Supporting information

Carbon-Coated SnO₂ riveted on Reduced Graphene Oxide composite

(C@SnO₂/RGO) as an anode material for lithium ion batteries

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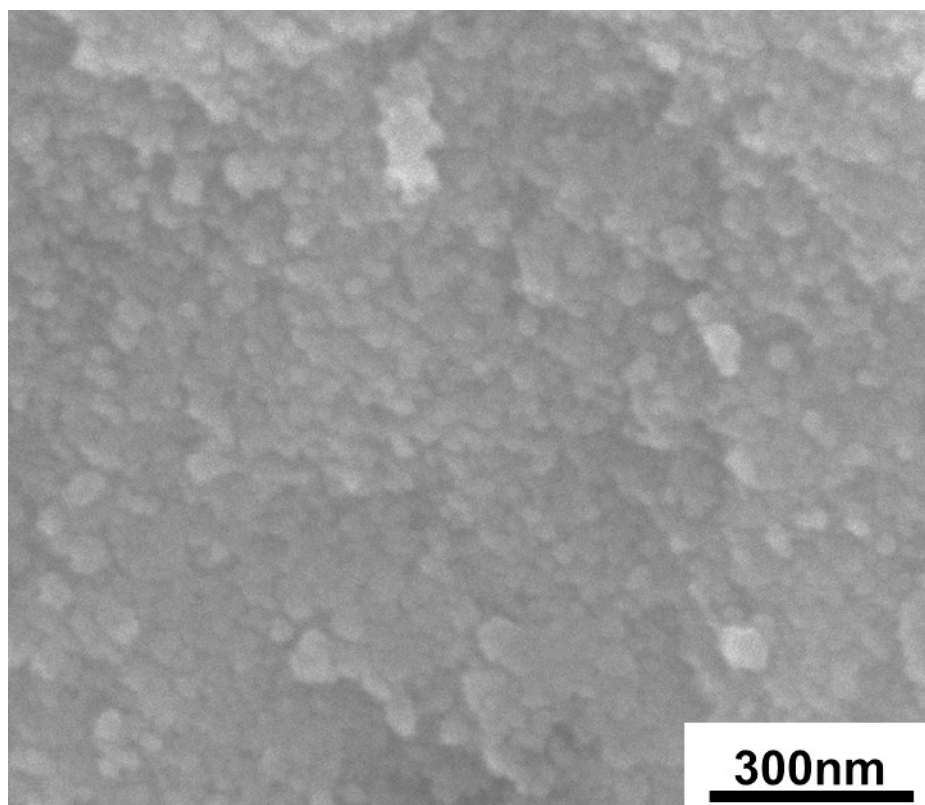*Corresponding author: E-mail: lvshsh@mail.sysu.edu.cn (S-S, Lyu)
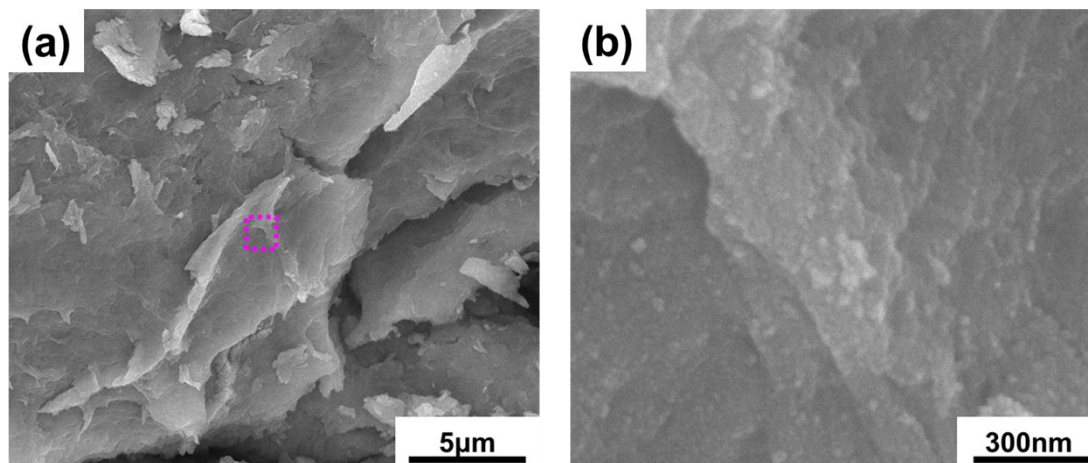
Fig.S1 SEM image of pure SnO$_2$ particles

Fig.S2 SEM image of SnO$_2$/RGO-90 (a), and magnified image (b).
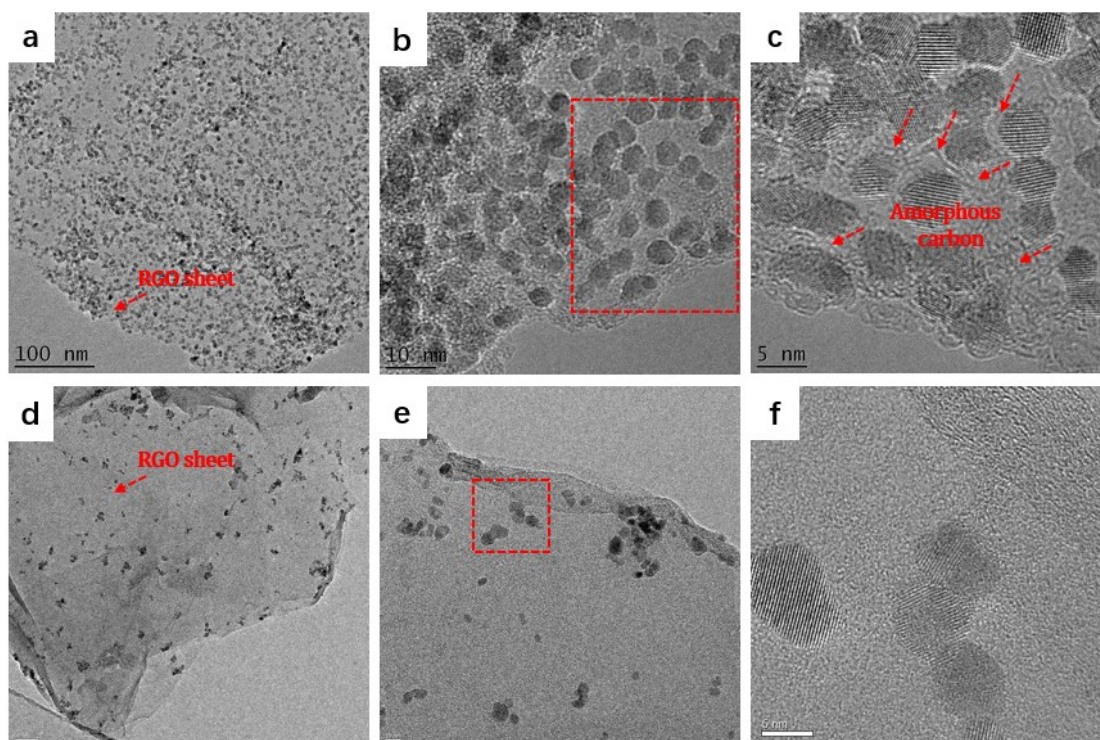
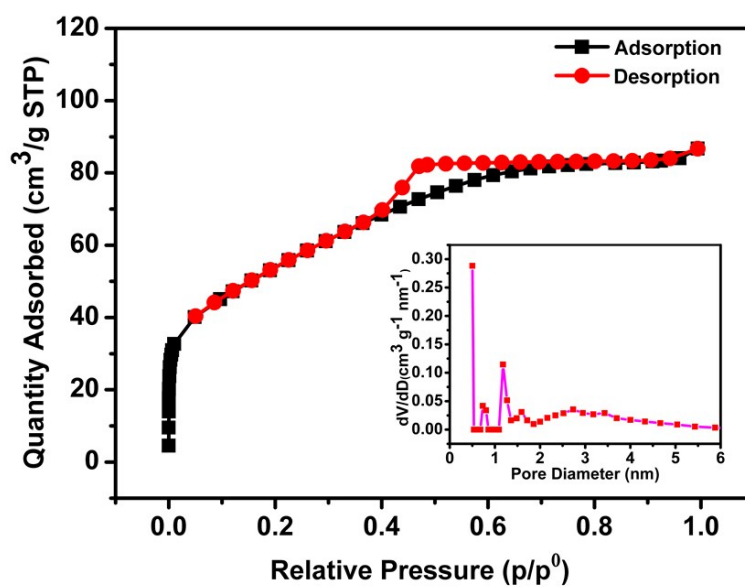Fig.S3 TEM images of C@SnO$_2$/RGO-90 (a-c) and SnO$_2$/RGO-90 (d-f) composite.

Fig.S4 Nitrogen (77 K) adsorption/desorption isotherms and Pore size distribution of
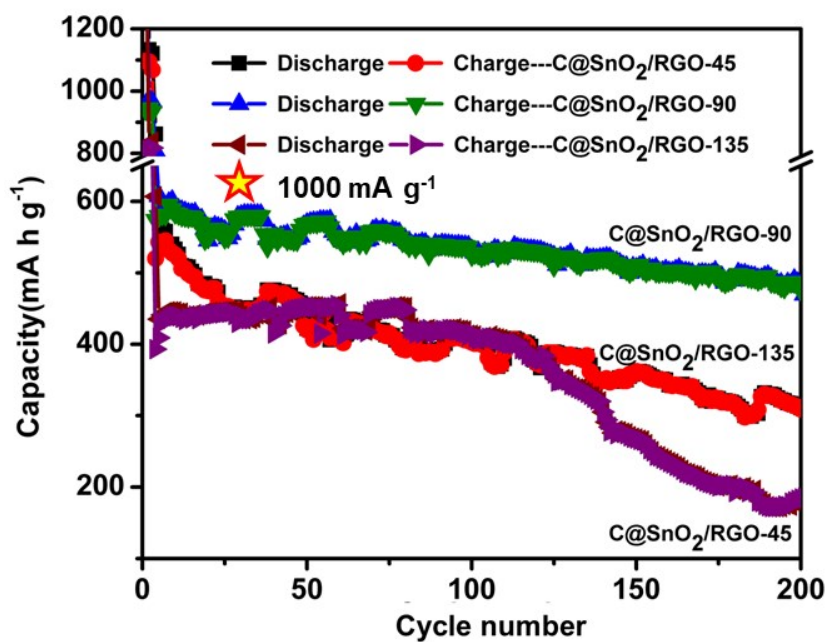
the C@SnO$_2$/RGO-90 specimens

Fig.S5 Cycling performance of C@SnO$_2$/RGO-45, C@SnO$_2$/RGO-90 and
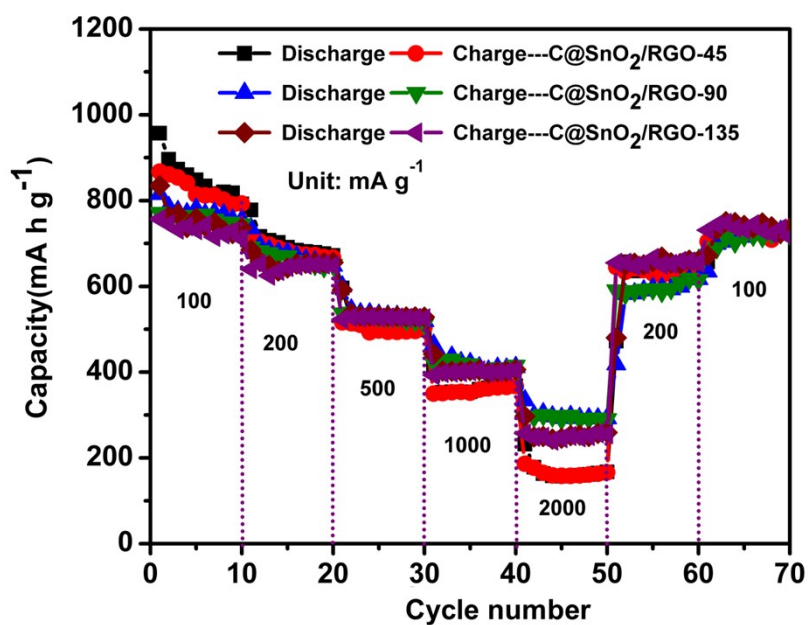
C@SnO$_2$/RGO-135 at 1000 mA g^{-1} after 200 cycles.

Fig.S6 Rate capacities of C@SnO$_2$/RGO-45, C@SnO$_2$/RGO-90 and C@SnO$_2$/RGO-
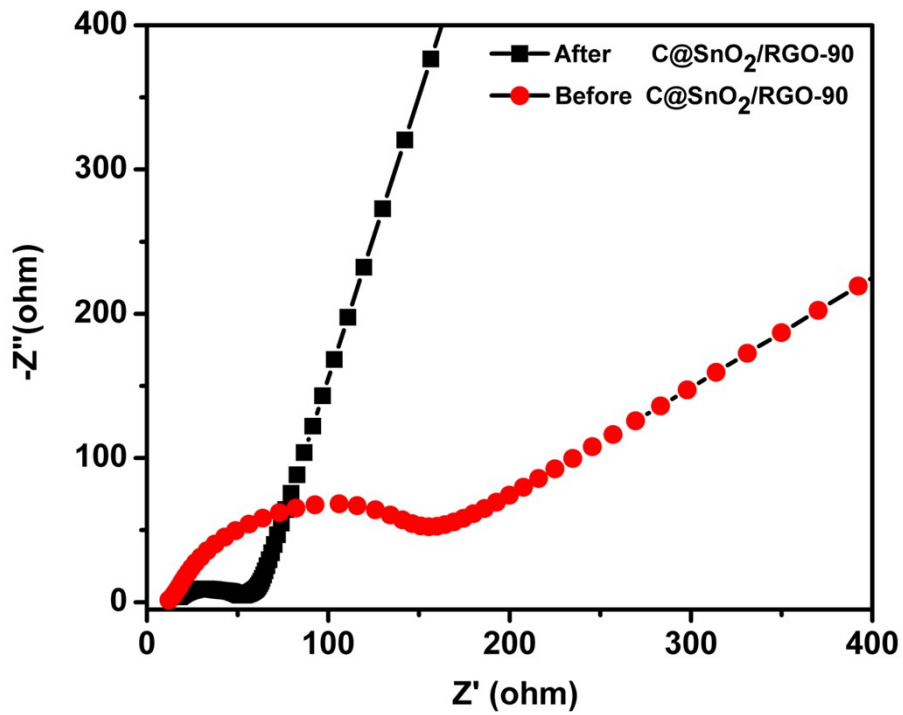
135.

Fig.S7. The EIS curves of C@SnO$_2$/RGO-90 before and after 200 cycles at 1000 mA

g^{-1}.

TableS1 Physicochemical properties calculated from EIS spectra (in Fig.S7)

Samples	R$_s$ (Ω)	R$_{ct}$ (Ω)
C@SnO$_2$/RGO-90-before	60.89	34.81
C@SnO$_2$/RGO-90-After	5.092	29