



Department: School of Resources and Environmental Engineering

Professional field: Environmental Science and Engineering

E-mail: gthuang@ecust.edu.cn

Profile

I graduated and got PhD degree in Fine Chemical Engineering, East China University of Science and Technology (ECUST) in 1998, and work as academic staff at School of Resources and Environmental Engineering, ECUST after my graduation. I was a visiting scholar in the Department of Civil Engineering, the University of Hong Kong from December 2001 to June 2003. I became a professor in Department of Environmental Engineering, ECUST in 2006. I am a council member of Shanghai Water Purification Technology Society and editorial board member of Journal of Water purification Technology. I give lectures on “Industrial water treatment technology”, and “Specialized English” to graduate and undergraduate students. I have published over 60 academic papers, co-edited 4 academic books and got 8 authorized patents. Now my research interests include electrochemical technology for wastewater treatment, Treatment technology of liquid radioactive wastes from nuclear power plants, microbial electrochemistry, polluted water remediation, and etc.

Research Field

1. Water Pollution Control Engineering
2. Environmental Electrochemistry

Research results and selected published papers

1. Yao Yin, Guangtuan Huang*, Yiran Tong, Yongdi Liu, Lehua Zhang. Electricity production and electrochemical impedance modeling of microbial fuel cells under static magnetic field. Journal of Power Sources, 2013, 237: 58-63
2. Zhihao Lu, Peter Girguis, Peng Liang, Haifeng Shi, Guangtuan Huang, Lankun Cai, Lehua Zhang*. Biological capacitance studies of anodes in microbial fuel cells using electrochemical impedance spectroscopy. Bioprocess and Biosystems Engineering, 2015, 38(7): 1325-1333
3. Zhihao Lu, Dingming Chang, Jingxing Ma, Guangtuan Huang, Lankun Cai, Lehua Zhang*. Behavior of metal ions in bioelectrochemical systems: A review. Journal of Power Sources, 2015, 275: 243-260
4. Lehua Zhang*, Willy Verstraete, Maria de Lourdes Mendoza, Zhihao Lu, Yongdi Liu, Guangtuan Huang, Lankun Cai. Decrease of dissolved sulfide in sewage by powdered natural magnetite and hematite. Science of The Total Environment, 2016, 573: 1070-1078
5. Yao Yin, Guangtuan Huang*, Ningbo Zhou, Yongdi Liu, Lehua Zhang. Increasing power generation of microbial fuel cell with nano-CeO₂ modified anode. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2016, 38(9): 1212-1218
6. Yao Yin, Guangtuan Huang*, Mengjie Di, Cheng Xue, Weixin Li, Lehua Zhang, Yongdi Liu. Increased electroactive species concentration in anodic biofilm of Geobacter-inoculated microbial fuel cells under static magnetic field. Research on Chemical Intermediates, 2017, 43(2): 873-883
7. Guangtuan Huang*, Panpan Dou, Zhen Zhang, Jing Yan. Removal of cobalt from liquid radioactive waste by in situ electrochemical synthesis of ferrite. Journal of Radioanalytical and Nuclear Chemistry, 2018, 316(1): 61-70
8. Guangtuan Huang*, Ling Qu, Yi Ding. Birnessite modified graphite cathode toward efficient autotrophic denitrification of Thiobacillus denitrificans in bioelectrochemical system. Desalination and Water Treatment, 2019, 150: 367-373
9. Guangtuan Huang*, Lifeng Shao, Xiaohong He, Li Jiang. Treatment of simulated liquid radioactive waste containing cobalt by in-situ co-precipitation of Zn/Al layered double hydroxides. Journal of Radioanalytical and Nuclear Chemistry, 2019, 319(3): 847-854
10. Guangtuan Huang*, Li Huang, Liyuan Dong. Electrocatalytic deiodination of methyl iodide on a copper electrode. Research on Chemical Intermediates, 2019, 45(7): 3723-3737
11. Guangtuan Huang*, Li Huang. Particulate copper electrodeposited on carbon felt for degradation of low concentration of methyl iodide in liquid radioactive wastes. Water Science and Technology, 2019, 80(3): 397-407