Supplementary Materials

Influence of copper addition for silicon-carbon composite as anode materials for lithium ion batteries

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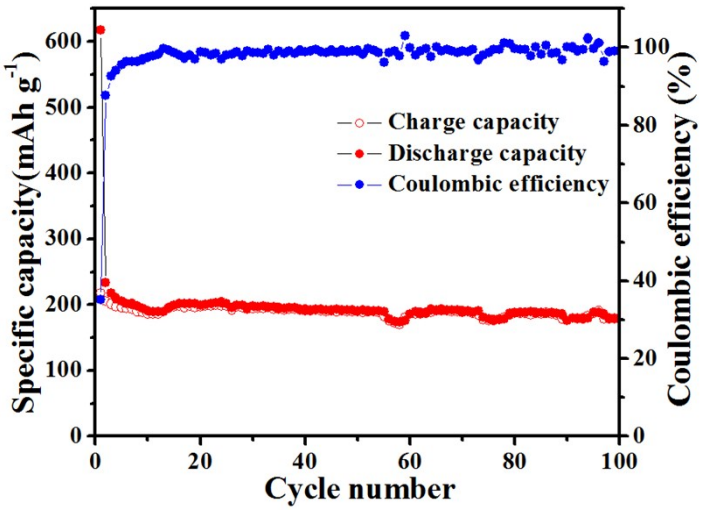

Fig. S1. Cycling performance of RF-derived carbon at the current density of 100 mA g^{-1}.

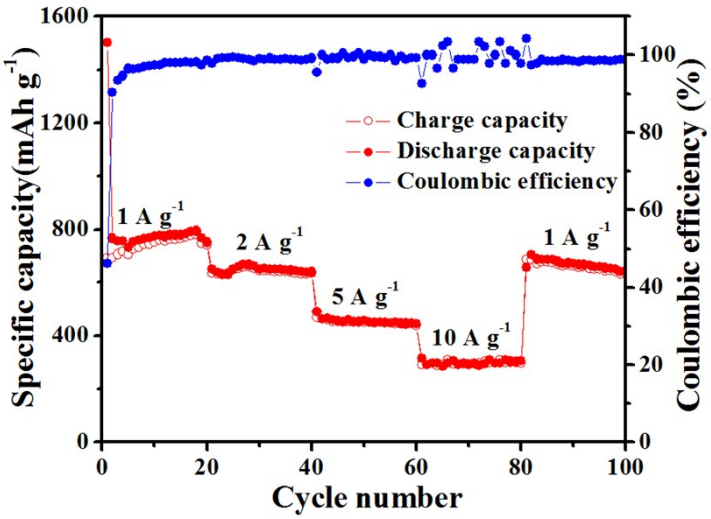

Fig. S2. Rate capability of Si-C/Cu2 at various current densities from 1 to 10 A g^{-1}.

Table S1 Element analysis of the prepared samples

Sample	Element	Weight (%)
Si-C	Si	37.7
	C	62.3
Si-C/Cu1	Si	42.6
	C	56
	Cu	1.4
Si-C/Cu2	Si	46.4
	C	51.4
	Cu	2.2
Si-C/Cu3	Si	45
	C	46.1
	Cu	8.9

Table S2 Electrochemical properties of the prepared samples

Sample	Current density (mA g^{-1})	Current density (mA cm^{-2})	Discharge specific capacity of 1st cycle (mAh cm^{-2})	Charge specific capacity of 1st cycle (mAh cm^{-2})	Initial coulombic efficiency (%)	Discharge specific capacity of 100th cycle (mAh cm^{-2})
Si-C	100	0.12	1.27	0.5	39	0.465
Si-C/Cu1	100	0.118	1.589	0.726	46	0.709
Si-C/Cu2	100	0.115	2.569	1.341	52	1.089
Si-C/Cu3	100	0.116	2.139	1.167	55	0.834