Supporting Information

Confined-Space Synthesis of Hierarchical SnO_2 Nanorods Assembled by Ultrasmall Nanocrystals for Energy Storage

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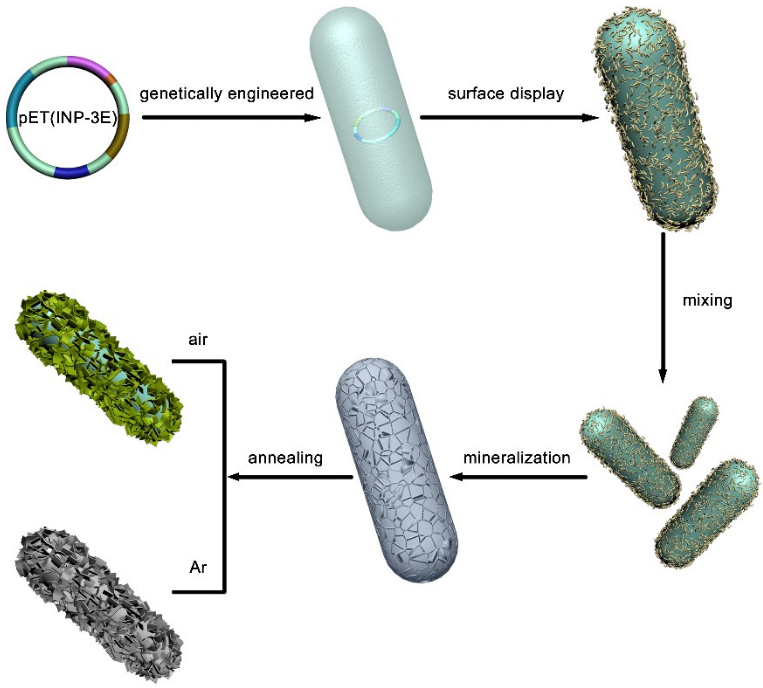

Figure S1. Scheme of strategy for confined space synthesis.

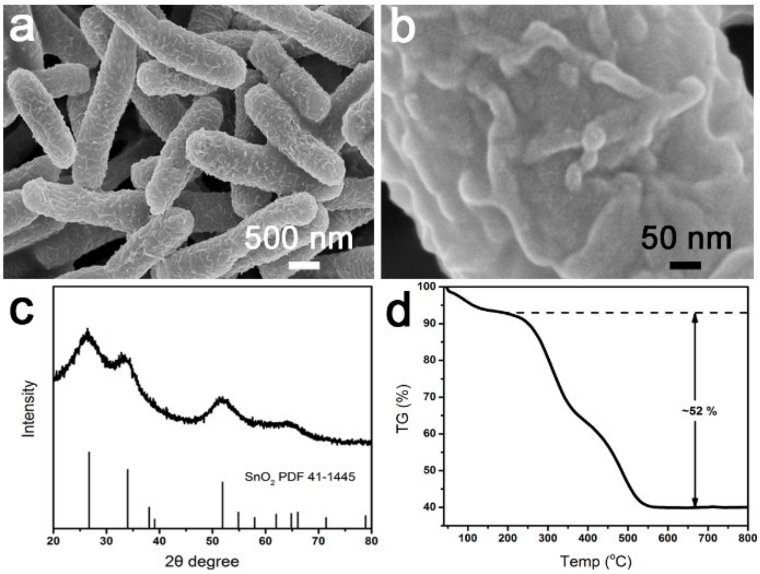

Figure S2. Mineralization of genetically engineered bacteria at 37 °C for 24 hours. (a) Low and (b) high magnification SEM image of mineralized bacteria. (c) XRD pattern. (d) TG curves.

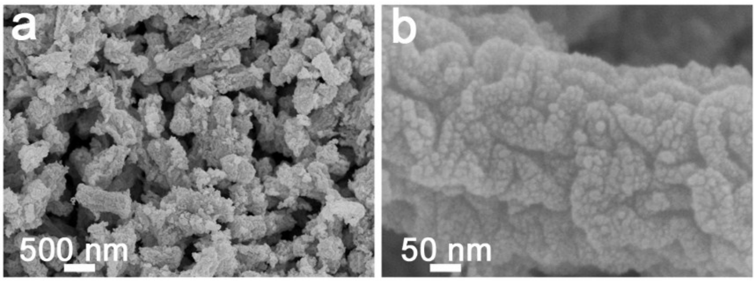

Figure S3. (a) Low and (b) high magnification SEM images of INP-modified product annealed at 600 °C in air.

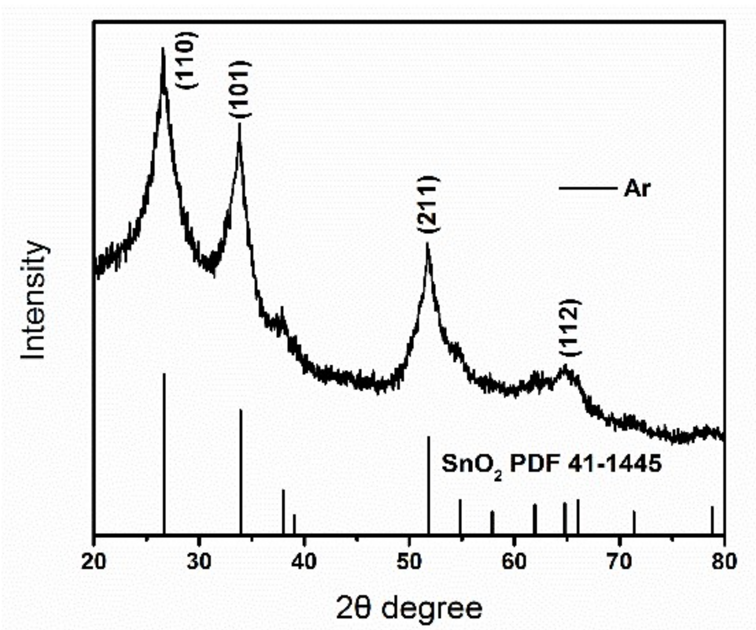

Figure S4. XRD pattern of SnO_2/C.

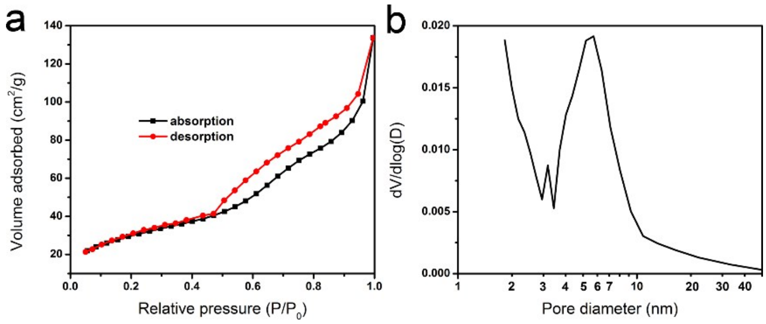

Figure S5. (a) Nitrogen adsorption and desorption isotherms and (b) pore size distribution of SnO_2/C.

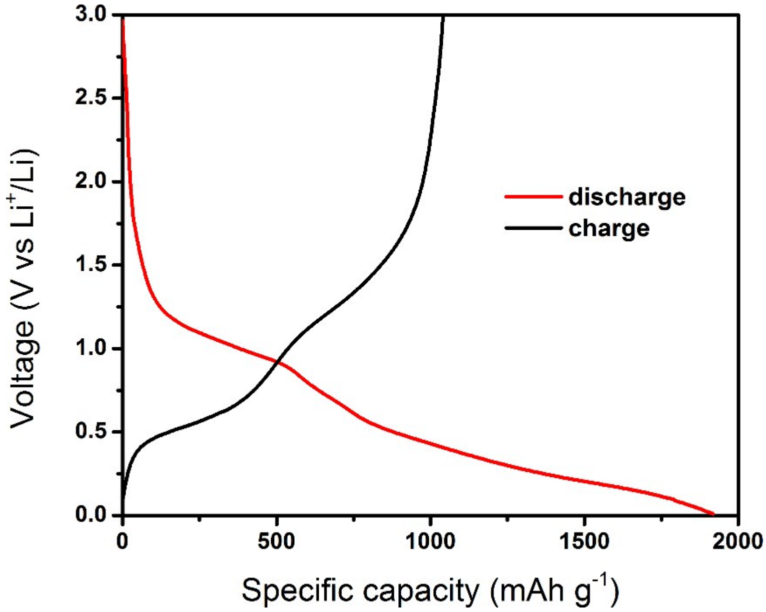

Figure S6. Charge-discharge voltage profiles of SnO_2/C electrode of the first cycle at a current rate of 0.2 A g^{-1}.

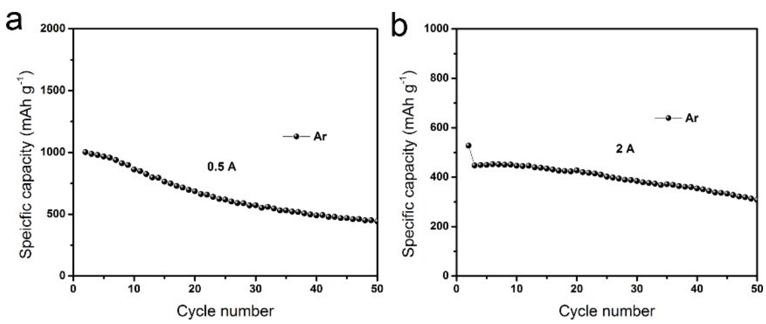

Figure S7. Cycling performance of SnO_2/C electrode at current rates of 0.5 A g^{-1} (a) and 2 A g^{-1} (b).

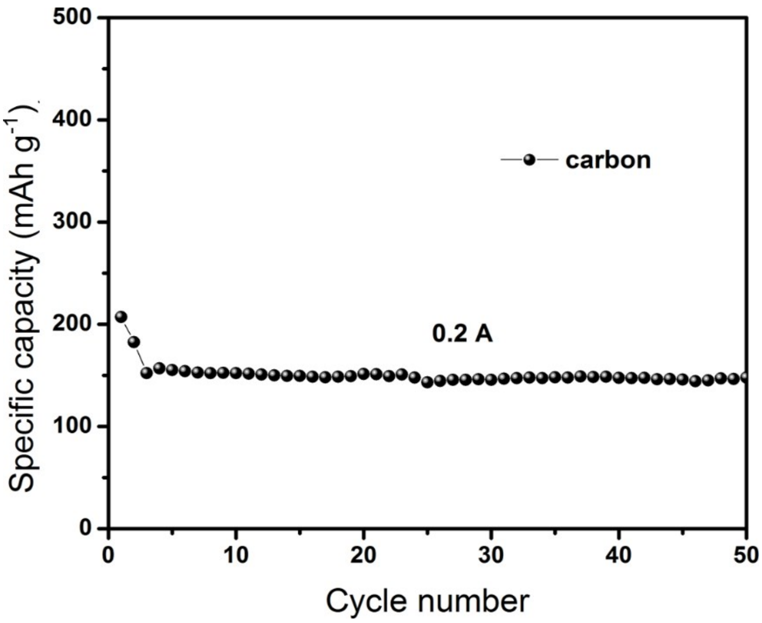

Figure S8. Cycling performance of carbon at a current rate of 0.2 A g^{-1}.

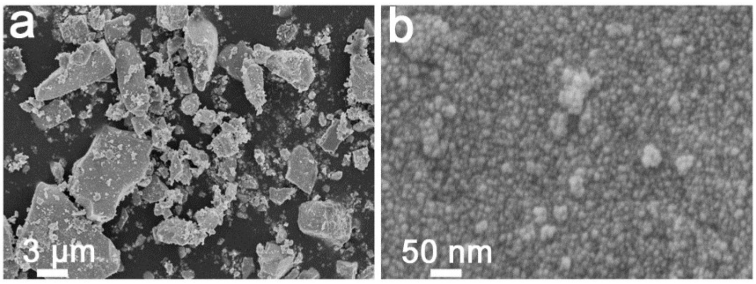

Figure S9. (a) Low and (b) high magnification SEM images of commercial 8 nm SnO_2 powder.

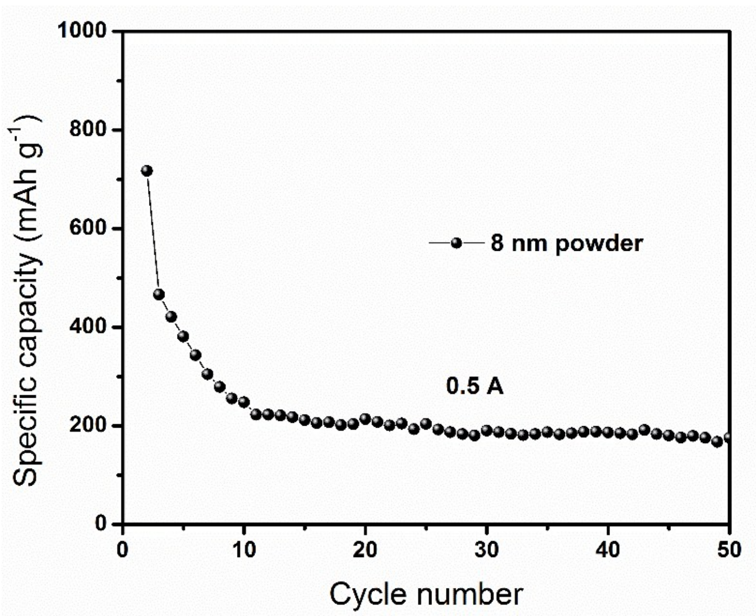

Figure S10. Cycling performance of commercial powder electrode at a current rate of 0.5 A g^{-1}.

Table S1. Comparison of electrochemical performance of various SnO_2 based materials.

Electrode materials	Surface area ($m^2 g^{-1}$)	Specific capacity ($mA h g^{-1}$)	Discharge rate ($mA g^{-1}$)	References
SnO_2 nanosheets	183.3	534 (after 50 cycles)	156	S1
Long SnO_2 nanotubes	213	468 (after 30 cycles)	100	S2
SnO_2 nanoboxes	60	570 (after 40 cycles)	156	S3
SnO_2 nanowires	—	270 (after 50 cycles)	100	S4
Bowl-like SnO_2@carbon hollow particles	103.8	963 (after 100 cycles)	400	S5
Ordered network of interconnected SnO_2	87	564 (after 100 cycles)	390	S6
SnO_2 nanocrystals + N-doped grapheme sheets	—	1346 (after 500 cycles)	500	S7
Ultra-uniform SnOx + carbon nanohybrids	—	608 (after 200 cycles)	500	S8
SnO_2-Graphene Aerogel	365	1299 (after 500 cycles)	500	S9
Graphene-based mesoporous SnO_2	251.7	847 (after 50 cycles)	78	S10
N-doped grapheme-SnO_2 sandwich	—	910 (after 50 cycles)	50	S11
Carbon coated SnO_2 nanorod	106	520 (after 50 cycles)	200	Our work

Supplementary References

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