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职称/职务：副教授、博士、硕士生导师

专 业：物理化学

研究方向：纳米储能/催化材料，硅、碳功能材料

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个人经历

学习经历

2008.09-2012.07：西安科技大学，化学化工学院，学士

2012.09-2015.07：新疆大学，化学化工学院，硕士

2015.09-2018.07：新疆大学，应用化学研究所，博士

工作经历

2020.06-至今：新疆大学，化学学院，副教授

2020.01-2020.06：新疆大学，应用化学研究所，副教授

2018.08-2020.01：新疆大学，应用化学研究所，讲师

主讲课程

本科生：《无机及分析化学实验》、《化学实验室安全》

研究生：《界面化学》

研究内容

1. 纳米储能材料
2. 纳米催化材料
3. 硅基功能材料
4. 碳基功能材料

主持科研项目

1. 自治区重点研发专项-子课题(2020B02019-1), 重质碳资源的化学组成分析、评价及下游产品开发, 2021.01-2023.12, 80 万元, 在研, 主持;

2. 乌鲁木齐市青年博士科技人才计划, 铋基化合物/碳一维复合材料构筑及其锂硫电池应用, 2021.01-2022.12, 10 万元, 在研, 主持;
3. 自治区天山青年博士计划(2019Q061), 铋氧基化合物/碳杂化纳米管的制备及电化学机制研究, 2020.06-2022.06, 10 万元, 在研, 主持;
4. 国家自然科学基金青年基金(51902277), 基于空间限域生长策略的金属氧化物@碳杂化多孔纳米管的构筑及其储锂(钠)机制研究, 2020.01-2022.12, 25 万元, 在研, 主持;
5. 自治区自然科学基金(2019D01C044), 尖晶石钛基化合物/C 一维纳米材料的构筑及锂电性能, 2019.05-2022.04, 7 万元, 在研, 主持;
6. 自治区天池博士计划, 杂化结构纳米钛基化合物/C 复合多孔纳米管的构筑与电化学性能, 2019.01-2020.12, 7 万元, 已结题, 主持;
7. 新疆大学博士科研启动基金, 金属氧化物@CNT 多孔纳米复合材料的制备及电化学性能, 2019.01-2020.12, 20 万元, 已结题, 主持;

主持科研项目

无

奖励情况:

1. 自治区第十四届自然科学优秀学术论文一等奖

奖励名称: Porous CNT@Li₄Ti₅O₁₂ coaxial nanocables as ultra high power and long life anode materials for lithium ion batteries

获奖者: 唐亚昆, 刘浪, 赵洪洋

授奖部门: 新疆维吾尔自治区科技厅

2. 自治区第十五届自然科学优秀学术论文二等奖

奖励名称: Rational design of hybrid porous nanotubes with robust structure of ultrafine Li₄Ti₅O₁₂ nanoparticles embedded in bamboo-like CNTs for superior lithium ion storage

获奖者: 唐亚昆, 刘浪, 赵洪洋

授奖部门: 新疆维吾尔自治区科技厅

个人荣誉

2018 年入选自治区“天池博士”计划

2019 年入选乌鲁木齐市“青年博士科技人才”计划

2020 年入选自治区“天山青年博士”计划

社会工作

无

代表性研究成果

1. **Yakun Tang**¹, Yang Gao¹, Lang Liu*, Yue Zhang, Jing Xie, Xingyan Zeng, Electrochemically driven amorphization of (Li-)Ti-P-O nanoparticles embedded in porous CNTs for superior lithium storage performance, *Chem. Eng. J.*, 2021, 409, 127373.
2. **Yakun Tang**¹, Yang Gao¹, Lang Liu*, Yue Zhang, Jing Xie, Xingyan Zeng, Li(Na)₂FeSiO₄/C hybrid nanotubes: promising anode materials for lithium/sodium ion batteries, *Inorg. Chem. Front.*, 2020, 7, 4438-4444.
3. **Yakun Tang**, Wenjie Ma, Yue Zhang, Yang Gao, Xingyan Zeng, Lang Liu*, Rational design of FeTiO₃/C hybrid nanotubes: promising lithium ion anode with enhanced capacity and cycling performance, *Chem. Commun.*, 2020, 56, 12640-12643.
4. **Yakun Tang**, Lang Liu*, Yue Zhang, Jing Xie, Yang Gao, Xingyan Zeng, Yang Zhang, Construction of the NaTi₂(PO₄)₃/C electrode with a one-dimensional porous hybrid structure as an advanced anode for sodium-ion batteries, *Dalton Trans.*, 2020, 49, 4680-4684.
5. Wenhao Liang¹, **Yakun Tang**¹, Lang Liu*, Caixia Zhu, Rui Sheng, Effective trapping of polysulfides using functionalized thin-walled porous carbon nanotubes as sulfur hosts for lithium-sulfur batteries, *Inorg. Chem.*, 2020, 59, 8481-8486.
6. Yue Zhang, Zihe Zhang, **Yakun Tang**, Dianzeng Jia*, Yudai Huang, Weikong Pang, Zaiping Guo, Zhen Zhou*, LiFePO₄ particles embedded in fast bifunctional conductor rGO&C@Li₃V₂(PO₄)₃ nanosheets as cathodes for high-performance Li-ion hybrid capacitors, *Adv. Funct. Mater.*, 2019, 29, 1807895.
7. Wenhao Liang¹, **Yakun Tang**¹, Lang Liu*, Yang Gao, Xingyan Zeng, Physical forces inducing thin amorphous carbon nanotubes derived from polymer nanotube/SiO₂ hybrids with superior rate capability for lithium-ion batteries, *ACS Appl. Mater. Interfaces*, 2019, 11, 36985-36990.
8. Shasha Gao¹, **Yakun Tang**¹, Yang Gao, Lang Liu*, Hongyang Zhao, Xiaohui Li, Xuzhen Wang, Highly crystallized Co₂Mo₃O₈ hexagonal nanoplates interconnected by coal-derived carbon via the molten-salt-assisted method for competitive Li-ion battery anodes, *ACS Appl. Mater. Interfaces*, 2019, 11, 7006-7013.
9. Caixia Zhu¹, **Yakun Tang**¹, Lang Liu*, Xiaohui Li, Yang Gao, Yanna NuLi, LiCrTiO₄ nanowires as high-performance cathodes for magnesium-lithium hybrid batteries, *ACS Sustainable Chem. Eng.*, 2019, 7, 14539-14544.
10. Yue Zhang, Dianzeng Jia*, **Yakun Tang**, Yudai Huang, Weikong Pang, Zaiping Guo, Zhen Zhou*, In-situ chelating synthesis of hierarchical LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ polyhedron assemblies with ultralong cycle life for Li-ion batteries, *Small*, 2018, 1704354.
11. **Yakun Tang**, Lang Liu*, Hongyang Zhao, Lingbing Kong, Zaiping Guo, Shasha Gao, Yuanyuan Che, Lei Wang, Dianzeng Jia, Rational design of hybrid porous nanotubes with robust structure of ultrafine

Li₄Ti₅O₁₂ nanoparticles embedded in bamboo-like CNTs for superior lithium ion storage, *J. Mater. Chem. A*, 2018, 6, 3342-3349.

12. **Yakun Tang**, Lang Liu*, Hongyang Zhao, Yue Zhang, Lingbing Kong, Shasha Gao, Xiaoahui Li, Lei Wang, Dianzeng Jia, Pseudocapacitive behaviors of Li₂FeTiO₄/C hybrid porous nanotubes for novel lithium-ion battery anodes with superior performances, *ACS Appl. Mater. Interfaces*, 2018, 10, 20225-20230.

13. Shasha Gao¹, **Yakun Tang**¹, Lei Wang, Lang Liu*, Zhipeng Sun, Shan Wang, Hongyang Zhao, Lingbing Kong, Dianzeng Jia, Coal-based hierarchical porous carbon synthesized with a soluble salt self-assembly-assisted method for high performance supercapacitors and Li-ion batteries, *ACS Sustainable Chem. Eng.*, 2018, 6 (3), 3255-3263.

14. **Yakun Tang**, Lang Liu*, Hongyang Zhao, Shasha Gao, Yan Lv, Lingbing Kong, Junhong Ma, Dianzeng Jia, Hybrid porous bamboo-like CNTs embedding ultrasmall LiCrTiO₄ nanoparticles as high rate and long life anode materials for lithium ion batteries, *Chem. Commun.*, 2017, 53, 1033-1036.

15. Wei Liu, **Yakun Tang**, Zhipeng Sun, Shasha Gao, Junhong Ma, Lang Liu*, A simple approach of constructing sulfur-containing porous carbon nanotubes for high-performance supercapacitors, *Carbon*, 2017, 115, 754-762.

16. Yang Zhang¹, **Yakun Tang**¹, Shasha Gao, Dianzeng Jia, Junhong Ma, Lang Liu*, Sandwich-like CNT@Fe₃O₄@C coaxial nanocables with enhanced lithium-storage capability, *ACS Appl. Mater. Interfaces*, 2017, 9, 1452-1458.

17. Shasha Gao, **Yakun Tang**, Lei Wang, Lang Liu*, Dianzeng Jia, Zongbin Zhao, NiFe nanoalloys in-situ immobilized on coal based activated carbons through one-step pyrolysis as magnetically recoverable catalysts for reduction of 4-nitrophenol, *J. Alloy Compd.*, 2017, 702, 531-537.

18. **Yakun Tang**, Lang Liu*, Hongyang Zhao, Dianzeng Jia, Wei Liu, Porous CNT@Li₄Ti₅O₁₂ coaxial nanocables as ultra high power and long life anode materials for lithium ion batteries, *J. Mater. Chem. A*, 2016, 4, 2089-2095.

19. **Yakun Tang**, Lang Liu*, Xingchao Wang, Dianzeng Jia, Wei Xia, Zongbin Zhao, Jieshan Qiu, TiO₂ quantum dots embedded in bamboo-like porous carbon nanotubes as ultra high power and long life anodes for lithium ion batteries, *J. Power Sources*, 2016, 319, 227-234.

20. Yincong Yang, Lang Liu*, **Yakun Tang**, Yang Zhang, Dianzeng Jia, Lingbing Kong, Bamboo-like carbon nanotubes containing sulfur for high performance supercapacitors, *Electrochim. Acta*, 2016, 191, 846-853.