

Name: Wu Ling Title: Ph.D., Professor Department: Metallurgical Engineering Office address: No.8 Jixue Road, Xiangcheng District, Suzhou E-mail: lwu@suda.edu.cn

Website (<u>http://web.suda.edu.cn/lwu/</u>)

Education and Professional Experience

2020.07 to present, Soochow University, Professor
2019.01 to 2019.12, National University of Singapore, Faculty of Chemistry, Visiting Scholar
2014.07 to 2020.06, Soochow University, Associate Professor
2011.11 to 2014.06, Soochow University, Lecturer
2006.09 to 2011.06, Central South University, Ph.D. in Physical Chemistry of Metallurgy
2002.09 to 2006.06, Central South University, B.S. in Metallurgical Engineering

Research Interests

- 1. Battery Materials (Li/Na/K ion batteries, et al.)
- 2. Physical Chemistry of Metallurgy; Hydrometallurgy
- 3. Comprehensive Utilization of Metallurgical Resources

Research Projects

- 1. National Natural Science Foundation of China (No.51974190)
- 2. National Natural Science Foundation of China (No.51774210)
- 3. National Natural Science Foundation of China (No.51574170)
- 4. National Natural Science Foundation of China (No.51204114)
- 5. Scientific and Technological Key Projects of Guangxi Province (No.1348010-2)
- 6. China Postdoctoral Science Foundation (No.2014T70543)
- 7. China Postdoctoral Science Foundation (No.2013M540464)
- 8. Science and Technology Plan Projects of Suzhou, China (No.SYG201512)
- 9. Natural Science Foundation of Jiangsu Province, China (No.BK2012216)
- 10. Industrialization Project of Citic Dameng Mining Industries Limited.
- 11. National Natural Science Foundation of China (No.51272290)
- 12. Natural Science Foundation Project of Universities in Jiangsu Province (No.16KJD430003)
- 13. Major Scientific and Technological Projects in Guangxi Province (1598008-6)

Selected Publications

- Yulei Sui, Jian Zhou, Xiaowei Wang, Ling Wu*, et al. Recent advances in black phosphorus based materials for electrochemical energy storage. *Materials Today*, 2020, https://doi.org/10.1016/j.mattod.2020.09.005. (IF=26.416)
- 2. Ling Wu, Jie Zheng, Liang Wang, et al. PPy-encapsulated SnS_2 nanosheets stabilized by defects on a TiO₂ support as a durable anode material for lithium-ion batteries. *Angewandte Chemie*

International Edition, 2019, 58: 811-815. (IF=12.959, ESI 1‰热点论文)

- Yijian Liu, Hao Guo, Baohua Zhang, Gongyu Wen, Robert Vajtai, Ling Wu*, Pulickel M Ajayan*, Liang Wang*. Sustainable synthesis of N-doped hollow porous carbon spheres via a spray-drying method for lithium-sulfur storage with ultralong cycle life. *Batteries & Supercaps*, 2020, https://doi.org/10.1002/batt.202000143
- Yulei Sui, Yueying Hao, Xiaoping, Jiangpeng Li, Gongyu Wen, Ziwei Zhang, Ling Wu*. Vanadium-substituted Na_{0.67}Fe_{0.5}Mn_{0.5}O₂ cathode materials with enhanced electrochemical performance for sodium-ion batteries. *Ceramics International*, 2020, https://doi.org/10.1016/j.ceramint.2020.10.102
- Shibao Tang, Ling Wu*, Yulei Sui, et al. Spray-drying synthesis of Na₂Fe_{1-x}Mn_xPO₄F/C cathodes: A facile synergetic strategy harvesting superior sodium storage. *Advanced Powder Technology*, 2020, 31: 1564-1573.
- Yulei Sui, Yueying Hao, Xiaoping Zhang, Shengkui Zhong, Jiabin Chen, Jiangpeng Li, Ling Wu*. Spray-drying synthesis of P2-Na_{2/3}Fe_{1/2}Mn_{1/2}O₂ with improved electrochemical properties. *Advanced Powder Technology*, 2020, 31: 190-197.
- Yong Zhang, Ming Li, Shengkui Zhong, Yulei Sui, Xiaoping Zhang, Xinyu Li, Ling Wu*. MoS₂ wrapped MOFs-derived N-doped carbon nanorods as an effective sulfur host for high-performance lithium-sulfur batteries. *Ceramics International*, 2020, 46: 9614-9621.
- Hao Guo, Yong Hu, Xiaoping Zhang, Rongliang Zhang, Dong Hou, Yulei Sui, Ling Wu*. Facile one-step hydrothermal synthesis of Na₃V₂(PO₄)₂F₃@C/CNTs tetragonal micro-particles as high performance cathode material for Na-ion batteries. *Frontiers in Chemistry*, 2019, 7: 689.
- Yulei Sui, Yueying Hao, Gongyu Wen, Yong Hu, Ling Wu*. Synthesis and photocatalytic properties of Fe-doped TiO₂ nanoparticles with highly exposed (001) facets from Ti-bearing tailings. *Applied Surface Science*, 2019, 475: 880-886.
- 10. Ling Wu, Yong Hu, Xiaoping Zhang, et al. Synthesis of carbon-coated Na₂MnPO₄F hollow spheres as a potential cathode material for Na-ion batteries. *Journal of Power Sources*, 2018, 374: 40-47. (IF=8.247, ESI 高被引)
- Yong Hu, Ling Wu*, Guixiang Liao, et al. Electrospinning synthesis of Na₂MnPO₄F/C nanofibers as a high voltage cathode material for Na-ion batteries. *Ceramics International*, 2018, 44: 17577-17584.
- Ling Wu, Shaonan Shi, Xiaoping Zhang, et al. Room-temperature pre-reduction of spinning solution for the synthesis of Na₃V₂(PO₄)₃/C nanofibers as high-performance cathode materials for Na-ion batteries. *Electrochimica Acta*, 2018, 274: 233-241.
- Ling Wu, Jiabin Chen, Shengkui Zhong, et al. Effect of mechanical activation on hydrochloric acid leaching ilmenite at atmospheric pressure. *The Chinese Journal of Nonferrous Metals*, 2015, 25: 211-219.
- Ling Wu, Jiajia Lu, Gui Wei, et al. Synthesis and electrochemical properties of *x*LiMn_{0.9}Fe_{0.1}PO₄ *y*Li₃V₂(PO₄)₃/C composite cathode materials for lithium-ion batteries. *Electrochimica Acta*, 2014, 146: 288-294.
- Shengkui Zhong, Ling Wu*, Jiequn Liu. Sol-gel synthesis and electrochemical properties of 9LiFePO₄ Li₃V₂(PO₄)₃/C composite cathode material for lithium ion batteries. *Electrochimica Acta*, 2012, 74: 8-15.

Awards

- 1. The First Prize of Suzhou Natural Science Excellent Paper, 1, 2020
- 2. Excellent Paper Award of China Nonferrous Metals Science and Technology, 1, 2020
- 3. Excellent Paper Award of Transactions of Nonferrous Metals Society of China, 1, 2018
- 4. Excellent Paper Award of the 11th Annual Academic Meeting of China Nonferrous Metals Society, 1, 2017
- 5. Nomination Award of "Metallurgical President Award" for Young Teachers of the Third National University Metallurgical President Award, 1, 2015
- 6. Teaching Achievement Award of Suchow University, 5, 2015
- 7. Teaching Achievement Award of Suchow University, 5, 2012