



Department: School of Resources and Environmental Engineering
Professional field: Environmental engineering, Resource recycling science and Engineering

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Profile

My research interests include comprehensive utilization of brine resources and treatment on bulk industrial solid wastes, concerning industrial crystallization, desalination and preparation of inorganic functional materials. I have presided a dozen of research projects such as NSFC and national key R & D plan, and published more than 40 papers. I won one second prize of Hebei Province for scientific and technological progress in 2018, and one third prize of Shanghai city for technological invention in 2013.

Education background:

2014-2015, , Martin-Luther-Universität Halle-Wittenberg , Germany, Visiting scholar

2004-2010, East China University of science and technology, chemical engineering, Ph.D

1998-2002, Hebei University of technology, chemical engineering and technology, Bachelor
Working experience:

2010 - Present, lecturer and associate professor, School of resources and environmental engineering, East China University of science and technology

2002 - 2004, Research assistant, School of chemical engineering, Hebei University of Technology

Research Field

Industrial crystallization, Desalination, Comprehensive utilization of brine resources (salt Lake, seawater, salty wastewater, etc.), Resource utilization of industrial solid waste.

Research results and selected published papers

- [1] Zhang J, Sun Y, and Yu J, et al. Investigation of amorphous calcium carbonate' s formation under high concentration of magnesium: The prenucleation cluster pathway [J]. Journal of Crystal Growth, 2018, 494: 8-16.
- [2] Xiaoxue Sun, Yuzhu Sun, Jianguo Yu. Removal of ferric ions from aluminum solutions by solvent extraction. II: Kinetics study, Environmental Progress & Sustainable Energy, 2018, 37 (6):1918-1924.
- [3] Zhang J, Dong C, Sun Y, and Yu J, et al. Mechanism of Magnesium's Influence on Calcium Carbonate Crystallization: Kinetically Controlled Multistep Crystallization [J]. Crystal Research and Technology, 2018, 53: 1-8.
- [4] Shaojun Duan, Yuzhu Sun, Xingfu Song, and Jianguo Yu. Morphology and Growth Mechanism Study of Lithium Carbonate Synthesized by Reactive Crystallization. Crystal Research and Technology, 2018, 53, DOI: 10.1002/crat.201700185
- [5] Zhang J, Sun Y, and Yu J. Qualitative discussion of prenucleation cluster role in crystallization of calcium carbonate under high concentration of magnesium based on experimental phenomena [J]. Journal of Crystal Growth, 2017, 478: 77-84.
- [6] Xiaoxue Sun, Yuzhu Sun, Jianguo Yu. Removal of ferric ions from aluminum solutions by solvent extraction. I Iron removal. Separation & purification 2016, 159:18-22.
- [7] Jin Miaomiao, Patrick Froberg, Sun Yuzhu, Li Ping, Yu Jianguo, Joachim Ulrich. The thermal decomposition study of $MgCl_2 \cdot 6H_2O \cdot C_4H_8O_2$ [J]. Chemical Engineering Research and Design, 2015, 104: 256-263.
- [8] Xiaoxue Sun, Sun Yuzhu, Jianguo Yu. Cooling Crystallization of Aluminum Sulfate in Pure Water Modulated by Sodium Dodecylbenzenesulfonate [J]. Crystal Research and Technology, 2015, 50(8):682-687.
- [9] Xiaoxue Sun, Sun Yuzhu, Jianguo Yu. Crystal structure of aluminum sulphate hexadecahydrate and its morphology[J]. Crystal Research and Technology, 2015, 50 (4): 293-298.
- [10] Xiaoxue Sun, Sun Yuzhu, Jianguo Yu. Leaching of aluminum from coal spoil by mechanochemical activation [J]. Frontiers of Chemical Science and Engineering, 2015, 9(2): 216-223.
- [11] Xiaoxue Sun, Sun Yuzhu, Jianguo Yu. Cooling Crystallization of Aluminum Sulfate in Pure Water [J]. Journal of Crystal Growth, 2015, 419: 94-101.
- [12] Yuzhu Sun, Xing-Fu Song, Miao-Miao Jin, Wang Jin, Jian-Guo Yu. Gas-Liquid Reactive Crystallization of Lithium Carbonate by a Falling Film Column [J]. Industrial & Engineering Chemistry Research, 2012, 52 (49): 17598– 17606.
- [13] Yuzhu Sun, Xingfu Song, Jin Wang, Jianguo Yu. Preparation of Li_2CO_3 by Gas-Liquid Reactive Crystallization of $LiOH$ and CO_2 [J]. Crystal Research and Technology, 2012, 47(4), 437-442.
- [14] Yuzhu Sun, Xingfu Song, Jin Wang, Jianguo Yu.. Preparation of lithium carbonate hollow spheres by spray pyrolysis [J]. Crystal Research and Technology, 2011, 46(2): 173-177.
- [15] Yuzhu Sun, Xingfu Song, Jin Wang, Yan Luo, Jianguo Yu. Determination of seeded supersolubility of lithium carbonate using FBRM [J]. Journal of Crystal Growth, 2010, 312(2): 294-300.