Electronic Supplementary Information

Copper sulfide nanoparticles as high-performance cathode material for magnesium secondary batteries

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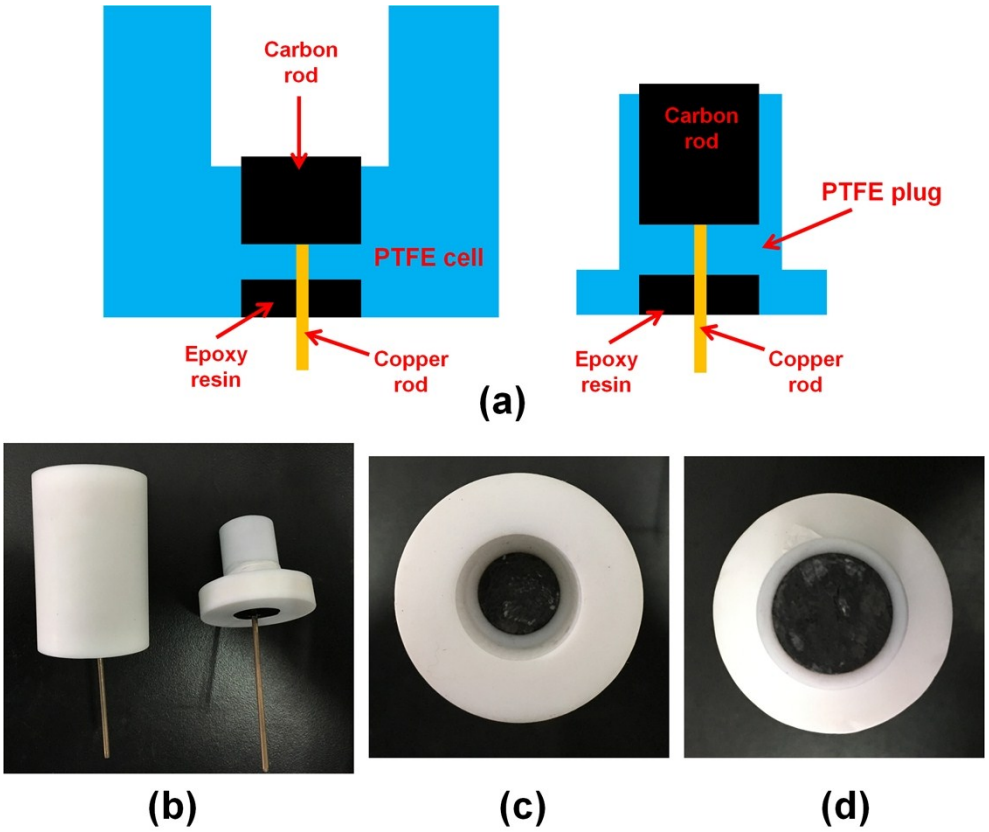

Fig. S1 (a) Schematic drawing and (b, c, d) photos of the customer-designed PTFE cell used for Mg battery tests. The cell is made of PTFE and carbon rod electrode. The crack is sealed with epoxy resin. PTFE tape is used for the sealing during the fabrication.

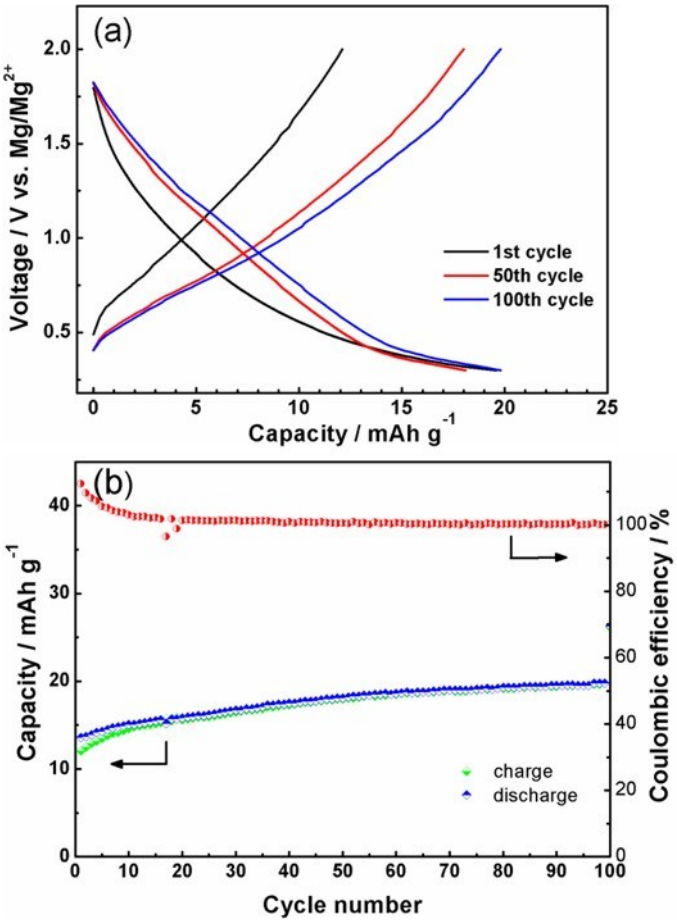

Fig. S2 (a) Discharge/charge profiles and (b) cycling performance of a blank carbon paper in Mg cells at a current density of 50 mA g^{-1}. The capacity is calculated by the mass of CuS for a better comparison.