

# Annie (Dan) Du, Ph.D.

## Research Professor

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## EDUCATION

2002 – 2005 **Ph.D.** in Analytical Chemistry Nanjing University, China  
1995 – 2002 **M.S. & B.S.** in Chemistry Hubei University, China

## POSITIONS

2013–present **Research Professor**, School of Mechanical and Materials Engineering,  
Washington State University, Pullman  
2011 **Professor**, Department of Chemistry, Central China Normal University (China)  
2009–2013 **Postdoctoral Fellow/ Scientist**, Pacific Northwest National Laboratory, Richland  
2005–2009 **Associate Professor**, Department of Chemistry, Central China Normal University (China)  
2005–2006 **Assistant Professor**, Department of Chemistry, Central China Normal University (China)

## HONORS & ACADEMIC AWARDS

1. “Top Cited Author,” *Biosensors and Bioelectronics*, 2011 & 2010
2. “Top-50 Most Cited Articles,” *Biosensors and Bioelectronics*, 2010-2011
3. NIH Travel Award, 2010

## PROFESSIONAL SERVICES AND AFFILIATIONS

### **Editorial Board Member:**

1. *Biosensors (MDPI)*
2. *North America Editor, Nanoscience & Nanotechnology-Asia*
3. *Advanced Materials Letters(2010-2014)*
4. *Journal of Biosensors & Bioelectronics*
5. *Journal of Biochips & Tissue Chips*
6. *ISRN Spectroscopy*
7. *International Journals of Cancer Studies and Research*
8. *Frontier in Analytical Chemistry*

### **Member:**

1. American Chemical Society (ACS)
2. Society for Electroanalytical Chemistry (SEAC)
3. China Instrument and Control Society Electroanalysis Committee

## **PUBLICATIONS**

More than 200 publications. 9 of them are highly cited papers. H-index 52, total citation 6600 based on Google Scholar. (Researcher ID: G-3821-2012).

### **Peer-reviewed Journal Articles**

#### **2017**

1. Yuting Zhao, Xiao Chen, Sophie Lin, **Dan Du\***, Yuehe Lin. Integrated immunochromatographic strip with glucometer readout for rapid quantification of phosphorylated proteins. *Analytical Chimica Acta* 2017, 964, 1-6.
2. Yang Song, Chengzhou Zhu, Junhua Song, He Li, **Dan Du\***, Yuehe Lin\*. Drug-Derived Bright and Color-Tunable N-Doped Carbon Dots for Cell Imaging and Sensitive Detection of Fe<sup>3+</sup> in Living Cells. *ACS Applied Materials & Interfaces* 2017, 9, 7399-7405.
3. Xiaoli Cai, Yalan Luo, Hongye Yan, **Dan Du\***, Yuehe Lin\*. pH-Responsive ZnO Nanocluster for Lung Cancer Chemotherapy. *ACS Applied Materials and Interfaces* 2017, 9, 5739-5747.
4. Chengzhou Zhu, **Dan Du\***, Yuehe Lin\*. Graphene-like 2D Nanomaterial-Based Biointerfaces for Biosensing Applications. *Biosensors & Bioelectronics* 2017, 89, 43-55.
5. Xiaoli Wu, Yang Song, Xu Yan, Chengzhou Zhu, Yongqiang Ma, **Dan Du\***, Yuehe Lin\*. Carbon quantum dots as fluorescence resonance energy transfer sensors for organophosphate pesticides determination. *Biosensors and Bioelectronics* 2017, 94, 292-297.
6. Chengzhou Zhu, Shaofang Fu, Junhua Song, Qiurong Shi, Mark H. Engelhard, Dongdong Xiao, Dongsheng Li, **Dan Du**, Yuehe Lin\*, Self-Assembled Fe-N-Doped Carbon Nanotube Aerogels with Single-Atom Catalyst Feature as High-Efficiency Oxygen Reduction Electrocatalysts. *Small* 2017, 13, 1603407.
7. Junhua Song, Chengzhou Zhu, Bo Z. Xu, Shaofang Fu, Mark H. Engelhard, Ranfeng Ye, **Dan Du**, Scott P. Beckman, Yuehe Lin\*. Bimetallic Cobalt-Based Phosphide Zeolitic Imidazolate Framework: CoP<sub>x</sub> Phase-Dependent Electrical Conductivity and Hydrogen Atom Adsorption Energy for Efficient Overall Water Splitting. *Advanced Energy Materials* 2017, 7, 1601555.
8. Wei Wen, Xu Yan, Chengzhou Zhu, **Dan Du**, Yuehe Lin\*. Recent Advances in Electrochemical Immunosensors. *Analytical Chemistry* 2017, 89, 138-156.
9. Xu Yan, Yang Song, Xiaoli Wu, Chengzhou Zhu, Xingguang Su, **Dan Du**, Yuehe Lin\*. Oxidase-mimicking activity of ultrathin MnO<sub>2</sub> nanosheets in colorimetric assay of acetylcholinesterase activity. *Nanoscale* 2017, 9, 2317-2323.
10. Tianxiang Wei, **Dan Du**, Zhaoyin Wang, Weiwei Zhang, Yuehe Lin\*, Zhihui Dai. Rapid and sensitive detection of microRNA via the capture of fluorescent dyes-loaded albumin nanoparticles around functionalized magnetic beads. *Biosensors and Bioelectronics* 2017, 94, 56-62.
11. Chengzhou Zhu, Shaofang Fu, Junhua Song, Qiurong Shi, Dong Su, Mark H. Engelhard, Xiaolin Li, Dongdong Xiao, Dongsheng Li, Luis Estevez, **Dan Du**, Yuehe Lin\*. Self-Assembled Fe-N-Doped Carbon Nanotube Aerogels with Single-Atom Catalyst Feature as High-Efficiency Oxygen Reduction Electrocatalysts. *Small* 2017, 13,

1603407.

12. Xiaoyu Li, Chengzhou Zhu, Yang Song, **Dan Du**, Yuehe Lin\*. Solvent co-mediated synthesis of ultrathin BiOCl nanosheets with highly efficient visible-light photocatalytic activity. *RSC Advances* 2017, 7, 10235-10241.
13. Qirong Shi, Chengzhou Zhu, MH Engelhard, **Dan Du**, Yuehe Lin\*. Highly uniform distribution of Pt nanoparticles on N-doped hollow carbon spheres with enhanced durability for oxygen reduction reaction. *RSC Advances* 2017, 7, 6303-6308.
14. Shaofang Fu, Chengzhou Zhu, Junhua Song, P Zhang, MH Engelhard, Haibing Xia, **Dan Du**, Yuehe Lin\*. Low Pt-content ternary PdCuPt nanodendrites: an efficient electrocatalyst for oxygen reduction reaction. *Nanoscale* 2017, 9, 1279-1284.
15. Chengzhou Zhu, Shaofang Fu, Bo Xu, Junhua Song, Qirong Shi, Mark Engelhard, Xiaolin Li, **Dan Du**, Yuehe Lin\*, Porous cobalt phosphide/carbon nanostructures with enhanced electrochemical oxidation performance towards water and other small molecules, 2017, *Small*, revised.
16. Qirong Shi, Chengzhou Zhu, Shaofang Fu, Junhua Song, **Dan Du**, Yuehe Lin\*, Bifunctional Catalyst of 3D PdPb Nanowire Networks toward Efficient Ethanol Oxidation and Oxygen Reduction Reaction with Significantly Improved Methanol Tolerance, *Advanced Materials*, 2017, Submitted.
17. Shan Wang, Qian Lu, Xu Yan, Mingming Yang, Ranfeng Ye, **Dan Du**, Yuehe Lin\*. “On-Off-On” Fluorescence Sensor Based on g-C<sub>3</sub>N<sub>4</sub> Nanosheets for Selective and Sequential Detection of Ag<sup>+</sup> and S<sup>2-</sup>. *Talanta* 2017, 168, 168–173.
18. D Choi, C Zhu, S Fu, **Dan Du**, E M.H., Y Lin. Electrochemically Controlled Ion-exchange Property of Carbon Nanotubes/Polypyrrole Nanocomposite in Various Electrolyte Solutions. *Electroanalysis* 2017, 29, 929-936.
19. Shaofang Fu, Chengzhou Zhu, Junhua Song, MH Engelhard, **Dan Du**, Yuehe Lin\*. Three-dimensional Nitrogen - Doped Reduced Graphene Oxide/Carbon Nanotube Composite Catalysts for Vanadium Flow Batteries. *Electroanalysis*, 2017, 29, 1-6.
20. Nan Cheng, **Dan Du**, Yuehe Lin. Dual-lateral flow immunoassays for simultaneous detection of Salmonella and Escherichia coli O157:H7 on smartphone. *Analytical Chemistry*. Revised
21. Mohamed Maarouf Ali Zeinhom, Lina Sheng, **Dan Du**, Lei Li, Mei-Jun Zhu, Yuehe Lina\*. Smart Phone Based Immunosensor Coupled with Nanoflower Signal Amplification for Rapid Detection of Salmonella Enteritidis in Dairy Foods and Water. *Biosensors and Bioelectronics*. Revised
22. Chengzhou Zhu, Shaofang Fu, Qirong Shi, **Dan Du**, Yuehe Lin\*. Single-atom electrocatalysts, *Energy & Environmental Science*. Submitted.
23. Chengzhou Zhu, Shaofang Fu, Junhua Song, Qirong Shi, **Dan Du**, Yuehe Lin\*, Versatile approach for the synthesis of atomically dispersed M-N-doped (M=Co and Fe) porous carbon nanomaterials and their enhanced ORR performance. *Small*, revised.
24. Shaofang Fu, Chengzhou Zhu, Junhua Song, Qirong Shi, Dan Du, Yuehe Lin\*, MOF-derived Fe-N-doped carbon materials with single atom catalyst for enhanced ORR performance. *Nanoscale*. revised.

## 2016

25. Ranfeng Ye, Chengzhou Zhu, Yang Song, Qian Lu, Xiaoxiao Ge, Xu Yang, Mei-Jun Zhu, **Dan Du**\*, He Li, Yuehe Lin\*. Bioinspired Synthesis of All-in-One Organic–Inorganic

- Hybrid Nanoflowers Combined with a Handheld pH Meter for On-Site Detection of Food Pathogen. *Small* 2016, 12 (23), 3094–3100.
26. Yang Song, Yanan Luo, Chengzhou Zhu, He Li, **Dan Du\***, Yuehe Lin\*. Recent advances in electrochemical biosensors based on graphene two-dimensional nanomaterials. *Biosensors and Bioelectronics* 2016, 76, 195-212.
  27. Ranfeng Ye, Chengzhou Zhu, Yang Song, Junhua Song, Shaofang Fu, Qian Lu, Xu Yang, Mei-Jun Zhu, **Dan Du\***, He Li, Yuehe Lin\*. One-pot bioinspired synthesis of all-inclusive protein–protein nanoflowers for point-of-care bioassay: detection of E. coli O157:H7 from milk. *Nanoscale*, 2016, 8, 18980–18986.
  28. Xiaoli Cai, Yanan Luo, Weiyang Zhang, **Dan Du\***, Yuehe Lin\*. pH-Sensitive ZnO Quantum Dots–Doxorubicin Nanoparticles for Lung Cancer Targeted Drug Delivery. *ACS Appl. Mater. Interfaces* 2016, 8, 22442–22450.
  29. Yanan Luo, Xiaoli Cai, He Li, Yuehe Lin, **Dan Du\***. Hyaluronic Acid-Modified Multifunctional Q-Graphene for Targeted Killing of Drug-Resistant Lung Cancer Cells. *ACS Appl. Mater. Interfaces* 2016, 8, 4048–4055.
  30. Xu Yan, Yang Song, Chengzhou Zhu, Junhua Song, **Dan Du\***, Xingguang Su, Yuehe Lin\*. Graphene Quantum Dot-MnO<sub>2</sub> Nanosheet Based Optical Sensing Platform: A Sensitive Fluorescence “Turn Off-On” Nanosensor for Glutathione Detection and Intracellular Imaging. *ACS Appl. Mater. Interfaces* 2016, 8, 21990-21996.
  31. Xiaoxiao Ge, Aidong Zhang, Yuehe Lin, **Dan Du\***. Simultaneous immunoassay of phosphorylated proteins based on apoferritin templated metallic phosphates as voltammetrically distinguishable signal reporters. *Biosensors and Bioelectronics* 2016, 80, 201–207.
  32. Dan Wu, **Dan Du\***, Yuehe Lin\*. Recent progress on nanomaterial-based biosensors for veterinary drug residues in animal-derived food. *Trends in Analytical Chemistry* 2016, 83, 95-101.
  33. Yan Zeng, Zhihong Zhu, **Dan Du\***, Yuehe Lin\*. Nanomaterial-based electrochemical biosensors for food safety. *Journal of Electroanalytical Chemistry* 2016, 781, 147–154.
  34. Tianxiang Wei, Zhihui Dai, Yuehe Lin, **Dan Du\***. Electrochemical Immunoassays based on Graphene: A Review. *Electroanalysis* 2016, 28, 4-12.
  35. Pei Liang, Caiyan Kang, Enjian Yang, Xiaoxiao Ge, **Dan Du\***, Yuehe Lin. A sensitive magnetic nanoparticle-based immunoassay of phosphorylated acetylcholinesterase using protein cage templated lead phosphate for signal amplification with graphite furnace atomic absorption spectrometry detection. *Analyst*, 2016, 141, 2278–2283.
  36. Chengzhou Zhu, He Li, Shaofang Fu, **Dan Du**, Yuehe Lin\*. Highly efficient nonprecious metal catalysts towards oxygen reduction reaction based on three-dimensional porous carbon nanostructures. *Chemical Society Reviews*, 2016, 45, 517-531.
  37. Chengzhou Zhu, Shaofang Fu, **Dan Du**, Yuehe Lin\*. Facilely Tuning Porous NiCo<sub>2</sub>O<sub>4</sub> Nanosheets with Metal Valence State Alteration and Abundant Oxygen Vacancies as Robust Electrocatalysts Towards Water Splitting. *Chem. Eur. J.* 2016, 22, 1- 9.
  38. Chengzhou Zhu, Qirong Shi, Shaofang Fu, Junhua Song, Haibing Xia, **Dan Du**, Yuehe Lin\*. Efficient Synthesis of M<sub>2</sub>Cu (M = Pd, Pt, and Au) Aerogels with Accelerated Gelation Kinetics and their High Electrocatalytic Activity. *Advanced Materials* 2016, 28, 8779–8783.
  39. Qirong Shi, Chengzhou Zhu, Yijing Li, Haibing Xia, Mark H. Engelhard, Shaofang Fu, **Dan Du**, Yuehe Lin\*. A Facile Method for Synthesizing Dendritic Core–Shell Structured

- Ternary Metallic Aerogels and Their Enhanced Electrochemical Performances. *Chemistry of Materials* 2016, 28, 7928-7934.
40. Guohai Yang, Yazhou Zhou, Horng-Bin Pan, Chengzhou Zhu, Shaofang Fu, Chien M. Wai, **Dan Du**, Jun-Jie Zhu, Yuehe Lin\*. Ultrasonic-assisted synthesis of Pd–Pt/carbon nanotubes nanocomposites for enhanced electro-oxidation of ethanol and methanol in alkaline medium. *Ultrasonics Sonochemistry* 2016, 28, 192–198
  41. Shaofang Fu, Chengzhou Zhu, Junhua Song, Mark Engelhard, Haibing Xia, **Dan Du**, Yuehe Lin\*. PdCuPt Nanocrystals with Multibranches for Enzyme-Free Glucose Detection. *ACS Applied Materials & Interfaces* 2016, 8, 22196–22200.
  42. Qiurong Shi, Chengzhou Zhu, Shaofang Fu, **Dan Du**, Yuehe Lin\*. One-Pot Fabrication of Mesoporous Core–Shell Au@PtNi Ternary Metallic Nanoparticles and Their Enhanced Efficiency for Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces* 2016, 8, 4739–4744.
  43. Shaofang Fu, Chengzhou Zhu, **Dan Du**, Yuehe Lin\*. Enhanced Electrocatalytic Activities of PtCuCoNi Three-Dimensional Nanoporous Quaternary Alloys for Oxygen Reduction and Methanol Oxidation Reactions. *ACS Applied Materials & Interfaces* 2016, 8, 6110–6116.
  44. Tianxiang Wei, **Dan Du**, Meijun Zhu, Yuehe Lin\*, Zihui Dai. An Improved Ultrasensitive Enzyme-Linked Immunosorbent Assay Using Hydrangea-Like Antibody–Enzyme–Inorganic Three-in-One Nanocomposites. *ACS Applied Materials & Interfaces* 2016, 8, 6329–6335.
  45. Yazhou Zhou, Ru Chen, Tingting He, Kai Xu, **Dan Du**, Nan Zhao, Xiaonong Cheng, Juan Yang, Haifeng Shi, Yuehe Lin\*. Biomedical Potential of Ultrafine Ag/AgCl Nanoparticles Coated on Graphene with Special Reference to Antimicrobial Performances and Burn Wound Healing. *ACS Applied Materials & Interfaces* 2016, 8, 15067–15075.
  46. Yazhou Zhou, Juan Yang, Chengzhou Zhu, **Dan Du**, Xiaonong Cheng, Clive Hsu Yen, Chien M Wai, Yuehe Lin\*. Newly Designed Graphene Cellular Monolith Functionalized with Hollow Pt-M (M = Ni, Co) Nanoparticles as the Electrocatalyst for Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces* 2016, 8, 25863–25874.
  47. Junhua Song, Chengzhou Zhu, Shaofang Fu, Yang Song, **Dan Du**, Yuehe Lin\*. Optimization of cobalt/nitrogen embedded carbon nanotubes as an efficient bifunctional oxygen electrode for rechargeable zinc-air batteries. *J. Mater. Chem. A*, 2016, 4, 4864-4870.
  48. Shaofang Fu, Chengzhou Zhu, Junhua Song, Mark H. Engelhard, Yang He, **Dan Du**, Chongmin Wang, Yuehe Lin\*. Three-dimensional PtNi hollow nanochains as an enhanced electrocatalyst for the oxygen reduction reaction. *J. Mater. Chem. A*, 2016, 4, 8755–8761.
  49. Gaochao Fan, Hua Zhu, **Dan Du**, Jianrong Zhang, Junjie Zhu, Yuehe Lin\*. Enhanced Photoelectrochemical Immunosensing Platform Based on CdSeTe@CdS:Mn Core–Shell Quantum Dots-Sensitized TiO<sub>2</sub> Amplified by CuS Nanocrystals Conjugated Signal Antibodies. *Analytical Chemistry*. 2016, 88, 3392–3399.
  50. Qiurong Shi, Younghwan Cha, Yang Song, Jung-In Lee, Chengzhou Zhu, Xiaoyu Li, Min-Kyu Song, **Dan Du**, Yuehe Lin\*. 3D graphene-based hybrid materials: synthesis and applications in energy storage and conversion. *Nanoscale* 2016, 8, 15414–15447.
  51. Shaofang Fu, Chengzhou Zhu, Qiurong Shi, Haibing Xia, **Dan Du**, Yuehe Lin\*. Highly branched PtCu bimetallic alloy nanodendrites with superior electrocatalytic activities for

- oxygen reduction reactions. *Nanoscale* 2016, 8, 5076–5081.
52. Shaofang Fu, Chengzhou Zhu, Junhua Song, Mark H. Engelhard, Xiaolin Li, **Dan Du**, Yuehe Lin\*. Highly Ordered Mesoporous Bimetallic Phosphides as Efficient Oxygen Evolution Electrocatalysts. *ACS Energy Lett.* 2016, 1, 792-796.
  53. Tao Jiang, Yang Song, **Dan Du**, Xiangtao Liu, Yuehe Lin\*. Detection of p53 Protein Based on Mesoporous Pt–Pd Nanoparticles with Enhanced Peroxidase-like Catalysis. *ACS Sensors* 2016, 1, 717–724.
  54. Li-Ju Wang, Yu-Chung Chang, Xiaoxiao Ge, Allison T. Osmanson, **Dan Du**, Yuehe Lin, Lei Li. Smartphone Optosensing Platform Using a DVD Grating to Detect Neurotoxins. *ACS Sensors* 2016, 1, 366–373.
  55. Shaofang Fu, Chengzhou Zhu, Qiurong Shi, **Dan Du**, Yuehe Lin\*. Enhanced electrocatalytic activities of three dimensional PtCu@Pt bimetallic alloy nanofoams for oxygen reduction reaction. *Catal. Sci. Technol.*, 2016, 6, 5052-5059.
  56. Tao Jiang, Yang Song, Tianxiang Wei, He Li, **Dan Du**, Mei-Jun Zhu, Yuehe Lin\*. Sensitive detection of Escherichia coli O157:H7 using Pt–Au bimetal nanoparticles with peroxidase-like amplification. *Biosensors and Bioelectronics* 2016, 77, 687–694.
  57. Wentao Xu, Nan Cheng, Kunlun Huang, Yuehe Lin, Chenguang Wang, Yuancong Xu, Longjiao Zhu, **Dan Du**, Yunbo Luo. Accurate and easy-to-use assessment of contiguous DNA methylation sites based on proportion competitive quantitative-PCR and lateral flow nucleic acid biosensor. *Biosensors and Bioelectronics* 2016, 80, 654–660.
  58. Shaofang Fu, Chengzhou Zhu, Qiurong Shi, **Dan Du**, Yuehe Lin\*. PtCu bimetallic alloy nanotubes with porous surface for oxygen reduction reaction. *RSC Advances* 2016, 6, 69233–69238.
  59. Haipeng Yang, Md Taibur Rahman, **Dan Du**, Rahul Panat\*, Yuehe Lin\*. 3-D printed adjustable microelectrode arrays for electrochemical sensing and biosensing. *Sensors and Actuators B* 2016, 230, 600–606.
  60. Lei Jiao, Zonggang Mu, Chengzhou Zhu, Qin Wei, He Li\*, **Dan Du**, Yuehe Lin\*. Graphene loaded bimetallic Au@Pt nanodendrites enhancing ultrasensitive electrochemical immunoassay of AFP. *Sensors and Actuators B-Chem* 2016, 231, 513–519.
  61. Guocheng Shao, Donglai Lu, Zhifeng Fu, **Dan Du**, Richard M. Ozanich, Wanjun Wang, Yuehe Lin\*. Design, fabrication and test of a pneumatically controlled, renewable, microfluidic bead trapping device for sequential injection analysis applications. *Analyst*, 2016, 141, 206–215.
  62. Erhan Keles, Yang Song, **Dan Du**, Wen-Ji Dong, Yuehe Lin\*. Recent progress in nanomaterials for gene delivery applications. *Biomater. Sci.*, 2016, 4, 1291-1309.
  63. Daiwon Choi, Chengzhou Zhu, Shaofang Fu, **Dan Du**, Mark H. Engelhard, Yuehe Lin\*. Electrochemically Controlled Ion-exchange Property of Carbon Nanotubes/ Polypyrrole Nanocomposite in Various Electrolyte Solutions. *Electroanalysis* 2016, 28, 1-9.

## 2015

64. Yanan Luo, Xuenv Wang, **Dan Du\***, Yuehe Lin\*. Hyaluronic acid-conjugated apoferritin nanocages for lung cancer targeted drug delivery. *Biomaterials Science* 2015, 3, 1386–1394.
65. Yuting Zhao, **Dan Du\***, Yuehe Lin\*. Glucose encapsulating liposome for signal amplification for quantitative detection of biomarkers with glucometer readout.

*Biosensors and Bioelectronics* 2015, 72, 348–354.

66. Linjuan Long, Yanan Luo, Bingwen Liu, **Dan Du**\*, Yuehe Lin\*. Screening of antidote sensitivity using an acetylcholinesterase biosensor based on a graphene-Au nanocomposite. *RSC Advance* 2015, 5, 4894–4897.
67. Chengzhou Zhu, **Dan Du**, Alexander Eychemüller, Yuehe Lin\*. Engineering Ordered and Nonordered Porous Noble Metal Nanostructures: Synthesis, Assembly, and Their Applications in Electrochemistry. *Chemical Reviews* 2015, 115 (16), 8896–8943.
68. Chengzhou Zhu, Guohai Yang, He Li, **Dan Du**, Yuehe Lin\*. Electrochemical Sensors and Biosensors Based on Nanomaterials and Nanostructures. *Analytical Chemistry* 2015, 87 (1), 230-249.
69. Guohai Yang, Chengzhou Zhu, **Dan Du**, Junjie Zhu, Yuehe Lin\*. Graphene-like two-dimensional layered nanomaterials: applications in biosensors and nanomedicine. *Nanoscale* 2015, 7(34), 14217-14231.
70. Chengzhou Zhu, **Dan Du**, Yuehe Lin\*. Graphene and graphene-like 2D materials for optical biosensing and bioimaging: a review. *2D Materials*, 2 (3), 032004.
71. Zhanjun Yang, Yue Cao, Juan Li, Juntao Wang, **Dan Du**, Xiaoya Hu, Yuehe Lin. A new label-free strategy for a highly efficient chemiluminescence immunoassay. *Chemical Communications* 2015, 51 (77), 14443-14446.
72. Qirong Shi, Yang Song, Chengzhou Zhu, Haipeng Yang, **Dan Du**, Yuehe Lin\*. Mesoporous Pt Nanotubes as a Novel Sensing Platform for Sensitive Detection of Intracellular Hydrogen Peroxide. *ACS Applied Materials Interfaces* 2015, 7 (43), 24288–24295.
73. Shaofang Fu, Chengzhou Zhu, **Dan Du**, Yuehe Lin\*. Facile One-Step Synthesis of Three-Dimensional Pd–Ag Bimetallic Alloy Networks and Their Electrocatalytic Activity toward Ethanol Oxidation. *ACS Applied Materials Interfaces* 2015, 7 (25), 13842–13848.
74. Shaofang Fu, Guohai Yang, Yazhou Zhou, Horng-Bin Pan, Chien M Wai, **Dan Du**, Yuehe Lin\*. Ultrasonic enhanced synthesis of multi-walled carbon nanotube supported Pt–Co bimetallic nanoparticles as catalysts for the oxygen reduction reaction. *RSC Advances* 2015, 5 (41), 32685-32689.
75. Shaofang Fu, Chengzhou Zhu, Yazhou Zhou, Guohai Yang, Ju-Won Jeon, John Lemmon, **Dan Du**, Yuehe Lin\*. Metal-organic framework derived hierarchically porous nitrogen-doped carbon nanostructures as novel electrocatalyst for oxygen reduction reaction. *Electrochimica Acta* 2015, 178, 287–293.
76. Shaofang Fu, Chengzhou Zhu, He Li, **Dan Du**, Yuehe Lin\*. One-step synthesis of cobalt and nitrogen co-doped carbon nanotubes and their catalytic activity for the oxygen reduction reaction. *Journal of Materials Chemistry A* 2015, 3, 12718-12722.
77. Yang Song, Chengzhou Zhu, He Li, **Dan Du**, Yuehe Lin. A nonenzymatic electrochemical glucose sensor based on mesoporous Au/Pt nanodendrites. *RSC Advances* 2015, 5, 82617-82622.
78. Yazhou Zhou, Clive Hsu Yen, Shaofang Fu, Guohai Yang, Chengzhou Zhu, **Dan Du**, Pui Ching Wo, Xiaonong Cheng, Juan Yang, Chien M Wai, Yuehe Lin\*. One-pot synthesis of B-doped three-dimensional reduced graphene oxide via supercritical fluid for oxygen reduction reaction. *Green Chemistry* 2015, 17, 3552-3560.
79. Yazhou Zhou, Guohai Yang, Horng-Bin Pan, Chengzhou Zhu, Shaofang Fu, Qirong Shi, **Dan Du**, Xiaonong Cheng, Juan Yang, Chien M Wai, Yuehe Lin\*. Ultrasonic-assisted synthesis of carbon nanotube supported bimetallic Pt–Ru nanoparticles for effective

methanol oxidation. *Journal of Materials Chemistry A* 2015, 3 (16), 8459-8465.

80. Hongxia Zhang, Jiawang Ding, **Dan Du**. Electrochemical Evaluation of the Mechanism of Acetylcholinesterase Inhibition Based on an Electrodeposited Thin Film. *Int. J. Electrochem. Sci* 2015, 10, 1632-1645.

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81. Weiyang Zhang, Abdullah Mohamed Asiri, Deli Liu, **Dan Du**,\* Yuehe Lin\*. Nanomaterial-based biosensors for environmental and biological monitoring of organophosphorus pesticides and nerve agents. *Trends in Analytical Chemistry* 2014, 54, 1-10.
82. Xiaoxiao Ge, Abdullah Mohamed Asiri, **Dan Du**,\* Wei Wen, Shengfu Wang, Yuehe Lin\*. Nanomaterial-enhanced paper-based biosensors. *Trends in Analytical Chemistry* 2014, 58, 31-39.
83. Priyanka Bhattacharya, **Dan Du**,\* Yuehe Lin.\* Bioinspired nanoscale materials for biomedical and energy applications. *Journal of the Royal Society Interface* 2014, 11, 20131067.
84. Yuqi Yang, Abdullah Mohamed Asiri, **Dan Du**,\* Yuehe Lin\*. Acetylcholinesterase biosensor based on a gold nanoparticle-polypyrrole-reduced graphene oxide nanocomposite modified electrode for the amperometric detection of organophosphorus pesticides. *Analyst* 2014, 139, 3055-3060.
85. Yanan Luo, Abdullah Mohamed Asiri, Xiao Zhang, Guohai Yang, **Dan Du**\*, Yuehe Lin\*. A magnetic electrochemical immunosensor for the detection of phosphorylated p53 based on enzyme functionalized carbon nanospheres with signal amplification. *RSC Advances* 2014, 4, 54066-54071.
86. Yan Huang, Wei Wen, **Dan Du**, Xiuhua Zhang, Shengfu Wang\*, Yuehe Lin\*. A universal lateral flow biosensor for protein and DNAs based on the conformational change of hairpinoligonucleotide and its use for logic gate operations. *Biosensors & Bioelectronics* 2014, 61, 598-604.
87. Ai-Cheng Lee, **Dan Du**, Baowei Chen, Chew-Kiat Heng, Tit-Meng Lim, Yuehe Lin\*. Electrochemical detection of leukemia oncogenes using enzyme-loaded carbon nanotube labels. *Analyst* 2014, 139, 4223-4230.
88. Bingwen Liu, **Dan Du**, Xin Hua, Xiao-Ying Yu, Yuehe Lin\*. Paper-Based Electrochemical Biosensors: From Test Strips to Paper-Based Microfluidics. *Electroanalysis* 2014, 26, 1214 - 1223.
89. Weiyang Zhang, **Dan Du**, Don Gunaratne, Robert Colby, Yuehe Lin,\* Julia Laskin. Polyoxometalate-Graphene Nanocomposite Modified Electrode for Electrocatalytic Detection of Ascorbic Acid. *Electroanalysis* 2014, 26, 178 -183.
90. Jiawang Ding, Hongxia Zhang, Falong Jia, Wei Qin, **Dan Du**\*. Assembly of carbon nanotubes on a nanoporous gold electrode for acetylcholinesterase biosensor design. *Sensors and Actuators B* 2014, 199, 284-290.
91. Yazhou Zhou, Xiaonong Cheng, **Dan Du**, Juan Yang, Nan Zhao, Shuangbiao Ma, Tao Zhong, Yuehe Lin.\* Graphene-silver nanohybrids for ultrasensitive surface enhanced Raman spectroscopy: size dependence of silver nanoparticles. *J. Mater. Chem. C* 2014, 2, 6850-6858.
92. Limin Wang, Jia Cai, Yulong Wang, Qingkui Fang, Suyan Wang, Qi Cheng, **Dan Du**, Yuehe Lin, Fengquan Liu. A bare-eye-based lateral flow immunoassay based on the use



of gold nanoparticles for simultaneous detection of three pesticides. *Microchimica Acta* 2014, 181, (13-14), 1565-1572.

93. K. Don D. Gunaratne, Grant E. Johnson, Amity Andersen, **Dan Du**, Weiyang Zhang, Venkateshkumar Prabhakaran, Yuehe Lin,\* Julia Laskin\*. Controlling the Charge State and Redox Properties of Supported Polyoxometalates via Soft Landing of Mass-Selected Ions. *J. Phys. Chem. C* 2014, 118, 27611–27622.

## 2013

94. Xiaoxiao Ge, Yuan Tao, Aidong Zhang, Yuehe Lin, **Dan Du**\*. Electrochemical Detection of Dual Exposure Biomarkers of Organophosphorus Agents Based on Reactivation of Inhibited Choline esterase. *Analytical Chemistry* 2013, 85, 9686-9691.
95. Yuting Zhao, Weiyang Zhang, Yuehe Lin, **Dan Du**\*. The vital function of Fe<sub>3</sub>O<sub>4</sub>@Au nanocomposites for hydrolase biosensor design and its application in detection of methyl parathion. *Nanoscale* 2013, 5, 1121-1126.
96. Yuqi Yang, Abdullah Mohamed Asiri, Zhiwen Tang, **Dan Du**\*, Yuehe Lin\*. Graphene based materials for biomedical applications. *Materials Today* 2013, 16, 365-373.
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