

Support information

Preparation of the working electrode

Fig. S1 shows digital photos of the Ni foam prior and after the electrophoretic deposition treatment. After the electrophoretic deposition process, the Ni foam coated with Sn-GNS was cut off from line "l" in Fig. S1b, and pressed under a pressure of 10 MPa, and then used as the working electrode directly. And the amount of active materials loading on each piece of Ni foam (about 10 mm in diameter) is ca. 1.2 mg cm⁻².

Support information

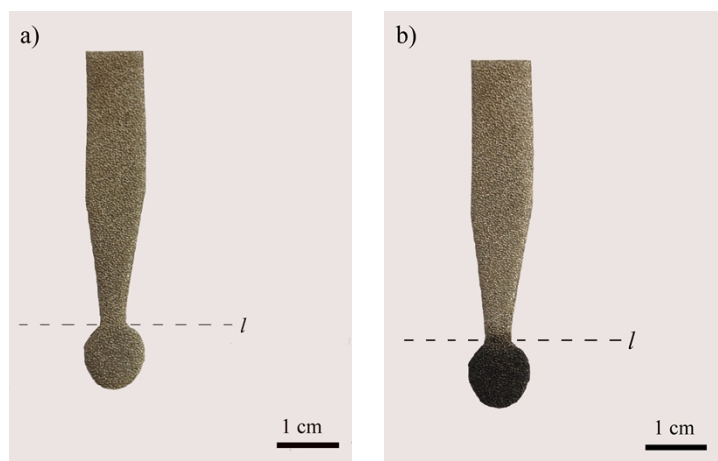


Fig. S1 Digital photos of the Ni foam (a) prior the electrophoretic deposition treatment (b) after the electrophoretic deposition treatment

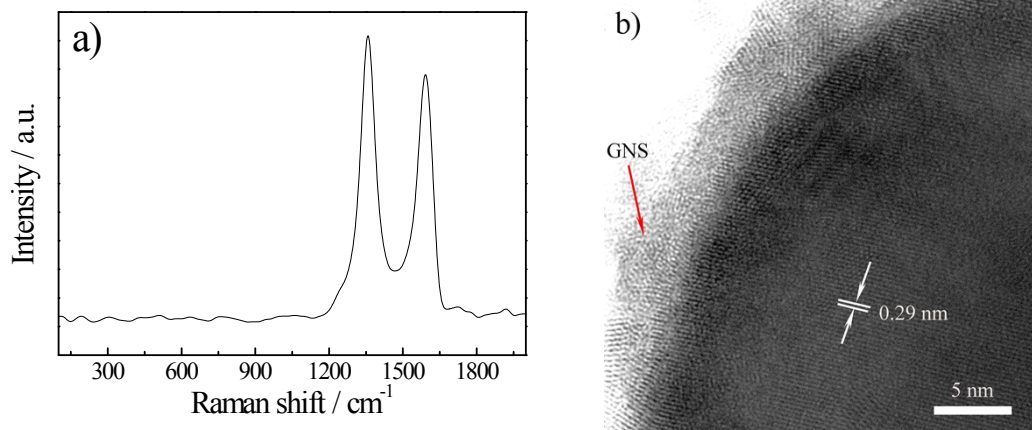


Fig. S2 (a) Raman spectrum of the Sn-GNS composite scratched down from the Ni foam (b) HRTEM image of the Sn-GNS composite scratched down from the Ni foam

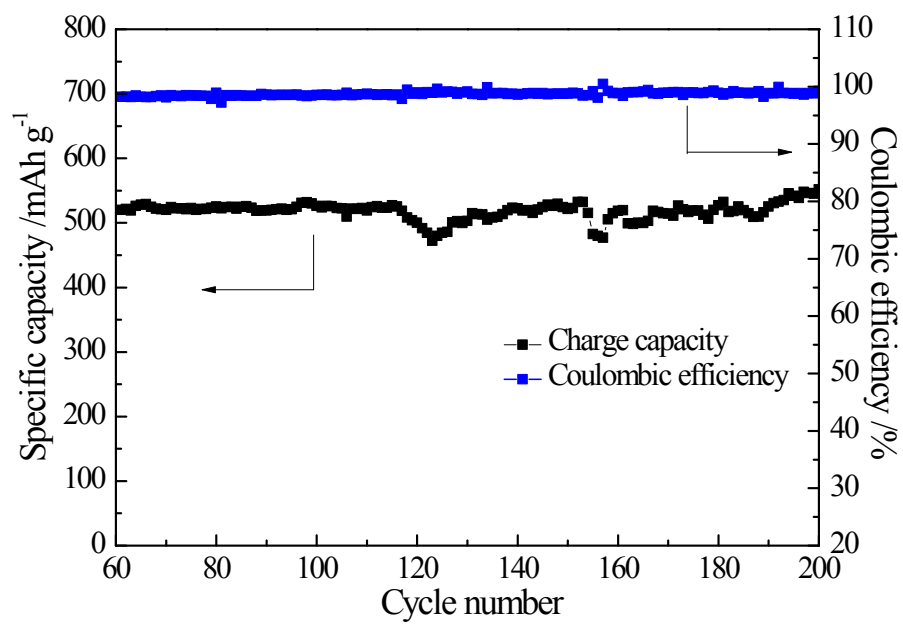


Fig. S3 The cyclic performance of 3D Sn-GNS from the 61st cycle to the 200th cycle