

Supplementary Materials

Reversible sulfate-anion involved charge storage in layered MnO₂ for aqueous symmetric batteries

Shiyi Tan^{1,#}, Litao Liang^{1,#}, Shanshan Zhou², Jiaxin Meng¹, Guozhen Zhang¹,
Weizhai Bao¹, Aung Ko Ko Kyaw³, Qian Liu², Feng Yu¹

¹Jiangsu Key Laboratory of New Energy Devices & Interface Science, School of Chemistry and Materials Science, Nanjing University of Information Science and Technology, Nanjing 210044, Jiangsu, China.

²Centre for Materials Science, School of Chemistry and Physics, Faculty of Science, Queensland University of Technology, Brisbane, Queensland, QLD 4001, Australia.

³Department of Electronic and Electrical Engineering, Southern University of Science and Technology, Shenzhen 518055 Guangdong, China.

[#]Authors contributed equally.

Correspondence to: Dr. Qian Liu, Centre for Materials Science, School of Chemistry and Physics, Faculty of Science, Queensland University of Technology, Brisbane, Queensland, QLD 4001, Australia. E-mail: q30.liu@qut.edu.au; Dr. Feng Yu, Jiangsu Key Laboratory of New Energy Devices & Interface Science, School of Chemistry and Materials Science, Nanjing University of Information Science and Technology, Nanjing 210044, Jiangsu, China. E-mail: yufeng@nuist.edu.cn

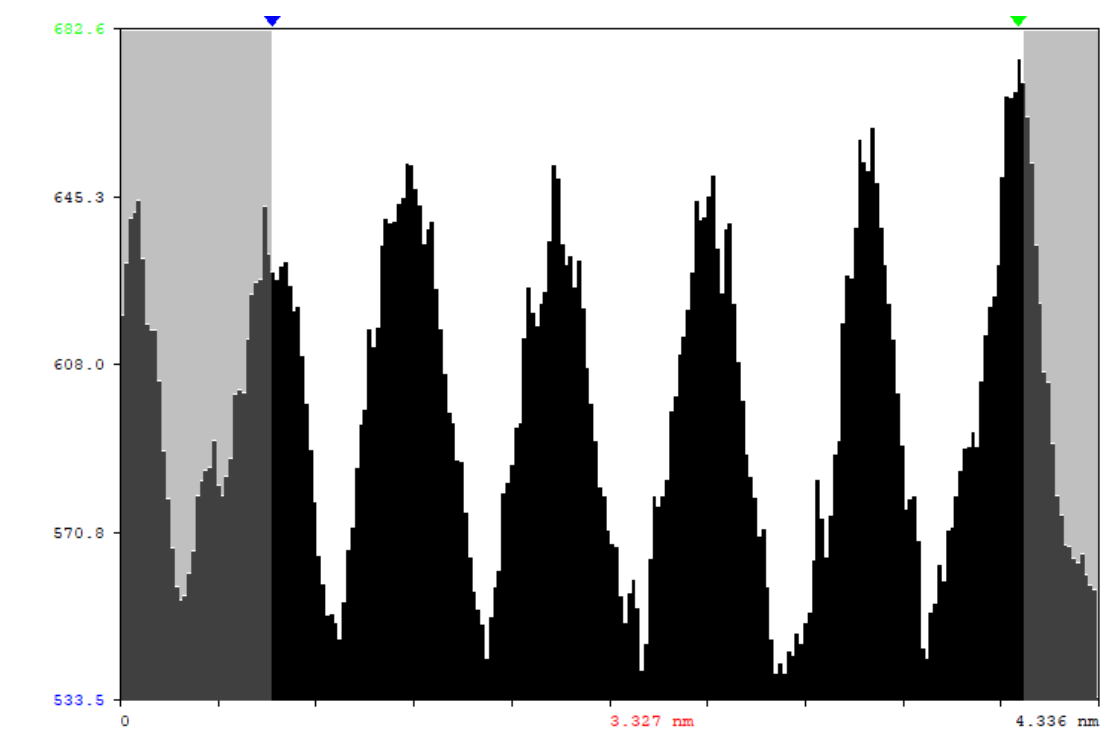


Figure S1. Measurement of lattice spacing using SAED for layered MnO₂.

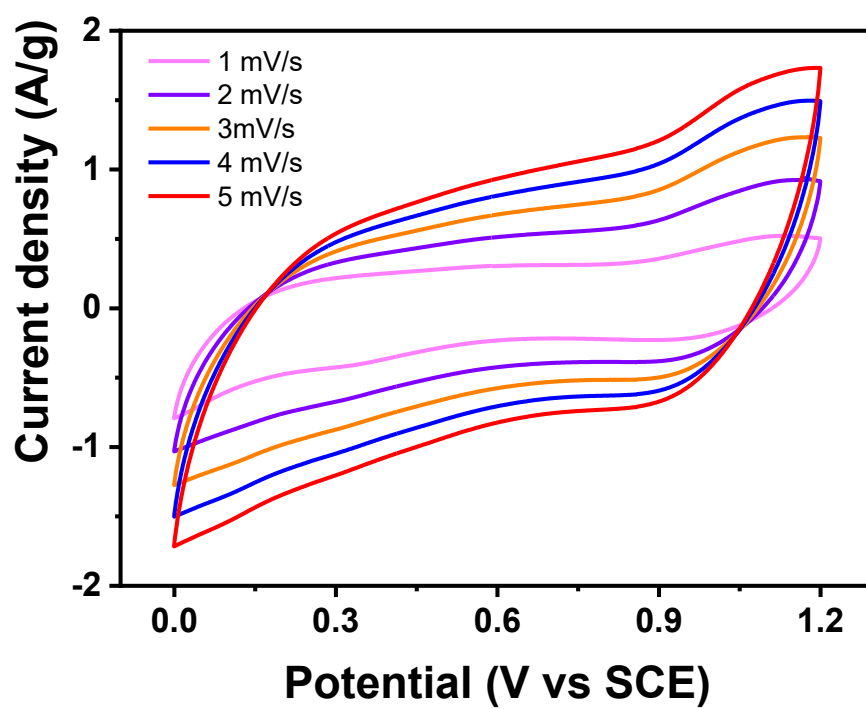


Figure S2. CV curves of the layered MnO₂ electrode at different scan rate.

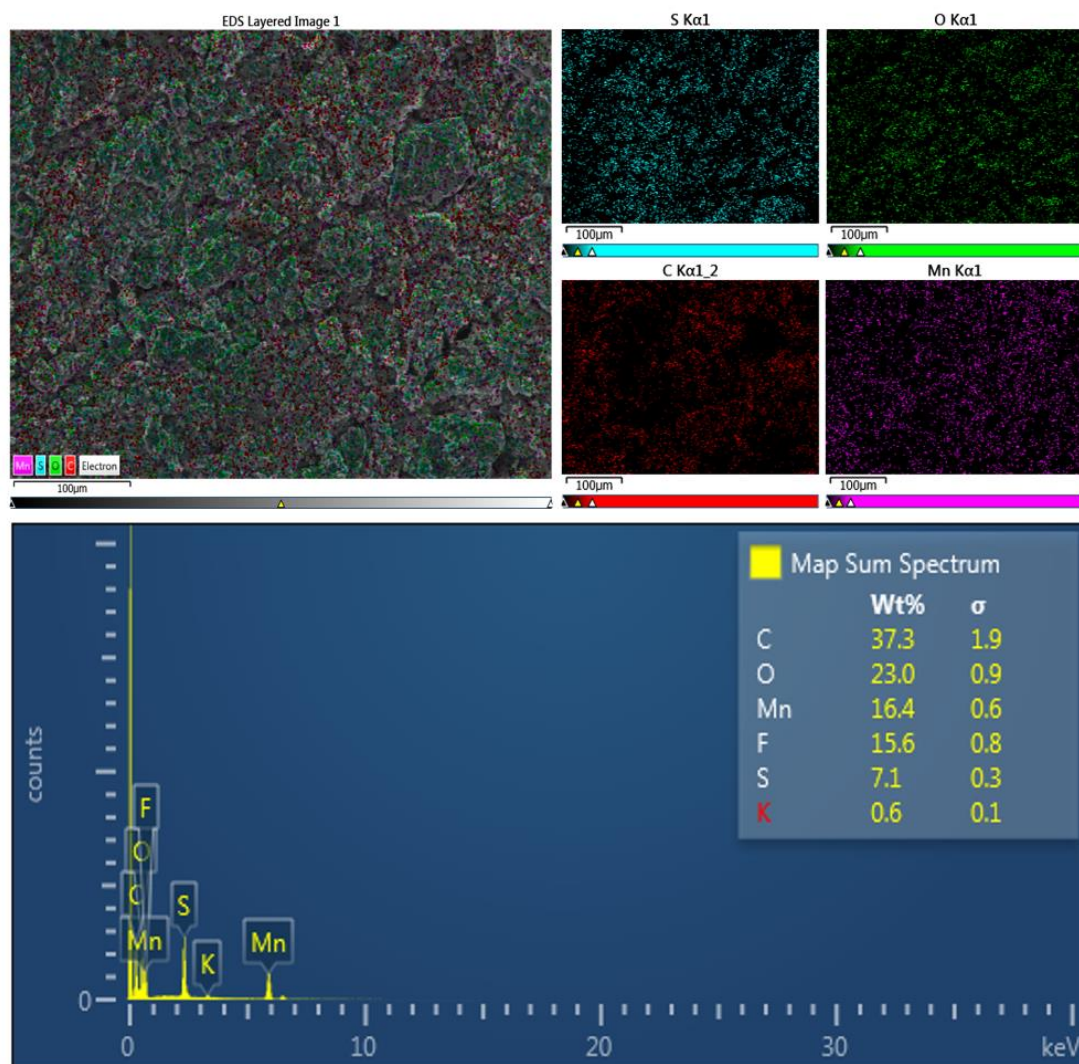


Figure S3. Ex situ SEM and the corresponding EDX mappings of layered MnO₂ electrodes at charged to 1 V. The calculated S: Mn atomic ratio is 0.7:1.

