depeng kong, Jing wang, Xuguang Zhou*, Li Chen. Synthesis of fluorescent polymers and their applications. **Current Organic Chemistry**. 2016.20(3): 266-

28. Dechao Shi, **Fanyong Yan***, Xuguang Zhou*, Tancheng Zheng, Yangyang Shi, Weigui Fu, Li Chen, Preconcentration and fluorometric detection of mercury ions using magnetic core-shell chitosan microspheres modified with a rhodamine spirolactam, **Microchimica Acta**, 2016, 183(1), 319-327
29. Dechao Shi, **Fanyong Yan***, Tancheng Zheng, Yinyin Wang, Xuguang Zhou, Li Chen, P-doped carbon dots act as nanosensor for trace 2,4,6-trinitrophenol detection and fluorescent reagent for bacterial labeling. **RSC Advances**, 2015, 5, 98492-98499
30. Gao Youzhi, He Yang, Zhao Yiping, Chen Li*, **Fanyong Yan***. Fabrication of thermosensitive hydrogel-supported Ni nanoparticles with tunable catalytic activity for 4-nitrophenol. **J Mater Sci**
31. **Fanyong Yan**, Tancheng Zheng, Dechao Shi, Yu Zou, Ya Wang, Manman Fu, Li Chen, Weigui Fu Rhodamine-aminopyridine based fluorescent sensors for Fe³⁺ in water: Synthesis, quantum chemical interpretation and living cell application, **sensors and actuators b-chemical**, 2015, 215: 598-606)
32. **Fanyong Yan**, Tancheng Zheng, Shanshan Guo, Dechao Shi, Ziyi Han, SiyuShan Zhou, Li Chen, New fluorescence probe for Fe(3+) with bis-rhodamine and its application as a molecular logic gate. **Spectrochimica acta part A: molecular and biomolecular spectroscopy**, 2015, 151: 881-887 9602533
33. Depeng Kong, **Fanyong Yan***, Dechao Shi,, Qianghua Ye, Ziyi Han • Li Chen, Lue Wang. Carbon dots: synthetic methods and applications as fluorescent probes for the detection of metal ions, inorganic anions and organic molecules. **Journal of the Iranian Chemical Society**, 2015, 12(10), 1841-1857
34. 付杨, **颜范勇***, 郑坦承, 母雪玲, 孙凤展, 陈莉*, 反应型罗丹明类荧光探针, **化学进展**, 2015, 27 (9): 1213-1229
35. Yu Zou, **Fanyong Yan***, Tancheng Zheng, Dechao Shi, , Ning Yang, Li Chen. Highly luminescent organosilane-functionalized carbon dots as a nanosensor for sensitive and selective detection of quercetin in aqueous solution. **Talanta**, 2015, 135, 145-148 0
36. Tancheng Zheng, **Fanyong Yan***, Dechao Shi, Yu Zou, Shenglan Zhang, Li Chen. Fluorescent Probes for Detection of Lead Ion. **Recent Innovations in Chemical Engineering**, 2014, 7, 10-16
37. Dechao Shi, Xuguang Zhou, Tancheng Zheng, Yu Zou, Shanshan Guo, Jia Lv, **Fanyong Yan***. Recognition and Fluorescent Sensing of Zinc Ions using Organic Fluorophores-based Sensor Molecules. **Journal of the Iranian Chemical Society**, 2015, 12(2), 293-308
38. Dechao Shi, **Fanyong Yan***, Meng Wang, Yu Zou, Tancheng Zheng, Xuguang Zhou, Li Chen, Rhodamine derivative functionalized chitosan as efficient sensor and adsorbent for mercury(II) detection and removal, **Materials Research Bulletin**, 2015, 70, 958-964.
39. Yu Zou, **Fanyong Yan***, Linfeng Dai, Yunmei Luo, Yang Fu, Ning Yang, Jingyun Wun, Li

Chen, High Photoluminescent Carbon Nanodots and Quercetin- Al^{3+} Construct A Ratiometric Fluorescent Sensing System, **Carbon**, 2014, 77, 1148-1156

40. **Fanyong Yan***, Yu Zou, Meng Wang, Xueling Mu, Ning Yang, Li Chen. Highly photoluminescent carbon dots-based fluorescent chemosensors for sensitive and selective detection of mercury ions and application of imaging in living cells. **Sensors and Actuators B**, 2014, 192: 488-495 **ESI 高被引论文**
41. MengWang, **Fanyong Yan***, Yu Zou, Li Chen, Ning Yang, Xuguang Zhou. Recognition of Cu^{2+} and Hg^{2+} in physiological conditions by a new rhodamine based dual channel fluorescent probe. **Sensors and Actuators B**, 2014, 192: 512-521
42. Meng Wang, **FanYong Yan***, Yu Zou, Ning Yang, Li Chen*, LiGong Chen. A rhodamine derivative as selective fluorescent and colorimetric chemosensor for mercury(II) in buffer solution, test strips and living cells. **Spectrochimica acta part A: molecular and biomolecular spectroscopy**, 2014, 123: 216-223

代表性专利:

1. 一种环保型一融雪剂, 201810562045. 6
2. 一种检测谷胱苷肽的罗丹明有机荧光探针制造方法, 201811218988. 3
3. 一种应用于检测谷胱甘肽的功能化的碳点, 2017103875649
4. 细胞内 Hg^{2+} 检测用以氧原子为结合位点的荧光探针, 201410545777. 6