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教育经历:

2016.09 - 2021.06, 山东大学, 材料科学与工程学院, 工学博士学位

2012.09 - 2016.06, 山东大学, 材料科学与工程学院, 工学学士学位

2019.09 - 2020.09, 美国莱斯大学, 联合培养

工作经历:

2021.07 - 2023.07, 山东大学, 控制科学与工程学院, 博士后

2023.08 - 至今, 鲁东大学, 物理与光电工程学院, 讲师

研究领域:

超级电容器新型电极材料设计制备及储能机理研究, 高效锂氧气电池正极催化剂等

科研项目:

- 镍/钴基异质结构电极材料的构建及界面机制研究, 山东省自然科学基金青年基金项目, 2023.01-2025.12, 在研, 主持
- 芯片封装用低膨胀系数电子基材关键技术研发, 山东省重大创新工程, 2021.10-2024.12, 在研, 共同主持

代表性成果:

[1] **Yuan Yang**, Linna Dai, Jianwei Qiu, Zhibiao Hu, Peng Wang, Yongtao Zhao, Huanhuan Guo, Pengchao Si*, Rui Song*. Modulating surface cation vacancies of nickel-cobalt oxides as efficient catalysts for lithium-oxygen batteries. *Journal of Materials Science & Technology*, 2023, 139, 147-155.

[2] **Yuan Yang**, Shuo Li, Shanshan Li, Pengchao Si*, Lijie Ci. High-performance hybrid supercapacitor enabled by advantageous heterojunction boosted starfish-like ZnCo-S electrode. *Journal of Alloys and Compounds*, 2022, 928, 166997.

[3] **Yuan Yang**, Shuo Li, Wei Huang, Shuwei Duan, Lijie Ci, Pengchao Si*. Rational construction of ternary ZnNiP arrayed structures derived from 2D MOFs for advanced

hybrid supercapacitors and alkaline batteries. *Electrochimica Acta*, 2021, 387, 138548.

[4] **Yuan Yang**, Shuo Li, Wei Huang, Huihui Shangguan, Christian Engelbrekt, Shuwei Duan, Lijie Ci, Pengchao Si*. Effective synthetic strategy for $Zn_{0.76}Co_{0.24}S$ encapsulated in stabilized N-doped carbon nanoarchitecture towards ultra-long-life hybrid supercapacitors. *Journal of Materials Chemistry A*, 2019, 7, 14670-14680.

[5] **Yuan Yang**, Wei Huang, Shuo Li, Lijie Ci, Pengchao Si*. Surfactant-dependent flower- and grass-like $Zn_{0.76}Co_{0.24}S/Co_3S_4$ for high-performance all-solid-state asymmetric supercapacitors. *Journal of Materials Chemistry A*, 2018, 6, 22830-22839.

[6] Shanshan Li, **Yuan Yang**, Zhibiao Hu, Shuo Li, Fei Ding, Xinxin Xiao*, Pengchao Si*, Jens Ulstrup. Hetero-structured NiS_2/CoS_2 nanospheres embedded on N/S co-doped carbon nanocages with ultra-thin nanosheets for hybrid supercapacitors. *Electrochimica Acta*, 2022, 424, 140604.

[7] Shuo Li, Minghao Hua, **Yuan Yang**, Xiaowen Zheng, Wei Huang, Pengchao Si*, Lijie Ci, Jun Lou. Phosphorous-doped bimetallic sulfides embedded in heteroatom-doped carbon nanoarrays for flexible all-solid-state supercapacitors. *Science China-Materials*, 2021, 64, 2439-2453.

[8] Xiaowen Zheng, Shuo Li, **Yuan Yang**, Lina Chen, Pengchao Si*. Electrochemical Characterization of Nanostructured $LiMn_2O_4$ Composite in Lithium-Ion Hybrid Supercapacitors. *ChemElectroChem*, 2021, 8, 179.

[9] Shuo Li, Minghao Hua, **Yuan Yang**, Wei Huang, Xiaohang Lin, Lijie Ci, Jun Lou, Pengchao Si*. Self-supported multidimensional Ni-Fe phosphide networks with holey nanosheets for high-performance all-solid-state supercapacitors. *Journal of Materials Chemistry A*, 2019, 7, 17386-17399.

[10] Shuo Li, Wei Huang, **Yuan Yang**, Jens Ulstrup, Jingdong Zhang, Lijie Ci, Jun Lou*, Pengchao Si*. Hierarchical layer-by-layer porous $FeCo_2S_4@Ni(OH)_2$ arrays for all-solid-state asymmetric supercapacitors. *Journal of Materials Chemistry A*, 2018, 6, 20480.