



Supplementary Materials:

## Study of the role of void and residual silicon dioxide on the electrochemical performance of silicon nanoparticles encapsulated by graphene.

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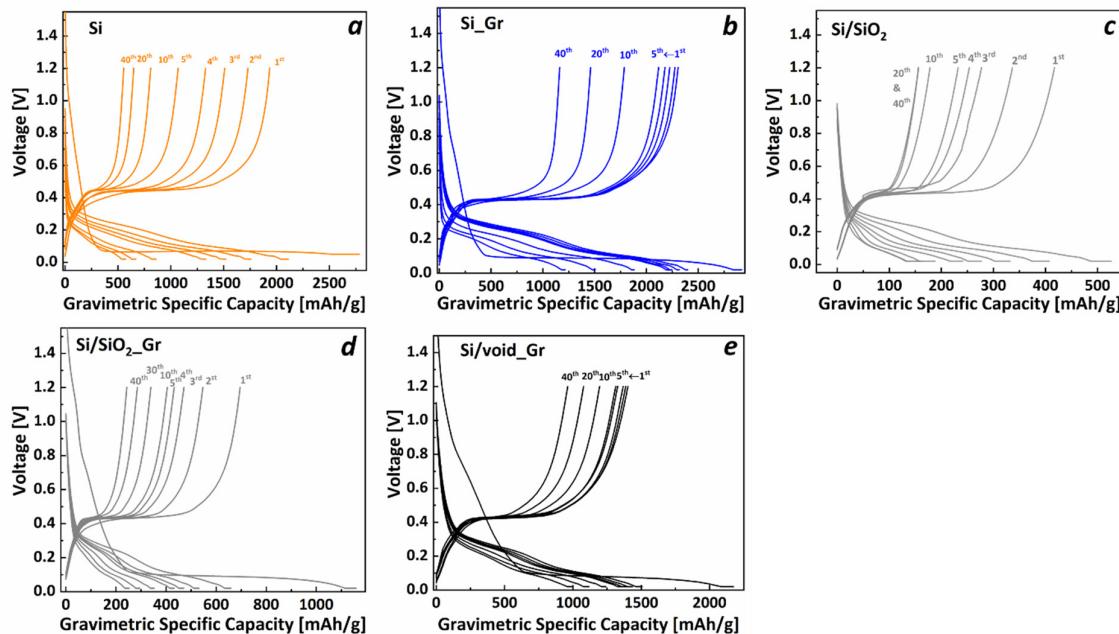


Figure S1: Voltage vs. gravimetric specific capacity of electrodes (a) Si, (b) Si\_Gr, (c) Si/SiO<sub>2</sub>, (d) Si/SiO<sub>2</sub>\_Gr, and (e) Si/void\_Gr, for the charge discharge cycles 1 to 5, 10, 20 and 40, in coin-type half-cell configuration.