

**Supporting information**

**Co<sub>2</sub>P nanoparticles encapsulated in 3D porous N-doped carbon nanosheet networks as anode for  
high-performance sodium-ion batteries**

Dan Zhou, Li-Zhen Fan\*

Beijing Advanced Innovation Center for Materials Genome Engineering, Institute of Advanced  
Materials and Technology, University of Science and Technology Beijing, Beijing 100083, China

\*Corresponding author: E-mail: fanlizhen@ustb.edu.cn (L.-Z. Fan)

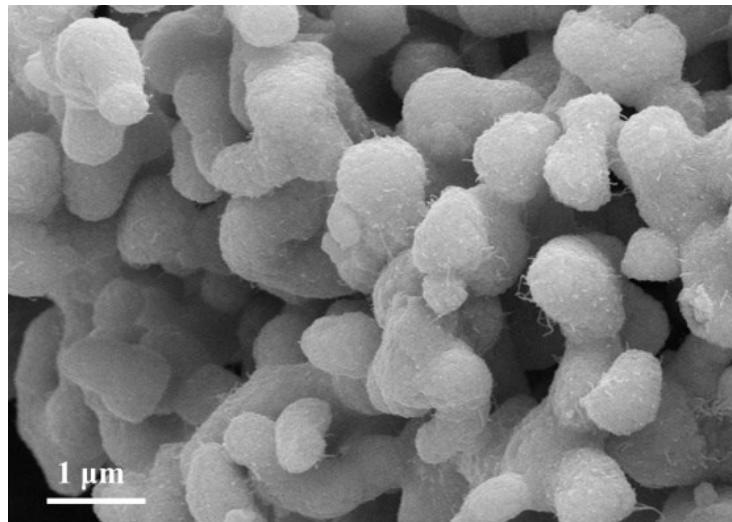


Figure S1 FE-SEM images of Co<sub>2</sub>P NPs.

Table S1 Elemental content analysis result of the Co<sub>2</sub>P-3D PNC composite

Elements	Atomic Mass	Atomic Percentage	Mass content
		(at%)	(wt%)
C	12.011	63.19	41.86
O	15.999	13.09	11.55
N	14.007	4.75	3.77
Co	58.933	6.82	22.17
P	30.974	12.15	20.65

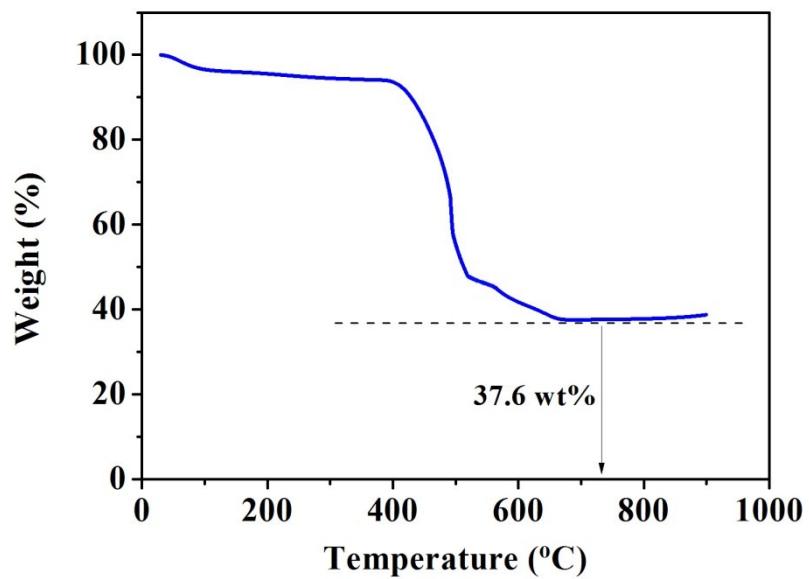


Figure S2 TGA analysis for the Co<sub>2</sub>P-3D PNC composite (about 37.6 wt% of Co<sub>2</sub>P was remained).

Table S2 Equivalent circuit parameters collected from fitting the impedance spectra of the Co<sub>2</sub>P-3D PNC electrode.

Status	R <sub>e</sub> (Ω)	R <sub>f</sub> (Ω)	R <sub>ct</sub> (Ω)	Z <sub>w</sub> (Ωs <sup>-1/2</sup> )	CPE1 (F)	CPE2 (F)
Before cycling	6.175	40.26	204.7	0.0009	2.66E-6	3.88E-7
100 cycles	7.482	60.65	149.6	0.0021	2.09E-6	5.11E-7