

2025 年度青岛市科学技术奖励项目（自然科学奖）公示表

项目名称	储能电化学反应的原位磁学表征								
提名者	青岛大学								
主要完成人(完成单位)	李强（青岛大学）、李洪森（青岛大学）、葛琛（中国科学院物理研究所）、李庆浩（青岛大学）、颜世申（济南大学）								
代表性论文专著目录									
序号	论文专著名称	刊名(出版社)	Doi/ISBN	发表(出版)时间	作者(按刊物发表顺序)	通讯作者(含共同)	第一作者(含共同)	他引总次数	检索数据库
1	Extra storage capacity in transition metal oxide lithium-ion batteries revealed by in situ magnetometry	《Nature Materials》	DOI10.1038/s41563-020-0756-y	2020.08	Qiang Li, Hongsen Li, Qingtao Xia, Zhengqiang Hu, Yue Zhu, Shishen Yan, Chen Ge, Qinghua Zhang, Xiaoxiong Wang, Xiantao Shang, Shuting Fan, Yunze Long, Lin Gu, Guo-Xing Miao, Guihua Yu, Jagadeesh S. Moodera.	Qiang Li, Hongsen Li, Guo-Xing Miao, Guihua Yu.	Qiang Li, Hongsen Li, Qingtao Xia, Zhengqiang Hu.	458	Web of science
2	Operando magnetometry probing the charge storage mechanism of CoO lithium-ion batteries	《Advanced Materials》	DOI10.1002/adma.202006629	2021.02	Hongsen Li, Zhengqiang Hu, Qingtao Xia, Hao Zhang, Zhaohui Li, Huaizhi Wang, Xiangkun Li, Fengkai Zuo, Fengling Zhang, Xiaoxiong Wang, Wanneng Ye, Qinghao Li, Yunze Long, Qiang Li, Shishen Yan, Xiaosong Liu, Xiaogang Zhang, Guihua Yu, Guo-Xing Miao.	Hongsen Li; Yunze Long; Qiang Li.	Hongsen Li.	80	Web of science
3	Reacquainting the electrochemical	《Journal of	DOI10.1021/j	2021.08	Zhaohui Li, Yongcheng Zhang, Xiangkun Li, Fangchao Gu, Leqing Zhang, Hengjun	Chen Ge; Hongsen	Zhaohui Li, Yongcheng	51	Web of

	conversion mechanism of FeS ₂ Sodium-Ion batteries by operando magnetometry	American Chemical Society》	acs.1c06115		Liu, Qingtao Xia, Qinghao Li, Wanneng Ye, Chen Ge, Hongsen Li, Han Hu, Shandong Li, Yun-Ze Long, Shishen Yan, Guo-Xing Miao, Qiang Li.	Li; Qiang Li.	Zhang, Xiangkun Li.		science
4	Revealing the multiple cathodic and anodic involved charge storage mechanism in an FeSe ₂ cathode for aluminium-ion batteries by in situ magnetometry.	《Energy & Environmental Science》	DOI10.1039/d1ee03070a	2022.01	Huaizhi wang, Linyi Zhao, Hao Zhang, Yongshuai Liu, Li Yang, Fei Li, Wenhao Liu, Xiaotong Dong, Xiangkun Li, Zhaohui Li, Xiaodong Qi, Langyuan Wu, Yunfei Xu, Yaqun Wang, Kuikui Wang, Huicong Yang, Qiang Li, Shishen Yan, Xiaogang Zhang, Feng Li, Hongsen Li	QiangLi; Hongsen Li	Huaizhi wang, Linyi Zhao.	48	Web of science
5	Revealing interfacial space charge storage of Li ⁺ /Na ⁺ /K ⁺ by operando magnetometry.	《Science Bulletin》	DOI10.1016/j.scib.2022.04.001	2022.04	Xiangkun Li, Su Jie, Zhaohui Li, Zhiqiang Zhao, Fengling Zhang, Leqing Zhang, Wanneng Ye, Qinghao Li, Kai Wang, Xia Wang, Hongsen Li, Han Hu, Shishen Yan, Guo-Xing Miao, Qiang Li.	Kai Wang, Han Hu, Qiang Li.	Xiangkun Li.	12	Web of science