Designed synthesis of ultrafine NiO nanocrystals bonded on three dimensional graphene framework for high-capacity lithium-ion batteries

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Fig. S1 XRD patterns of Ni/3D-GF hybrid derived from Ni precursor/3D-GF at 450 °C under Ar atmosphere.



Fig. S2 TEM image of the Ni/3D-GF hybrid.



Fig. S3 Thermogravimetric (TG) curve of the Ni/3D-GF hybrid under air atmosphere at a heating rate of 10 °C min⁻¹. It shows that Ni can be adequately oxidized at 300 °C. Meanwhile, this also prevents the decomposition of the graphene.



Fig. S4 Thermogravimetric (TG) curve of the NiO/3D-GF hybrid under air atmosphere at a heating rate of 10 °C min⁻¹.