

Publications

2018

- 1) Wen-Yi Zhou, Shan-Shan Li, Xiang-Yu Xiao, Shi-Hua Chen, Jin-Huai Liu, Xing-Jiu Huang*
Defect- and phase-engineering of Mn-mediated MoS₂ nanosheets for ultrahigh electrochemical sensing of heavy metal ions: chemical interactiondriven in situ catalytic redox reactions
Chemical Communications, 2018, 54, 9329--9332
- 2) Shi-Hua Chen, Yi-Xiang Li, Pei-Hua Li, Xiang-Yu Xiao, Min Jiang, Shan-Shan Li, Wen-Yi Zhou, Meng Yang*, Xing-Jiu Huang *, Wen-Qing Liu*
Electrochemical spectral methods for trace detection of heavy metals: A review
Trends in Analytical Chemistry, 2018, 106, 139-150
- 3) Shan-Shan Li, Wen-Yi Zhou, Yi-Xiang Li, Min Jiang, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang*
Noble Metal-Free Co_{0.6}Fe_{2.4}O₄ Nanocubes Self-Assembly Monolayer for Highly Sensitive Electrochemical Detection of As(III) based on Surface Defects
Analytical Chemistry, 2018, 90, 1263-1272
- 4) Shan-Shan Li, Wen-Yi Zhou, Min Jiang, Zheng Guo, Jin-Huai Liu, Lizhi Zhang,* Xing-Jiu Huang*
Surface Fe(II)/Fe(III) Cycle Promoted Ultra-Highly Sensitive Electrochemical Sensing of Arsenic(III) with Dumbbell-like Au/Fe₃O₄ Nanoparticles
Analytical Chemistry, 2018, 90, 4569-4577.
- 5) Wen-Yi Zhou, Shan-Shan Li, Jie-Yao Song, Min Jiang, Tian-Jia Jiang, Jin-Yun Liu, * Jin-Huai Liu, * Xing-Jiu Huang*
High Electrochemical Sensitivity of TiO_{2-x} Nanosheets and Electron-Induced Mutual Interference Effect toward Heavy Metal Ions Demonstrated Using X-Ray Absorption Fine Structure (XAFS) Spectra
Analytical Chemistry, 2018, 90, 4328-4337.
- 6) Shan-Shan Li, Wen-Yi Zhou, Min Jiang, Li-Na Li, Yu-Feng Sun, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang*
Insights into diverse performance for the electroanalysis of Pb(II) on Fe₂O₃ nanorods and hollow nanocubes: Toward analysis of adsorption sites
Electrochimica Acta, 2018, 288, 42-51.
- 7) Pei-Hua Li, Yi-Xiang Li, Shi-Hua Chen, Shan-Shan Li, Min Jiang, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang, Meng Yang*
Sensitive and interference-free electrochemical determination of Pb(II) in wastewater using porous Ce-Zr oxide nanospheres
Sensors and Actuators B, 2018, 257, 1009-1020
- 8) Meng Yang, Pei-Hua Li, Wei-Hong Xu, Yan Wei*, Li-Na Li*, Yu-Ying Huang,Yu-Feng Sun, Xing Chen*, Jin-Huai Liu, Xing-Jiu Huang*
Reliable electrochemical sensing arsenic(III) in nearly groundwaterpH based on efficient adsorption and excellent electrocatalytic abilityof AuNPs/CeO₂-ZrO₂nanocomposite
Sensors and Actuators B, 2018, 255, 226-234
- 9) Min Jiang, Hui-Ru Chen, Shan-Shan Li, Rui Liang, Jin-Huai Liu, Yang Yang,* Yue-Jin Wu, Meng Yang,* and Xing-Jiu Huang*
The selective capture of Pb²⁺ in rice phloem sap using glutathione-functionalized gold

nanoparticles/multi-walled carbon nanotubes: enhancing anti-interference electrochemical detection
Environmental Science: Nano, 2018, 5, 2761-2771

2017

- 10) Tian-Jia Jiang, Meng Yang, Shan-Shan Li, Ming-Jun Ma, Nan-Jing Zhao, Zheng Guo,* Jin-Huai Liu, Xing-Jiu Huang*
In Situ Underwater Laser-Induced Breakdown Spectroscopy Analysis for Trace Cr(VI) in Aqueous Solution Supported by Electrosorption Enrichment and a Gas-Assisted Localized Liquid Discharge Apparatus
Analytical Chemistry, 2017, 89, 5557-5564
- 11) Zhen Jin, Meng Yang, Shao-Hua Chen, Jin-Huai Liu, Qun-Xiang Li,* Xing-Jiu Huang*
Tin Oxide Crystals Exposed by Low-Energy {110} Facets for Enhanced Electrochemical Heavy Metal Ions Sensing: X-ray Absorption Fine Structure Experimental Combined with Density-Functional Theory Evidence
Analytical Chemistry, 2017, 89, 2613-2621
- 12) Wen-Yi Zhou, Jin-Yun Liu, Jie-Yao Song, Jin-Jin Li, Jin-Huai Liu,* Xing-Jiu Huang*
Surface-Electronic-State-Modulated, Single-Crystalline (001) TiO₂ Nanosheets for Sensitive Electrochemical Sensing of Heavy-Metal Ions
Analytical Chemistry, 2017, 89, 3386-3394
- 13) Shan-Shan Li, Min Jiang, Tian-Jia Jiang, Jin-Huai Liu,* Zheng Guo,* Xing-Jiu Huang*
Competitive adsorption behavior toward metal ions on nano-Fe/Mg/Ni ternary layered double hydroxide proved by XPS: Evidence of selective and sensitive detection of Pb(II)
Journal of Hazardous Materials, 2017, 338, 1-10
- 14) Meng Yang, Tian-Jia Jiang, Zheng Guo, Jin-Huai Liu, Yu-Feng Sun*, Xing Chen*, Xing-Jiu Huang*
Sensitivity and selectivity sensing cadmium(II) using amination functionalized porous SnO₂ nanowire bundles-room temperature ionic liquid nanocomposite: Combined efficient cation capture with control experimental conditions
Sensors and Actuators B, 2017, 240, 887-894
- 15) Meng Yang, Tian-Jia Jiang, Yu Wang, Jin-Huai Liu, Li-Na Li*, Xing Chen*, Xing-Jiu Huang*
Enhanced electrochemical sensing arsenic(III) with excellentanti-interference using amino-functionalized graphene oxide-decorated gold microelectrode: XPS and XANES evidence
Sensors and Actuators B, 2017, 245, 230-237
- 16) Zheng Guo, Meng Yang, Xing-Jiu Huang*
Recent developments in electrochemical determination of arsenic
Current Opinion in Electrochemistry, 2017, 3,130-136

2016 年

- 17) Chao Gao, Qiangqiang Meng, Kun Zhao, Huajie Yin, Dawei Wang, Jun Guo, Shenlong Zhao, Lin Chang, Meng He, Qunxiang Li, Huijun Zhao, Xing-Jiu Huang,* Yan Gao,* and Zhiyong Tang*
Co₃O₄ Hexagonal Platelets with Controllable Facets Enabling Highly Efficient Visible-Light Photocatalytic Reduction of CO₂
Advanced Materials, 2016, 28, 6485-6490

- 18) Shan-Shan Li, Wen-Juan Li, Tian-Jia Jiang, Zhong-Gang Liu, Xing Chen, Huai-Ping Cong, Jin-Huai Liu, Yu-Ying Huang, Li-Na Li*, Xing-Jiu Huang*
 Iron Oxide with Different Crystal Phases (α - and γ - Fe_2O_3) in Electroanalysis and Ultra-Sensitive and Selective Detection of Lead(II): An Advancing Approach Using XPS and EXAFS
Analytical Chemistry, 2016, 88, 906-914
- 19) Juan Wei, Shan-Shan Li, Zheng Guo, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
 Adsorbent Assisted In Situ Electrocatalysis: An Ultra-Sensitive Detection of As(III) in Water at Fe_3O_4 Nanosphere Densely decorated with Au Nanoparticles
Analytical Chemistry, 2016, 88, 1154-1161.
- 20) Meng Yang, Xing Chen,* Tian-Jia Jiang, Zheng Guo, Jin-Huai Liu,* Xing-Jiu Huang*
 Electrochemical Detection of Trace Arsenic(III) by Nanocomposite of Nanorod-Like α - MnO_2 Decorated with \sim 5 nm Au Nanoparticles: Considering the Change of Arsenic Speciation
Analytical Chemistry, 2016, 88, 9720-9728
- 21) Tian-Jia Jiang, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang*
 Gold electrode modified with ultrathin SnO_2 nanosheets with high reactive exposed surface for electrochemical sensing of As(III)
Electrochimica Acta, 2016, 191142-191148.
- 22) Tian-Jia Jiang, Zheng Guo, Ming-Jun Ma, Li Fang, Meng Yang, Shan-Shan Li, Jin-Huai Liu, Nan-Jing Zhao*, Xing-Jiu Huang*, Wen-Qing Liu
 Electrochemical laser induced breakdown spectroscopy for enhanced detection of Cd(II) without interference in rice on layer-by-layer assembly of graphene oxides
Electrochimica Acta, 2016, 216, 188-195.
- 23) Meng Yang, Xing Chen,* Jin-Huai Liu, Xing-Jiu Huang*
 Enhanced anti-interference on electrochemical detection of arsenite with nanoporous gold in mild condition
Sensors and Actuators B, 2016, 234, 404-411
- 24) Meng Yang, Zheng Guo, Li-Na Li, Yu-Ying Huang, Jin-Huai Liu, Qi Zhou, Xing Chen*, Xing-Jiu Huang*
 Electrochemical determination of arsenic(III) with ultra-high anti-interference performance using Au-Cu bimetallic nanoparticles
Sensors and Actuators B, 2016, 231, 70-78

2015 年

- 25) Tian-Jia Jiang, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang*
 Electradsorption-Assisted Direct Determination of Trace Arsenic without Interference Using Transmission X-ray Fluorescence Spectroscopy
Analytical Chemistry, 2015, 87, 8503-8507.
- 26) Juan Wei, Zheng Guo, Xing Chen, Dong-Dong Han, Xiang-Ke Wang*, Xing-Jiu Huang*
 Ultrasensitive and Ultraselective Impedimetric Detection of Cr(VI) Using Crown Ethers as High-Affinity Targeting Receptors
Analytical Chemistry, 2015, 87, 1991-1998.
- 27) Fanli Meng, Zheng Guo, Xing-Jiu Huang*
 Graphene-based hybrids for chemiresistive gas sensors

Trends in Analytical Chemistry, 2015, 68, 37-47.

- 28) Xing Chen, Zheng Guo, Zhong-Gang Liu, Yu-Jing Jiang, Dong-Ping Zhan, Jin-Huai Liu, Xing-Jiu Huang*
A Versatile Environmental Impedimetric Sensor for Ultrasensitive Determination of Persistent Organic Pollutants (POPs) And Highly Toxic Inorganic Ions
Advanced Sciences, 2015, 2, 1500013.
- 29) Zhong-Gang Liu, Yu-Feng Sun, Wen-Kai Chen, Yuan Kong, Zhen Jin, Xing Chen, Xiao Zheng,* Jin-Huai Liu, Xing-Jiu Huang,* Shu-Hong Yu*
Facet-Dependent Stripping Behavior of Cu₂O Microcrystals Toward Lead Ions: A Rational Design for the Determination of Lead Ions
Small, 2015, 11, 2493-2498
- 30) Zheng Guo, Min-Qiang Li, Jin-Huai Liu, Xing-Jiu Huang*
Cation Exchange Synthesis and Unusual Resistive Switching Behaviors of Ag₂Se Nanobelts
Small, 2015, 11, 6285-6294
- 31) Wei-Hong Xu, Lei Wang, Zheng Guo, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
Copper Nanowires as Nanoscale Interconnects: Their Environmental Stability, Electrical Transport, and Mechanical Properties
ACS Nano, 2015, 9, 241-250.

2014 年

- 32) Tao Luo, Qiang-Qiang Meng, Chao Gao, Xin-Yao Yu, Yong Jia, Bai Sun, Zhen Jin, Qun-Xiang Li,* Jin-Huai Liu, Xing-Jiu Huang*
Sub-20 nm-Fe₃O₄ squared and circular nanoplates: Synthesis and facet-dependent magnetic and electrochemical properties
Chemical Communications, 2014, 50, 15952-15955
- 33) Wei-Hong Xu, Qiang-Qiang Meng, Chao Gao, Jing Wang, Qun-Xiang Li,* Jin-Huai Liu, Xing-Jiu Huang*
Investigation of the facet-dependent performance of alpha-Fe₂O₃ nanocrystals for heavy metal determination by stripping voltammetry
Chemical Communications, 2014, 50, 5011-5013
- 34) Lijuan Wan, Jinhuai Liu, Xing-Jiu Huang*
Novel magnetic nickel telluride nanowires decorated with thorns: synthesis and their intrinsic peroxidase-like activity for detection of glucose
Chemical Communications, 2014, 50, 13589-13591
- 35) Zhong-Gang Liu, Xing-Jiu Huang*
Voltammetric determination of inorganic arsenic
Trends in Analytical chemistry, 2014, 60, 25-35
- 36) Xian-Zhi Yao, Zheng Guo, Qing-Hong Yuan, Zhong-Gang Liu, Jin-Huai Liu, Xing-Jiu Huang*
Exploiting Differential Electrochemical Stripping Behaviors of Fe₃O₄ Nanocrystals toward Heavy Metal Ions by Crystal Cutting
ACS Applied Materials & Interfaces, 2014, 6, 12203-12213
- 37) Xin-Yao Yu, Xian-Zhi Yao, Tao Luo, Yong Jia, Jin-Huai Liu, Xing-Jiu Huang*
Facile Synthesis of Urchin-like NiCo₂O₄ Hollow Microspheres with Enhanced Electrochemical

Properties in Energy and Environmentally Related Applications

ACS Applied Materials & Interfaces, 2014, 6, 3689-3695

- 38) Zhong-Gang Liu, Xing Chen, Yong Jia, Jin-Huai Liu, Xing-Jiu Huang*
Role of Fe(III) in preventing humic interference during As(III)detection on gold electrode:
Spectroscopic and voltammetric evidence
Journal of Hazardous Materials, 2014, 267, 153-160.
- 39) Zhong-Gang Liu, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
Robust electrochemical analysis of As(III) integrating withinterference tests: A case study in groundwater
Journal of Hazardous Materials, 2014, 278, 66-74.
- 40) Zhen Jin, Yong-Xing Zhang, Fan-Li Meng, Yong Jia, Tao Luo, Xin-Yao Yu,Jin Wang, Jin-Huai Liu, Xing-Jiu Huang*
Facile synthesis of porous single crystalline ZnO nanoplatesand their application in photocatalytic reduction of Cr(VI)in the presence of phenol
Journal of Hazardous Materials, 2014, 276, 400-407.
- 41) Fang Fang, Lingtao Kong*, Jiarui Huang, Shibiao Wu, Kaisheng Zhang,Xuelong Wang, Bai Sun, Zhen Jin, Jin Wang, Xing-Jiu Huang*, Jinhua Liu*
Removal of cobalt ions from aqueous solution by an aminationgraphene oxide nanocomposite
Journal of Hazardous Materials, 2014, 270, 1-10
- 42) Chao Gao, Xin-Yao Yu, Tao Luo, Yong Jia, Bai Sun, Jin-Huai Liu, Xing-Jiu Huang*
Millimeter-sized Mg-Al-LDH nanoflake impregnated magnetic alginate beads (LDH-n-MABs): a novel bio-based sorbent for the removal of fluoride in water
Journal of Materials Chemistry A, 2014, 2, 2119-2128.
- 43) Tao Luo, Min He, Chao Gao, Jin-Huai Liu, Xing-Jiu Huang*
Specific size-matching strategy for electrochemical selective and sensitive detection of mercury(II) based on a three-dimensional-gap-net in a Au-thiol coordination polymer
Electrochemistry Communications, 2014, 42, 26-29.

2013 年

- 44) Chao Gao, Xin-Yao Yu, Shi-Quan Xiong, Jin-Huai Liu, Xing-Jiu Huang*
Electrochemical detection of arsenic(III) completely free from noble metal: Fe₃O₄ microspheres-room temperature ionic liquid composite showing better performance than gold
Analytical Chemistry, 2013, 85, 2673-2680.
- 45) Lei Wang, Wei-Hong Xu, Ran Yang, Ting Zhou, Dong Hou, Xiao Zheng*, Jin-Huai Liu, Xing-Jiu Huang*
Electrochemical and density functional theory investigation on high selectivity and sensitivity of exfoliated nano-zirconium phosphate toward lead (II)
Analytical Chemistry, 2013, 85, 3984-3990.
- 46) Chao Gao, Xing-Jiu Huang*
Voltammetric determination of mercury(II)
Trends in Analytical chemistry, 2013, 51, 1-12.
- 47) Xing Chen, Zhong-Gang Liu, Zhi-Qiang Zhao, Jin-Huai Liu, Xing-Jiu Huang*

SnO_2 tube-in-tube nanostructures: Cu@C nanocable templated synthesis and their mutual interferences between heavy metal ions revealed by stripping voltammetry

Small, 2013, 9, 2233-2239.

- 48) Zheng Guo, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
Transport phenomena and conduction mechanism of individual cross-junction SnO_2 nanobelts
Small, 2013, 16, 2678-2683.
- 49) Weihong Xu, Jing Wang, Lei Wang, Guoping Sheng, Jinhuai Liu, Hanqing Yu, Xing-Jiu Huang*
Enhanced arsenic removal from water by hierarchically porous $\text{CeO}_2\text{-ZrO}_2$ nanospheres: Role of surface- and structure-dependent properties
Journal of Hazardous Materials, 2013, 260, 498-507
- 50) Zheng Guo, Zhong-Gang Liu, Xian-Zhi Yao, Kai-Sheng Zhang, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
A molecular-gap device for specific determination of mercury ions
Scientific Reports, 2013, 3, 3115; DOI:10.1038/srep03115.
- 51) Xin-Yao Yu, Qiang-Qiang Meng, Tao Luo, Yong Jia, Bai Sun, Qun-Xiang Li,* Jin-Huai Liu, Xing-Jiu Huang*
Facet-dependent electrochemical properties of Co_3O_4 nanocrystals toward heavy metal ions
Scientific Reports, 2013, 3, 2886; DOI:10.1038/srep02886.
- 52) Qiao-Xin Zhang, Dai Peng, Xing-Jiu Huang*
Effect of morphology of $\alpha\text{-MnO}_2$ nanocrystals on electrochemical detection of toxic metal ions
Electrochemistry Communications, 2013, 34, 270-273.
- 53) Zhong-Gang Liu, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
Well-arranged porous Co_3O_4 microsheets for electrochemistry of Pb(II) revealed by stripping voltammetry
Electrochemistry Communications, 2013, 30, 59-62
- 54) Ren-Xia Xu, Xin-Yao Yu, Chao Gao, Yu-Jing Jiang, Dong-Dong Han, Jin-Huai Liu, Xing-Jiu Huang*
Non-conductive nanomaterial enhanced electrochemical response in stripping voltammetry: The use of nanostructured magnesium silicate hollow spheres for heavy metal ions detection
Analytica Chimica Acta, 2013, 790, 31-38.
- 55) Ren-Xia Xu, Xin-Yao Yu, Chao Gao, Jin-Huai Liu, Richard G. Compton, Xing-Jiu Huang*
Enhancing selectivity in stripping voltammetry by different adsorption behaviors: The use of nanostructured Mg-Al-layered double hydroxides to detect Cd(II)
Analyst, 2013, 138, 1812-1818
- 56) Zheng Guo, Myeong-Lok Seol, Moon-Seok Kim, Jae-Hyuk Ahn, Yang-Kyu Choi,*
Jin-Huai Liu, and Xing-Jiu Huang*
Sensitive and selective electrochemical detection of dopamine using an electrode modified with carboxylated carbonaceous spheres
Analyst, 2013, 138, 2683-2690.
- 57) Yan Wei, Zhong-Gang Liu, Xing Chen, Jin-Huai Liu, Xing-Jiu Huang*
Ionic liquid–carbon nanotube composites as scaffolds in the determination of tetrachlorobenzene:
Electrochemical impedance technique
Analytical Methods, 2013, 5, 2440-2443. (当期外封面)
- 58) Yan Wei, Ran Yang, Jin-Huai Liu, Xing-Jiu Huang*
Selective detection toward Hg(II) and Pb(II) using polypyrrole/carbonaceous nanospheres

modified screen-printed electrode

Electrochimica Acta, 2013, 105, 218- 223.

- 59) Zheng Guo, Yan Wei, Ran Yang, Jin-Huai Liu, Xing-Jiu Huang*
Hydroxylation/carbonylation carbonaceous microspheres: A route without the need for an external functionalization to a "hunter" of lead(II) for electrochemical detection
Electrochimica Acta, 2013, 87, 46-52.
- 60) Qiao-Xin Zhang, Yu-Xue Chen, Zheng Guo, Hong-Lin Liu, Da-Peng Wang, Xing-Jiu Huang*
Bioinspired Multifunctional Hetero-Hierarchical Micro/Nanostructure Tetragonal Array with Self-Cleaning, Anticorrosion, and Concentrators for the SERS Detection
ACS Applied Materials & Interfaces, 2013, 5, 10633-10642.
- 61) Yu-Jing Jiang, Xin-Yao Yu, Tao Luo, Yong Jia, Jin-Huai Liu, Xing-Jiu Huang*
 γ -Fe₂O₃ Nanoparticles Encapsulated Millimeter-Sized Magnetic Chitosan Beads for Removal of Cr(VI) from Water: Thermodynamics, Kinetics, Regeneration, and Uptake Mechanisms
Journal of Chemical and Engineering Data, 2013, 58, 3142-3149.

2012 年

- 62) Yang Yu, Xing Chen, Yan Wei, Jin-Huai Liu, Xing-Jiu Huang*
A strategy to polychlorinated biphenyls detection based on specific inhibition of charge transport using nanogapped gold particle film
Analytical Chemistry, 2012, 84, 9818-9824.
- 63) Yang Yu, Xing Chen, Yan Wei, Jin-Huai Liu, Shu-Hong Yu, Xing-Jiu Huang*
CdSe quantum dots enhanced electrical and electrochemical signals of nanogap device for bioanalysis
Small, 2012, 8, 3274-3281. (当期外封面)
- 64) Weihong Xu , Yongxing Zhang, Zheng Guo, Xing Chen, Jinhuai Liu, Xing-Jiu Huang,* Shu-Hong Yu*
Conduction performance of individual Cu@C coaxial nanocable connectors
Small, 2012, 8, 53-58.
- 65) Zhi-Qiang Zhao, Xing Chen, Qing Yang, Jin-Huai Liu, Xing-Jiu Huang*
Selective adsorption toward toxic metal ions results in selective response: electrochemical studies on a polypyrrole/reduced graphene oxide nanocomposite
Chemical Communications, 2012, 48, 2180-2182. (当期外封底)
- 66) Zhi-Qiang Zhao, Xing Chen, Qing Yang, Jin-Huai Liu, Xing-Jiu Huang*
Beyond the selective adsorption of polypyrrole-reduced graphene oxide nanocomposite toward Hg²⁺: Ultra-sensitive and -selective sensing Pb²⁺ by stripping voltammetry
Electrochemistry Communications, 2012, 23, 21-24.
- 67) Yan Wei, Ren-Xia Xu, Chao Gao, Jin-Huai Liu, Xing-Jiu Huang*
Polishing-activated nano α -Al₂O₃: Adsorption and electrochemical behavior toward organophosphate pesticides
Electrochemistry Communications, 2012, 18, 78-80.
- 68) Xu-Cheng Fu, Ju Wu, Li Nie, Cheng-Gen Xie, Jin-Huai Liu, Xing-Jiu Huang*
Electropolymerized surface ion imprinting films on a gold nanoparticles/single-wall carbon nanotube

nanohybrids modified glassy carbon electrode for electrochemical detection of trace mercury(II) in water

Analytica Chimica Acta, 2012, 720, 29-37.

- 69) Yan Wei, Ran Yang, Xing Chen, Lun Wang, Jin-Huai Liu, Xing-Jiu Huang*
A cation trap for anodic stripping voltammetry: NH₃-plasma treated carbon nanotubes for adsorption and detection of metal ions
Analytica Chimica Acta, 2012, 755, 54-61.
- 70) Fan-Li Meng, Hui-Hua Li, Ling-Tao Kong, Jin-Yun Liu, Zhen Jin, Wei Li, Yong Jia, Jin-Huai Liu, Xing-Jiu Huang*
Parts per billion-level detection of benzene using SnO₂/graphene nanocomposite composed of sub-6 nm SnO₂ nanoparticles
Analytica Chimica Acta, 2012, 736, 100-107.
- 71) Yan Wei, Ran Yang, Xin-Yao Yu, Lun Wang, Jin-Huai Liu, Xing-Jiu Huang*
Stripping voltammetry study of ultra-trace toxic metal ions on highly selectively adsorptive porous magnesium oxide nanoflowers
Analyst, 2012, 137, 2183-2191.
- 72) Yan Wei, Chao Gao, Fan-Li Meng, Hui-Hua Li, Lun Wang,* Jin-Huai Liu,* Xing-Jiu Huang*
SnO₂/Reduced Graphene Oxide Nanocomposite for the Simultaneous Electrochemical Detection of Cadmium(II), Lead(II), Copper(II), and Mercury(II): An Interesting Favorable Mutual Interference
The Journal of Physical Chemistry C, 2012, 116, 1034-1041
- 73) Bang-Jing Zhu, Xin-Yao Yu, Yong Jia, Fu-Min Peng, Bai Sun, Mei-Yun Zhang, Tao Luo,* Jin-Huai Liu,* Xing-Jiu Huang*
Iron and 1,3,5-Benzenetricarboxylic Metal–Organic Coordination Polymers Prepared by Solvothermal Method and Their Application in Efficient As(V) Removal from Aqueous Solutions
The Journal of Physical Chemistry C, 2012, 116, 8601-8607
- 74) Xin-Yao Yu, Ren-Xia Xu, Chao Gao, Tao Luo, Yong Jia, Jin-Huai Liu, Xing-Jiu Huang*
Novel 3D Hierarchical Cotton Candy-like CuO: Surfactant-Free Solvothermal Synthesis and Application in As(III) Removal
ACS Applied Materials & Interfaces, 2012, 4, 1954-1962
- 75) Chao Gao, Xin-Yao Yu, Ren-Xia Xu, Jin-Huai Liu, Xing-Jiu Huang*
AlOOH-Reduced Graphene Oxide Nanocomposites: One-Pot Hydrothermal Synthesis and Their Enhanced Electrochemical Activity for Heavy Metal Ions
ACS Applied Materials & Interfaces, 2012, 4, 4672-4682
- 76) Chao Gao, Zheng Guo, Jin-Huai Liu, and Xing-Jiu Huang*
The new age of carbon nanotubes: An updated review of functionalized carbon nanotubes in electrochemical sensors
Nanoscale, 2012, 4, 1948-1963
- 77) Xin-Yao Yu, Tao Luo, Yong Jia, Ren-Xia Xu, Chao Gao, Yong-Xing Zhang, Jin-Huai Liu, Xing-Jiu Huang*
Three-dimensional hierarchical flower-like Mg-Al-layered double hydroxides: A highly efficient adsorbents for As(V) and Cr(VI) removal
Nanoscale, 2012, 4, 3466-3474
- 78) Zheng Guo, Myeong-Lok Seol, Moon-Seok Kim, Jae-Hyuk Ahn, Yang-Kyu Choi,* Jin-Huai Liu, Xing-Jiu Huang*

Hollow CuO nanospheres uniformly anchored on porous Si nanowires: preparation and their potential use as electrochemical sensors

Nanoscale, 2012, 4, 7525–7531

- 79) Ran Yang, Yan Wei, Yang Yu, Chao Gao, Lun Wang*, Jin-Huai Liu, Xing-Jiu Huang*

Make it different: The plasma treated multi-walled carbon nanotubes improve electrochemical performances toward nitroaromatic compounds

Electrochimica Acta, 2012, 76, 354-362

2011 年

- 80) Zheng Guo, Xing Chen, Wei-Hong Xu, Jie Li, Gui-Mei Yang, Min-Qiang Li, Jin-Huai Liu, * Xing-Jiu Huang*

T-shaped SnO₂ nanowire current splitter

Materials Today, 2011, 14, 42-49

- 81) Xing Chen, Zheng Guo, Wei-Hong Xu, Hong-Bin Yao, Min-Qiang Li, Jin-Huai Liu, Xing-Jiu Huang,* Shu-Hong Yu*

Templating synthesis of SnO₂ nanotubes loaded with Ag₂O nanoparticles and their enhanced gas sensing properties

Advanced Functional Materials, 2011, 21, 2049-2056. .

- 82) Xing Chen, Chun-Hua Cui, Zheng Guo, Jin-Huai Liu, Xing-Jiu Huang,* Shu-Hong Yu*

Unique heterogeneous silver-copper dendrites with a trace amount of uniformly distributed Cu elements and their enhanced SERS properties

Small, 2011, 7, 858-863. (卷首插画文章)

- 83) Yan Wei, Ran Yang, Yong-Xing Zhang, Lun Wang, Jin-Huai Liu, * Xing-Jiu Huang*

High adsorptive γ-AlOOH(boehmite)@SiO₂/Fe₃O₄ porous magnetic microspheres for detection of toxic metal ions in drinking water

Chemical Communications, 2011, 47, 11062-11064.

- 84) Yan Wei, Ling-Tao Kong, Ran Yang, Lun Wang, * Jin-Huai Liu, Xing-Jiu Huang*

Electrochemical impedance determination of polychlorinated biphenyl using a pyrenecyclodextrin-decorated single-walled carbon nanotube hybrid

Chemical Communications, 2011, 47, 5340-5342.

- 85) Yan Wei, Zhong-Gang Liu, Xin-Yao Yu, Lun Wang*, Jin-Huai Liu*, Xing-Jiu Huang*

O₂-plasma oxidized multi-walled carbon nanotubes for Cd(II) and Pb(II) detection: evidence of adsorption capacity for electrochemical sensing

Electrochemistry Communications, 2011, 13, 1506-1509.

- 86) Xu-Cheng Fu, Xing Chen, Zheng Guo, Cheng-Gen Xie, Ling-Tao Kong, Jin-Huai Liu, * Xing-Jiu Huang*

Stripping voltammetric detection of mercury(II) based on a surface ion imprinting strategy in electropolymerized microporous poly(2-mercaptopbenzothiazole) films modified glassy carbon electrode

Analytica Chimica Acta, 2011, 685, 21-28.

- 87) Shi-Quan Xiong, Yan Wei, Zheng Guo, Xing Chen, Jin Wang, * Jin-Huai Liu, Xing-Jiu Huang*

Toward Membrane-Free Amperometric Gas Sensors: An Ionic Liquids-Nanoparticles Composite Approach

The Journal of Physical Chemistry C, 2011, 115, 17471-17478.

- 88) Xin-Yao Yu, Tao Luo, Yong Jia, Yong-Xing Zhang, Jin-Huai Liu*, Xing-Jiu Huang*
Porous Hierarchically Micro-/Nano-Structured MgO: Morphology Control and Their Excellent Performance in As(III) and As(V) Removal
The Journal of Physical Chemistry C, 2011, 115, 22242-22250.
- 89) Jie Li, Zheng Guo, Jin-Huai Liu,* Xing-Jiu Huang*
Copper Nanowires Array: Controllable Construction, Tunable Wettability, and Application for Sensing
The Journal of Physical Chemistry C, 2011, 115, 16934-16940.
- 90) Xin-Yao Yu, Tao Luo, Yong-Xing Zhang, Yong Jia, Bang-Jing Zhu, Xu-Cheng Fu, Jin-Huai Liu*,
Xing-Jiu Huang*
Adsorption of Pb(II) on O₂ plasma oxidized multi-walled carbon nanotubes: Thermodynamics, kinetics, and desorption
ACS Applied Materials & Interfaces, 2011, 3, 2585-2593.
- 91) Yan Wei, Ling-Tao Kong, Ran Yang, Lun Wang,* Jin-Huai Liu, Xing-Jiu Huang*
Single-walled carbon nanotube/pyrenecyclodextrin nanohybrids for ultra highly sensitive and selective detection of p-nitrophenol
Langmuir, 2011, 27, 10295-10301.
- 92) Zheng Guo, Xing Chen, Jie Li, Jin-Huai Liu,* Xing-Jiu Huang*
ZnO/CuO hetero-hierarchical nanotrees array: hydrothermal preparation and self-cleaning properties
Langmuir, 2011, 27, 6193-6200.

2010 年

- 93) Xing Chen, Zheng Guo, Gui-Mei Yang, Jie Li, Min-Qiang Li, Jin-Huai Liu,* Xing-Jiu Huang*
Electrical nanogap devices for biosensing
Materials Today, 2010, 13, 28-41.
- 94) Hong-Xuan Ren, Xing Chen, Jin-Huai Liu, Ning Gu, Xing-Jiu Huang*
Toxicity of single-walled carbon nanotube: how we were wrong?
Materials Today, 2010, 13, 6-8.
- 95) Xing-Jiu Huang, Leigh Aldous, Aoife M. O'Mahony, F. Javier del Campo, Richard G. Compton
Towards membrane-free amperometric gas sensors: a microelectrode array approach
Analytical Chemistry, 2010, 82, 5238-5245.
- 96) Hong-Xuan Ren, Xing-Jiu Huang*
Polyacrylate nanoparticles: toxicity or new nanomedicine?
European Respiratory Journal, 2010, 36, 218-221.
- 97) Xing Chen, Xing-Jiu Huang*, Lingtao Kong, Zheng Guo, Xucheng Fu, Minqiang Li, Jinhuai Liu*
Walnut-like CdS micro-particles/single-walled carbon nanotube hybrids: one-step hydrothermal route to synthesis and their properties
Journal of Materials Chemistry, 2010, 20, 352-359.
- 98) Xu-Cheng Fu, Xing Chen, Jin Wang, Jin-Huai Liu,* Xing-Jiu Huang*
Amino functionalized mesoporous silica microspheres with perpendicularly aligned mesopore channels for electrochemical detection of trace 2, 4, 6-trinitrotoluene
Electrochimica Acta, 2010, 56, 102-107.

- 99) Xu-Cheng Fu, Xing Chen, Zheng Guo, Ling-Tao Kong, Jin Wang, Jin-Huai Liu*, **Xing-Jiu Huang***
 Three-dimensional micro/nano pore array containing 2-mercaptopbenzothiazole molecular adapters allows sensitive and selective determination for trace mercury (II)
Electrochimica Acta, 2010, 56, 463-469.
- 100) Fan-Li Meng, Yong Jia, Jin-Yun Liu, Min-Qiang Li, Yu-Feng Sun, Jin-Huai Liu*, **Xing-Jiu Huang***
 Nanocomposites of sub-10nm SnO₂ nanoparticles and MWCNTs for detection of Aldrin and DDT
Analytical Methods, 2010, 2, 1710-1714.

2009 年

- 101) Hong-Xuan Ren, Xing Chen, **Xing-Jiu Huang***, Maesoon Im, Dong-Haan Kim, Joo-Hyung Lee, Jun-Bo Yoon, Ning Gu, Jin-Huai Liu and Yang-Kyu Choi*
 A conventional route to scalable morphology-controlled regular structures and their superhydrophobic/hydrophilic properties for biochips application
Lab on a chip, 2009, 9, 2140-2144
- 102) **Xing-Jiu Huang**, Aoife M. O'Mahony and Richard G. Compton
 Microelectrode arrays for electrochemistry: approaches to fabrication
Small, 2009, 5, 776-788
- 103) **Xing-Jiu Huang***, Dong-Haan Kim, Maesoon Im, Joo-Hyung Lee, Jun-Bo Yoon, and Yang-Kyu Choi
 'Lock-and-Key' geometry effect of patterned surfaces: the wettability and the switching of adhesive force
Small, 2009, 5, 90-94
- 104) **Xing-Jiu Huang**, Emma I. Rogers, Charistopher Hardacre and Richard G. Compton
 The reduction of oxygen in various room temperature ionic liquids in the temperature range 293-318K: Exploring the applicability of the Stokes-Einstein relationship in room temperature ionic liquids
The Journal of Physical Chemistry B, 2009, 113, 8953-8959
- 105) **Xing-Jiu Huang**, Oktay Yarimaga, Ju-Hyun Kim and Yang-Kyu Choi
 Substrate surface roughness-dependent 3-D complex nanoarchitectures of gold particles from directed electrodeposition
Journal of Materials Chemistry, 2009, 19, 478-483
- 106) Xing Shen, Xing Chen, Jin-Huai Liu and **Xing-Jiu Huang***
 Free standing Pt-Au bimetallic membranes with leaf-like nanostructures from agarose-mediated electrodeposition and oxygen gas sensing in room temperature ionic liquids
Journal of Materials Chemistry, 2009, 19, 7687-7693.
- 107) Hong-Xuan Ren, **Xing-Jiu Huang***, Oktay Yarimaga, Yang-Kyu Choi and Ning Gu
 A cauliflower-like gold structure for superhydrophobicity
Journal of Colloid and Interface Science, 2009, 334, 103-107.
- 108) Hong-Xuan Ren, **Xing-Jiu Huang***, Ju-Hyun Kim, Yang-Kyu Choi and Ning Gu
 Pt/Au bimetallic hierarchical structure with micro/nano array via photolithography and electrochemical synthesis: from design to GOT and GPT biosensors
Talanta, 2009, 78, 1371-1377.
- 109) Denis Menshykau, **Xing-Jiu Huang**, Neil V. Rees, F. Javier del Campo, Francesc Xavier Muñoz,

and Richard G. Compton

Investigating the concept of diffusional independence. Potential step transients at nano- and micro-electrode arrays: theory and experiment

The Analyst, 2009, 134, 343-348

110) Emma I. Rogers, Xing-Jiu Huang, Edmund J. F. Dickinson, Christopher Hardacre and Richard G. Compton

Investigating the mechanism and electrode kinetics of the oxygen/superoxide couple in various room temperature ionic liquids at gold and platinum electrodes in the temperature range 298-318K

The Journal of Physical Chemistry C 2009, 113, 17811-17823

111) Bonsang Gu, Tae Jung Park, Jae-Hyuk Ahn, Xing-Jiu Huang, Sang Yup Lee and Yang-Kyu Choi
Nanogap Field-Effect Transistor Biosensors for Electrical Detection of Avian Influenza

Small, 2009, 5, 2407-2412

2008 年及以前

112) Hyung-Soon Im, Xing-Jiu Huang, Bonsang Gu and Yang-Kyu Choi

A dielectric modulated field effect transistor for biosensing

Nature Nanotechnology 2007, 2, 430-434

113) Xing-Jiu Huang, Joo-Hyung Lee, Jong-Woo Lee, Jun-Bo Yoon and Yang-Kyu Choi

A one-step way to a perfectly ordered wafer-scale microbowl array for size-dependent superhydrophobicity

Small, 2008, 4, 211-216

114) Kuk-Hwan Kim, Ju-Hyun Kim, Xing-Jiu Huang, Seung Min Yoo, Sang Yup Lee and Yang-Kyu Choi
Doping-free nanoscale complementary carbon-nanotube field-effect transistors with DNA-templated molecular lithography

Small 2008, 4, 1959-1963

115) Xing-Jiu Huang, Debbie S. Sylvester, Ian Streeter, Leigh Aldous, Christopher Hardacre and Richard G. Compton

The electro-reduction of chlorine Gas at platinum electrodes in several room temperature ionic liquids; Evidence of strong adsorption on the electrode surface revealed by unusual voltammetry in which currents decrease with increasing voltage scan rates

The Journal of Physical Chemistry C 2008, 112, 19477-19483

116) Xing-Jiu Huang, Cun-Cheng Li, Bonsang Gu, Ju-Hyun. Kim, Sung-Oh Cho, and Yang-Kyu Choi

Controlled molecularly mediated assembly of gold nanoctahedra for a glucose biosensor

The Journal of Physical Chemistry C 2008, 112, 3605-3611

117) Ju-Hyun. Kim‡, Xing-Jiu Huang‡ and Yang-Kyu Choi (**#Co-first authors**)

Controlled-synthesis of gold nano-complex array by a combined top-down and bottom-up approach and their electrochemical behavior

The Journal of Physical Chemistry C 2008, 112, 12747-12753.

118) Xing-Jiu Huang, Hyung-Soon Im, Do-Hoon Lee, Hak-Sung Kim and Yang-Kyu Choi

Ferrocene functionalized single-walled carbon nanotube bundles. Hybrid interdigitated construction film for L-Glutamate detection

The Journal of Physical Chemistry C 2007, 111, 1200-1206

105) Xing-Jiu Huang, Hyung-Soon Im, Oktay Yarimaga, Ju-Hyun Kim, Do-Hoon Lee, Hak-Sung Kim

and Yang-Kyu Choi

Direct electrochemistry of uric acid at chemically assembled carboxylated single-walled carbon nanotubes net-like electrode

The Journal of Physical Chemistry B 2006, 110, 21850-21856.

- 106) Xing-Jiu Huang, Seong-Wan Ryu, Hyung-Soon Im and Y.K. Choi

Wet chemical needlelike assemblies of single-walled carbon nanotubes on silicon surface

Langmuir 2007, 23, 991-994

- 107) Yue Li[#], Xing-Jiu Huang[#], Sung-Hwan Heo, Cun-Cheng Li, Yang-Kyu Choi, Wei-Ping Cai and Sung-Oh Cho(^{#Co-first authors})

Superhydrophobic bionic surfaces with hierarchical microsphere/SWCNT composite arrays

Langmuir 2007, 23, 2169-2174

- 108) Xing-Jiu Huang, Yang-Kyu Choi, Kwang-Seok Yun and Euisik Yoon

Oscillating behavior of hazardous gas on tin oxide gas sensor: Fourier and wavelet transform analysis

Sensors and Actuators B 2006, 115, 357-364

- 109) Xing-Jiu Huang and Yang-Kyu Choi

Chemical sensors based on nanostructured materials

Sensors and Actuators B 2007, 122, 659-671

- 110) Xing-Jiu Huang, Yufeng Sun, Fanli Meng, Jinhuai Liu

New approach for the detection of organophosphorus pesticide in cabbage using SPME/SnO₂ gas sensor: principle and preliminary experiment

Sensors and Actuators B 2004, 102, 235-240

- 111) Xing-Jiu Huang, Lianchao Wang, Yufeng Sun, Fanli Meng, Jinhuai Liu

Quantitative analysis of pesticide residue based on the dynamic response of a single SnO₂ gas sensor

Sensors and Actuators B 2004, 99, 330-335

- 112) Xing-Jiu Huang, Fanli Meng, Zongxin Pi, Weihong Xu, Jinhuai Liu

Gas sensing behavior of a single tin dioxide sensor under dynamic temperature modulation

Sensors and Actuators B 2004, 99, 444-450

- 113) Xing-Jiu Huang, Jinhuai Liu, Dongliang Shao, Zongxin Pi, Zengliang Yu

Rectangular mode of operation for detecting pesticide residue by using a single SnO₂-based gas sensor

Sensors and Actuators B 2003, 96, 630-635