

Cobalt-Doped Vanadium Nitride Compositing Carbon Hollow Spheres for Enhanced Lithium-Sulfur Battery Performance: Overcoming Sulfur Dissolution and Shuttle Effect

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Table S1 presents performance comparison of different composite as sulfur host materials in lithium-sulfur batteries.

Cathode materials	Maximum discharge capacity (mAh g ⁻¹)	Final capacity (mAh g ⁻¹) ¹⁾	Reference
CoVN/C-HS@S	1482 (0.2 C)	1067 (100 cycles, 0.2 C)	This work
CoVN/C-HS@S	951 (2 C)	662 (400 cycles, 2 C)	This work
NbP-NbC/C@S	1367 (0.2 C)	1216 (250 cycles, 0.2 C)	Ref.14
Co-VN/S	706 (2 C)	578 (500 cycles, 2 C)	Ref. 18
Co-VN/NC/S	1100 (0.5 C)	876 (300 cycles, 0.5 C)	Ref. 20
Co-VN/NC/S	810 (2 C)	490 (100 cycles, 2 C)	Ref. 20
Co ₃ V ₂ O ₈ /C-HS@S	1237 (0.2 C)	603 (100 cycles, 0.2 C)	Ref. 27
V ₂ O ₃ /C-HS@S	1153(0.05 C)	433 (300 cycles,0.2 C)	Ref. 37

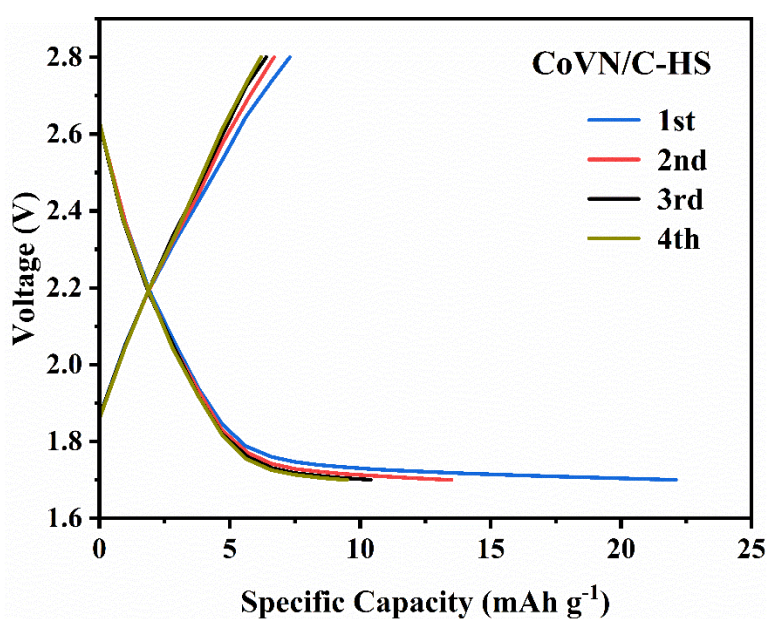


Figure S1 galvanostatic discharge-charge curves of CoVN/C-HS