

Electronic Supplementary Information

Facile synthesis and electrochemical Mg-storage performance of Sb_2Se_3 nanowires and Bi_2Se_3 nanosheets

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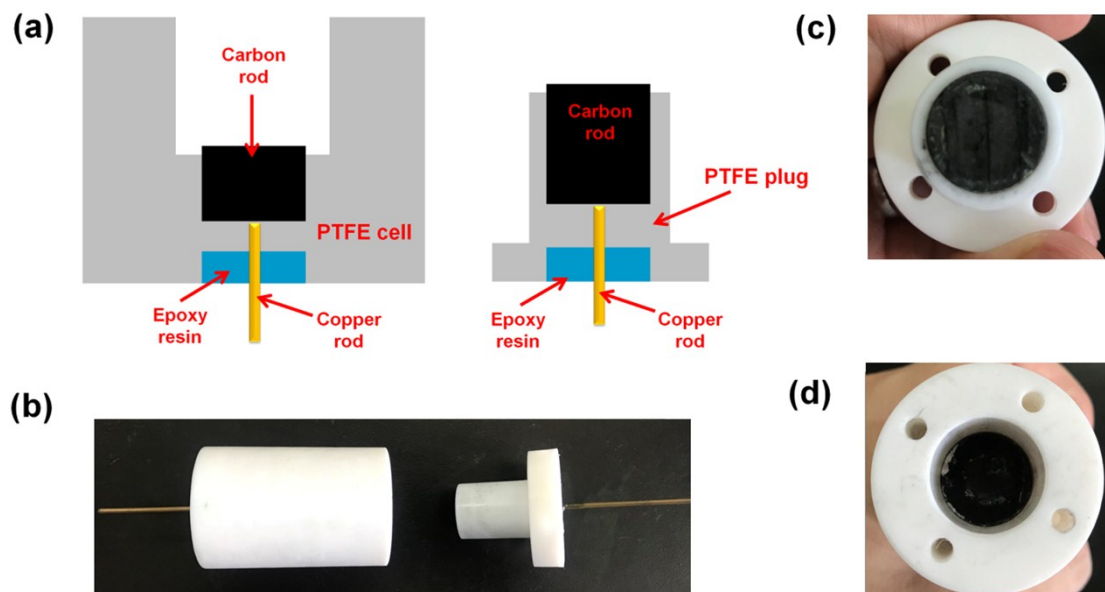


Fig. S1 (a) Schematic drawing and (b, c, d) photos of the lab-made PTFE cell used for Mg cell tests. The cell is made of PTFE cell body and carbon rod electrode. The crack is sealed with epoxy resin. PTFE tape is used for sealing during cell fabrication.

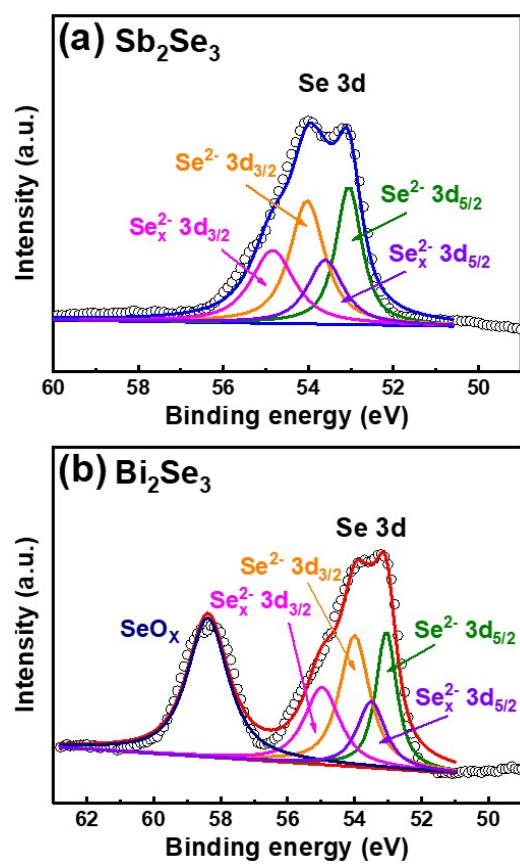


Fig. S2 High-resolution XPS spectra of Se 3d for (a) Sb_2Se_3 and (b) Bi_2Se_3 .

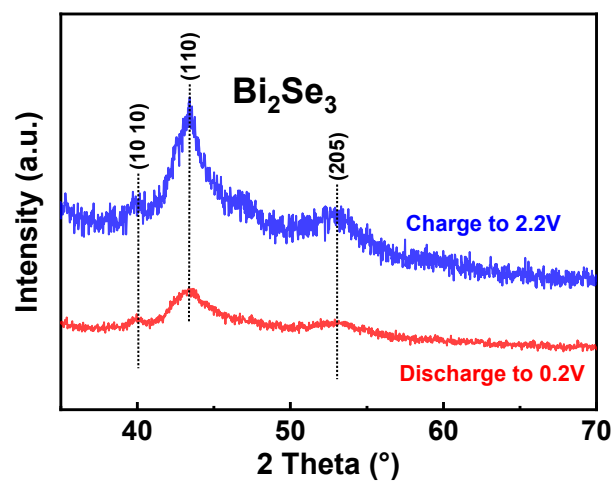


Fig. S3 XRD patterns of Bi_2Se_3 cathodes at the fully charged (2.2 V) and discharged (0.2 V) states after 30 cycles.

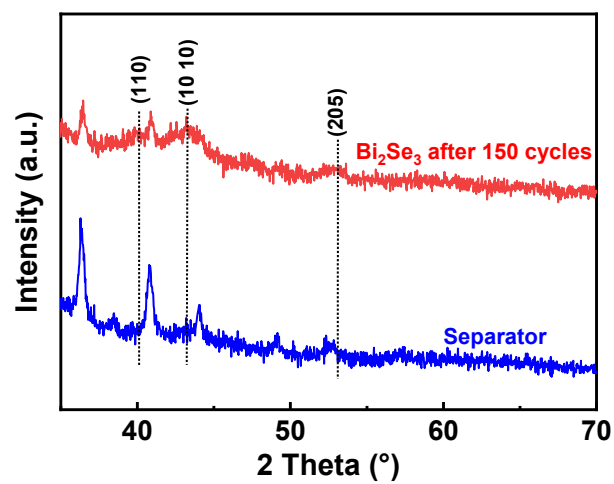


Fig. S4 XRD pattern of Bi₂Se₃ after 150 cycles. Cycled separator is used for the characterization since the active material tends to remain on the separator after long-term cycling.