

Supporting Information

Table S1. Summary and comparison of cycling and rate performances of recently reported copper-based sulfides anode materials for PIBs.

Materials	Capacity retention (mAh g ⁻¹)	Rate Performance		Reference
		Capacity (mAh g ⁻¹)	Current (mA g ⁻¹)	
C/Cu ₂ S	363 (100 cycles) at 0.1 A g ⁻¹ ; 120 (1000 cycles) at 5 A g ⁻¹	403, 366, 330, 309, 288, 260	0.1, 0.2, 0.5, 1, 2, and 5	This work
Cu ₉ S ₅ @C	316 (200 cycles) at 0.1 A g ⁻¹	318, 286, 244, 215, and 170	0.1, 0.2, 0.5, 1, and 2	[28]
CuS@GO	311 (100 cycles) at 0.5 A g ⁻¹	407.7, 322, 256.2, and 196.5	0.1, 0.2, 0.5, and 1	[29]
Cu ₉ S ₅ /MoS ₂ / C	270.6 (200 cycles) at 0.5 A g ⁻¹	325, 300.2, 273.5, 246, 211, 142.3, and 100.2	0.1, 0.2, 0.5, 1, 2, 5, and 10	[30]
CuS@Nb ₂ O ₅ / C	278.5 (100 cycles) at 0.1 A g ⁻¹	304, 254.5, 184.4, 139.6, and 101.4	0.1, 0.2, 0.5, 1, and 2	[31]
Cu ₂ S@C	206.6 (400 cycles) at 2 A g ⁻¹	451.2, 334, 280.1, 226.3	0.2, 0.5, 1, and 2	[32]
CNT/Cu ₉ S ₈	320.5 (200 cycles) at 0.1 A g ⁻¹	380, 309.4, 284.5, 241, 168.5, 144	0.1, 0.2, 0.5, 1, 2, and 5	[36]

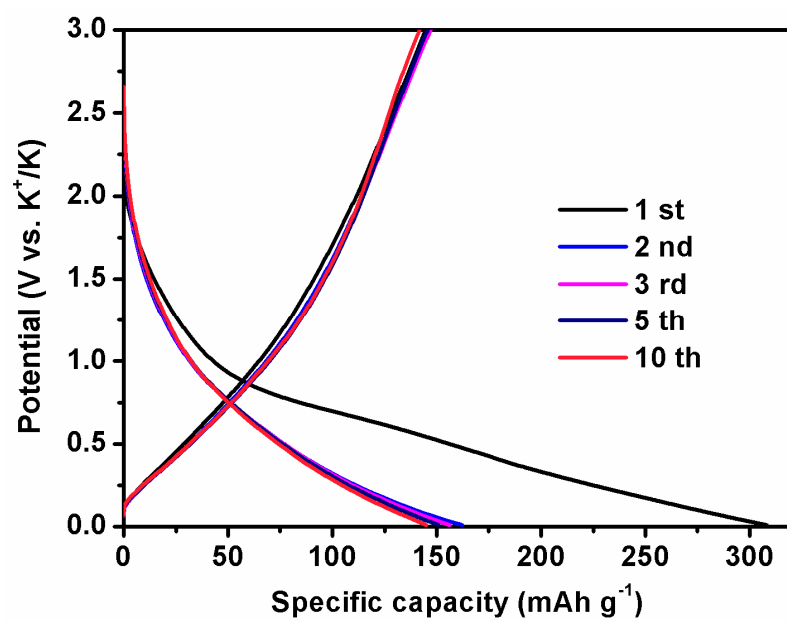


Figure S1: The galvanostatic charge-discharge profile for porous carbon at 0.1 A g⁻¹.