李大伟

所属学院 化学与分子工程学院

学科领域 分析化学

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个人简介

李大伟教授于 2008 年在大连理工大学获得博士学位，2008-2011 年在华东理工大学开展博士后研究，2015-2016 年在密歇根大学以访问学者身份从事研究工作。李大伟教授课题组主要以表面增强拉曼散射为基础，开展环境检测与生物分析新材料、新方法、新技术与新器件等研究。

研究方向

生物光谱分析新材料与新方法

环境污染检测新技术与新器件

研究成果及主要发表文章

在国际著名学术期刊上已发表 SCI 论文 40 余篇，授权发明专利 3 项，PCT 专利 1 项，授予中国分析测试协会科学技术奖特等奖 1 项（第三完成人）。代表性论文如下：

1 L. Wang, Z. F. Gan, D. Guo, H. L. Xia, F. T. Patrice, M. E. Hafez, D. W. Li*, Electrochemistry-regulated recyclable SERS sensor for sensitive and selective detection of tyrosinase activity, Anal. Chem. 2019, 91, 6507-6513. (IF=6.042)

2 D. Li, X. Cao, Q. Zhang, X. Ren*, L. Jiang, D. W. Li*, W. Deng* and H. Liu, Facile in situ synthesis of core–shell MOF@Ag nanoparticle composites on screen-printed electrodes for ultrasensitive SERS detection of polycyclic aromatic hydrocarbons, J. Mater. Chem. A, 2019, 7, 14108-14017. (IF=9.931)

3 L. L. Qu, Z. Q. Geng, W. Wang, K. C. Yang, W. P. Wang, C. Q. Han*, G. Yang, R. Vajtai, D. W. Li*, P. M. Ajayan, Recyclable three-dimensional Ag nanorod arrays decorated with O-g-C3N4 for highly sensitive SERS sensing of organic pollutants, J. Hazard. Mater., 2019, 379, 12083-12088. (IF=7.650)

4 D. Li, Y. Ma, H. Duan, W. Deng*, D. W. Li*, Griess reaction-based paper strip for colorimetric/fluorescent/SERS triple sensing of nitrite, Biosens. Bioelectron., 2018, 99, 389-398. (IF=8.173)

5 L. L. Qu, Y. Y. Liu, M. K. Liu, G. H. Yang, D. W. Li*, H.T. Li*, Highly Reproducible Ag NPs/CNT-Intercalated GO Membranes for Enrichment and SERS Detection of Antibiotics, ACS Appl. Mater. Interfaces, 2016, 8, 28180-28186. (IF=8.097)

6 D. W. Li*, L. L. Qu, K. Hu, Y. T. Long*, H. Tian, Monitoring of endogenous hydrogen sulfide in living cells using surface-enhanced Raman spectroscopy. Angew. Chem. Int. Ed., 2015, 127, 12949-12952. (IF=12.102)

7 Y. Cao, D. W. Li*, X. Y. Liu, L. J. Zhao, Y. T. Long*, Highly selective detection of carbon monoxide in living cells by palladacycle carbonylation-based SERS nanosensors. Anal. Chem., 2015, 87 (19), 9696–9701. (IF=6.042)

8 L. L. Qu, D. W. Li*, L. X. Qin, J. Mu, J. S. Fossey, and Y. T. Long, Selective and Sensitive Detection of Intracellular O2 Using Au NPs Cytochrome c as SERS Nanosensors, Anal. Chem., 2013, 85 (20), 9549-9555. (IF=6.042)

9 Y. T. Li, L. L. Qu, D. W. Li*, Q. X. Song, Y. T. Long*, Rapid and sensitive in-situ detection of polar antibiotics in water using a disposable Ag-graphene sensor based on electrophoretic preconcentration and surface-enhanced Raman spectroscopy, Biosens. Bioelectron., 2013, 43, 94-100. (IF=8.173)

10 L. L. Qu, D. W. Li*, J. Q. Xue, W. L. Zhai, J. S. Fossey, and Y T. Long*, Batch fabrication of disposable screen-printed SERS arrays, Lab Chip, 2012, 12(5), 876 - 881. (IF=5.995)