南京农业大学人工智能学院师资队伍（个人信息）

<table>
<tr><td>姓　名</td><td>赵国</td><td>性　别</td><td>男</td><td rowspan="3">  </td></tr>
<tr><td>学　位</td><td>博士</td><td>职　称</td><td>副教授</td></tr>
<tr><td>部　门
（系别）</td><td>人工智能学院
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<tr><td>通信地址</td><td colspan="3">南京市浦口区点将台路 40 号</td><td></td></tr>
<tr><td>个人简介</td><td colspan="4">● 教育经历：
2009.09-2013.06 山东理工大学 农业机械化及其自动化 学士
2013.09-2015.06 山东理工大学 农业工程 硕士
2015.09-2020.01 中国农业大学 农业电气化与自动化 博士
● 工作经历
2017.09-2019.09 美国加州大学河滨分校 化学与环境工程学院 联合培养
2020.01-2020.08 南京农业大学 工学院 副教授
2020.08-至今 南京农业大学 人工智能学院 副教授</td></tr>
<tr><td>研究领域</td><td colspan="4">(1) 纳米传感材料合成及柔性微纳传感器件制备
(2) 农业智能传感器、检测技术及智能装备
(3) 面向传感器的新型储能器件及应用</td></tr>
<tr><td>教授课程</td><td colspan="4"></td></tr>
<tr><td>承担项目</td><td colspan="4">(1) 南京农业大学人才引进科研启动基金 (2020-01 至 2023-01) 主持
(2) 江苏省自然科学基金青年基金 (2020-07 至 2023-06) 主持
(3) 国家自然科学基金青年基金 (2021-01 至 2023-12) 主持
(4) 国家自然科学基金面上项目 (2021-01 至 2024-12) 第一参与人
(5) 国家重点研发计划中英联合项目 (2021 至 2023/2024) 参与</td></tr>
<tr><td>学术成果
(论文、专利、软著等)</td><td colspan="4">发表论文情况：
[1] Zhao Guo, Liu Gang*. Electrochemical Deposition of Gold Nanoparticles on Reduced Graphene Oxide by Fast Scan Cyclic Voltammetry for the Sensitive Determination of As (III). Nanomaterials, 2019, 9(1): 41.
[2] Zhao Guo, Liu Gang*. Synthesis of a three-dimensional $(BiO)_2CO_3$@single-walled carbon nanotube nanocomposite and its application for ultrasensitive detection of trace Pb (II) and Cd (II) by incorporating Nafion. Sensors and Actuators B: Chemical, 2019, 288: 71-79.
[3] Zhao Guo, Liu Gang*. Synthesis and characterization of a single-walled carbon nanotubes/L-cysteine/Nafion-Ionic liquid nanocomposite and its application in the ultrasensitive determination of Cd(II) and Pb(II). Journal of Applied Electrochemistry, 2019, 49(6): 609-619.
[4] Zhao Guo, Liu Gang*. Interference Effects of Cu (II) and Pb (II) on the Stripping Voltammetric Detection of Cd (II): Improvement in the Detection</td></tr>
</table>

	Precision and Interference Correction. *Journal of the Electrochemical Society*, 2018, 165(9): H488-H495. [4] **Zhao Guo**, Wang Hui, Liu Gang*. Sensitive determination of trace Cd (II) and Pb (II) in soil by an improved stripping voltammetry method using two different in situ plated bismuth-film electrodes based on a novel electrochemical measurement system. *RSC Advances*, 2018, 8(10): 5079-5089. [5] **Zhao Guo**, Liu Gang*. A Portable Electrochemical System for the On-site Detection of Heavy Metals in Farmland Soil Based on Electrochemical Sensors. *IEEE Sensors Journal*, 2018, 14(18): 5645-5655. [6] **Zhao Guo**, Wang Hui, Liu Gang*, Wang Z Q. Simultaneous and Sensitive Detection of Cd (II) and Pb (II) Using a Novel Bismuth Film/Ordered Mesoporous Carbon-molecular Wire Modified Graphite Carbon Paste Electrode *Electroanalysis*, 2017, 29(2): 497-505. [8] **Zhao Guo**, Wang Hui, Liu Gang*, Cheng Jin. Simultaneous determination of trace Cd (II) and Pb (II) based on Bi/Nafion/reduced graphene oxide-gold nanoparticle nanocomposite film-modified glassy carbon electrode by one-step electrodeposition. *Ionics*, 2017, 23(3): 767-777. [9] **Zhao Guo**, Wang Hui, Yin Yuan, Liu Gang*. PSO-SVM applied to SWASV studies for accurate detection of Cd (II) based on disposable electrode. *International Journal of Agricultural and Biological Engineering*, 2017, 10(5): 251-261. [10] **Zhao Guo**, Wang Hui, Liu Gang*. Recent Advances in Chemically Modified Electrodes, Microfabricated Devices and Injection Systems for the Electrochemical Detection of Heavy Metals: A review. *International Journal of Electrochemical Science*, 2017, 12(9): 8622-8641. [11] **Zhao Guo**, Wang Hui, Liu Gang*. Direct quantification of Cd^{2+} in the presence of Cu^{2+} by a combination of anodic stripping voltammetry using a bi-film-modified glassy carbon electrode and an artificial neural network. *Sensors*, 2017, 17(7): 1558-1573. [12] **Zhao Guo**, Yin Yuan, Wang Hui, Liu Gang*, Wang Zhiqiang. Sensitive stripping voltammetric determination of Cd (II) and Pb (II) by a Bi/multi-walled carbon nanotube-emeraldine base polyaniline-Nafion composite modified glassy carbon electrode. *Electrochimica Acta*, 2016, 220: 267-275. [13] **Zhao Guo**, Wang Hui, Liu Gang*, Wang Zhiqiang. Box–Behnken response surface design for the optimization of electrochemical detection of cadmium by Square Wave Anodic Stripping Voltammetry on bismuth film/glassy carbon electrode. *Sensors and Actuators B: Chemical*, 2016, 235: 67-73. [14] **Zhao Guo**, Wang Hui, Liu Gang*, Wang Zhiqiang. Simultaneous determination of Cd (II) and Pb (II) based on bismuth film/carboxylic acid functionalized multi-walled carbon nanotubes-beta-cyclodextrin-nafion nanocomposite modified electrode. *International Journal of Electrochemical Science*, 2016, 11: 8109-8122. [15] **Zhao Guo**, Wang Hui, Liu Gang*. Electrochemical determination of trace cadmium in soil by a bismuth film/graphene-beta-cyclodextrin-nafion composite modified electrode. *International Journal of Electrochemical Science*, 2016, 11:

	1840-1851. [16] **Zhao Guo**, Wang Hui, Liu Gang*, Wang Zhiqiang. Optimization of stripping voltammetric sensor by a back propagation artificial neural network for the accurate determination of Pb (II) in the presence of Cd (II). *Sensors*, 2016, 16(9): 1540. [17] **Zhao Guo**, Si Yongsheng, Wang Hui, Liu Gang*. A portable electrochemical detection system based on graphene/ionic liquid modified screen-printed electrode for the detection of cadmium in soil by square wave anodic stripping voltammetry. *International Journal of Electrochemical Science*, 2016, 11: 54-64. [18] **Zhao Guo**, Xu Qingcui, Zhang Qianqian, Guo Yemin*, Sun Xia, Wang Xiangyou. Study on Aptasensors Modified by Ionic Liquid-Fe_3O_4 Based on Microarray Electrodes for Tetracycline Detection. *International Journal of Electrochemical Science*, 2016, 11: 1699-1706. [19] **Zhao Guo**, Wang Hui, Liu Gang*. Advances in biosensor-based instruments for pesticide residues rapid detection. *International Journal of Electrochemical Science*, 2015, 10(12): 9790-9807. [20] **Zhao Guo**#, Guo Yemin#, Sun Xia*, Wang Xiangyou. A system for pesticide residues detection and agricultural products traceability based on acetylcholinesterase biosensor and internet of things. *International Journal of Electrochemical Science*, 2015, 10(4): 3387-3399. [21] **赵国**，孙霞*，王相友．基于物联网技术和生物传感器技术的蔬菜质量安全溯源系统研究．*食品安全质量检测学报*, 2015, 6(03): 747-755. [22] **Zhao Guo**, Sun Xia*, Guo Yemin, Wang Xiangyou, Jia Yongxin. A portable instrument based on acetylcholinesterase biosensor for the rapid detection of pesticides residues. *Sensors & Transducers*, 2014, 182(11): 1. **申请专利情况：** [1] 刘刚，**赵国**，王辉．一种土壤重金属电化学原位检测系统及检测方法，2020-04-01，已授权发明专利。 [2] 刘刚，**赵国**，王辉．采用两步电沉积和溶出步骤的土壤重金属伏安检测方法，2019-05-21，已授权发明专利。 [3] 刘刚，**赵国**，王辉．基于脲酶生物传感器的土壤重金属检测仪，2018-04-03，已授权发明专利。 [4] 刘君峰，**赵国**，孙霞，郭业民．一种蔬菜农药残留的物联网追溯系统及应用，2017-11-07，已授权发明专利。 [5] 刘君峰，**赵国**，孙霞，郭业民．一种农产品农药残留的物联网监测系统及应用，2016-01-13，已授权发明专利。 [6] 郭业民，孙霞，王相友，刘君峰，**赵国**．一种定量检测果蔬中农药残留的快速检测仪，2016-01-20，已授权发明专利。 [7] 郭业民，王相友，孙霞，刘君峰，**赵国**．一种适配体传感器抗生素残留快速检测仪，2015-07-29，已授权发明专利。 [8] 孙霞，郭业民，王相友，刘君峰，**赵国**．一种乙酰胆碱酯酶生物传感器农药残留快速检测仪，2015-05-13，已授权发明专利。 [9] 郭业民，王相友，孙霞，刘君峰，**赵国**．一种电流型免疫传感器农药残留快速检测仪，2015-03-24，已授权发明专利。

奖励荣誉	**2019 年 荣获北京市优秀毕业生称号。** **2017 年 荣获中国农业大学“五四青年标兵”称号。** **2016 年 荣获中国商业联合会科学技术奖-全国商业科技进步奖（9/10）。** **2015 年 荣获山东省研究生优秀科技创新成果奖。**
社会兼职	
欢迎有志向、能吃苦、热爱科研的同学报考研究生！也欢迎有一定理论基础和动手能力的本科生加入实验室学习和深造！	