

Assistant Professor Ying Li

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Academic Qualification:

09.2015-06.2019, Ph.D. in Environmental Science, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China

09.2012-06.2015, MSc in Environmental Science, South China University of Technology, China

Teaching Area

Research Area

Working Experience

08.2022-present, Assistant Professor, Macau University of Science and Technology, China

06.2019-12.2021, Postdoc Research Associate, University of Illinois at Urbana-Champaign, USA

09.2017-04.2019, Visiting Scholar, University of Illinois at Urbana-Champaign, USA

Research Grants

1. Advanced Photon Source, Argonne, IL, Effect of carbonate on the formation and transformation of green rusts **PI.**
2. Advanced Photon Source, Argonne, IL, Effect of (bi)carbonate on the transformation of ferrihydrite at near **PI.**
3. Research Grant of the Clay Minerals Society, Effect of isomorphous substitution on the reducing capability of magnetite coupled with aqueous Fe^{2+} **PI.**
4. Illinois Nutrient Research and Education Council, Understanding mechanisms and processes of dissolved reactive P
5. USDA National Institute of Food and Agriculture, Sources and transport of phosphorus in tile drained agricultural
6. National Natural Science Foundation of China, Interaction of magnetite coupled with Fe(III) and its reducing
7. CAS/SAFEA International Partnership Program for Creative Research Teams, Mineral structure and surface

8. Natural Science Foundation of Guangdong Province, China, Degradation of tetrabromobisphenol A by nanoscale
9. National Natural Science Foundation of China, Effect of surfactants on the surface properties and structure,

Representative publications (Complete publication refer to my webpage)

Jounal Papers

1. **Ying Li**, Chaoqun Zhang, Meijun Yang, Hongping He, Yuji Arai*, Carbonate accelerated transformation of ferrihydrite in the presence of phosphate. *Geoderma*, 2022, 417, 115811.
2. **Ying Li**, Kenneth J.T. Livi, Mary R. Arenberg, Suwei Xu, Yuji Arai*, Depth sequence distribution of water extractable colloidal phosphorus and its phosphorus speciation in intensively managed agricultural soils, *Chemosphere*, 2022, 286, 131665.
3. **Ying Li**, Meijun Yang, Martin Pentrak, Hongping He, Yuji Arai*, Carbonate-enhanced transformation of ferrihydrite to hematite, *Environmental Science & Technology*, 2020, 54, 13701-13708.
4. **Ying Li**, Gaoling Wei, Xiaoliang Liang*, Caihua Zhang, Jianxi Zhu, Yuji Arai, Metal substitution-induced reducing capacity of magnetite coupled with aqueous Fe(II), *ACS Earth and Space Chemistry*, 2020, 4: 905-911.
5. **Ying Li**, Donghui Han, Yuji Arai, Lin Fu, Xiaoqin Li*, Weilin Huang, Kinetics and mechanisms of debromination of tetrabromobisphenol A by Cu coated nano zerovalent iron, *Chemical Engineering Journal*, 2019, 373: 95-102.
6. **Ying Li**, Gaoling Wei, Caihua Zhang, Xiaoliang Liang*, Wei Chu*, Hongping He, Joseph W. Stucki, Lingya Ma, Xiaoju Lin, Jianxi Zhu, Remarkable effect of Co substitution in magnetite on the reduction removal of Cr(VI) coupled with aqueous Fe(II): Improvement mechanism and Cr fate, *Science of the Total Environment*, 2019, 656:
7. **Ying Li**, Gaoling Wei, Hongping He, Xiaoliang Liang*, Wei Chu*, Deyin Huang, Jianxi Zhu, Wei Tan, Qiuxin Huang, Improvement of zinc substitution in the reactivity of magnetite coupled with aqueous Fe(II) towards nitrobenzene reduction, *Journal of Colloid and Interface Science*, 2018, 517: 104-112.
8. **Ying Li**, Xiaoqin Li*, Donghui Han, Weilin Huang, Chen Yang, New insights into the role of Ni loading on the surface structure and the reactivity of nZVI toward tetrabromo- and tetrachlorobisphenol A, *Chemical Engineering Journal*, 2017, 311: 173-182.
9. **Ying Li**, Xiaoqin Li*, Yang Xiao, Chaohai Wei, Donghui Han, Weilin Huang, Catalytic debromination of tetrabromobisphenol A by Ni/nZVI bimetallic particles, *Chemical Engineering Journal*, 2016, 284: 1242-1250.
10. Xiaoliang Liang*, **Ying Li***, Gaoling Wei, Hongping He, Joseph W. Stucki, Lingya Ma, Linda Pentrakova, Martin Pentrak, Jianxi Zhu, Heterogeneous reduction of by Co-substituted magnetite coupled with aqueous Fe²⁺: Performance, factors, and mechanism, *ACS Earth and Space Chemistry*, 2019, 3: 728-737. (***Co-corresponding author**)
11. **Ying Li**, Yang Xiao, Xiaoqin Li*, Chen Yang, Degradation of phenanthrene by nanoscale zero-valent iron and its bimetallic nanoparticles, *Acta Scientiae Circumstantiae*, 2015, 35: 499-507. (**In Chinese**)
12. **Ying Li**, Yang Xiao, Xiaoqin Li*, Research progresses in tetrabromobisphenol A degradation technologies, *Environmental Protection of Chemical Industry*, 2014, 34: 326-331. (**In Chinese**)
13. Ai Chen, **Ying Li**, Jianying Shang, Yuji Arai*, Ferrihydrite transformation impacted by coprecipitation of phytic acid, *Environmental Science & Technology*, 2020, 54: 8837-8847.
14. Meijun Yang, Xiaoliang Liang, **Ying Li**, Hongping He*, Runliang Zhu, Yuji Arai*, Ferrihydrite transformation impacted by adsorption and structural incorporation of rare earth elements. *ACS Earth and Space Chemistry*, 2021,

Parents

1. Xiaoqin Li, **Ying Li**, Xin Fu, Qun Chen, Na Ji, A protocol for the removal of total nitrogen, total phosphorus, and heavy metals from river by zero-valent iron, China, **ZL 2014 1 0386229.3**.

Professional Certification and Awards

Outstanding research achievement award for graduate students, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences (GIG, CAS), 2020.

2019.

A research grant award from the Clay Minerals Society and a travel grant award for EUROCLAY 2019 (2019 CMS Annual Conference).

Third prize of academic report of Soil young scholar forum, Guangdong Society of Soil Sciences, 2018

Excellence paper award of National Mineral Science and Engineering Conference, Chinese Society for Mineralogy, Petrology and Geochemistry, 2016.

2016.

2013, 2013 2014.

Second prize of academic report in the seminar

and Abiotic Degradation of Brominated Flame

Journal Editorship

Personal Website

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