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Electronic Supporting Information

Nanoporous Hollow Carbon Spheres Derived from Fullerene Assembly as Electrode Materials for High-Performance Supercapacitors

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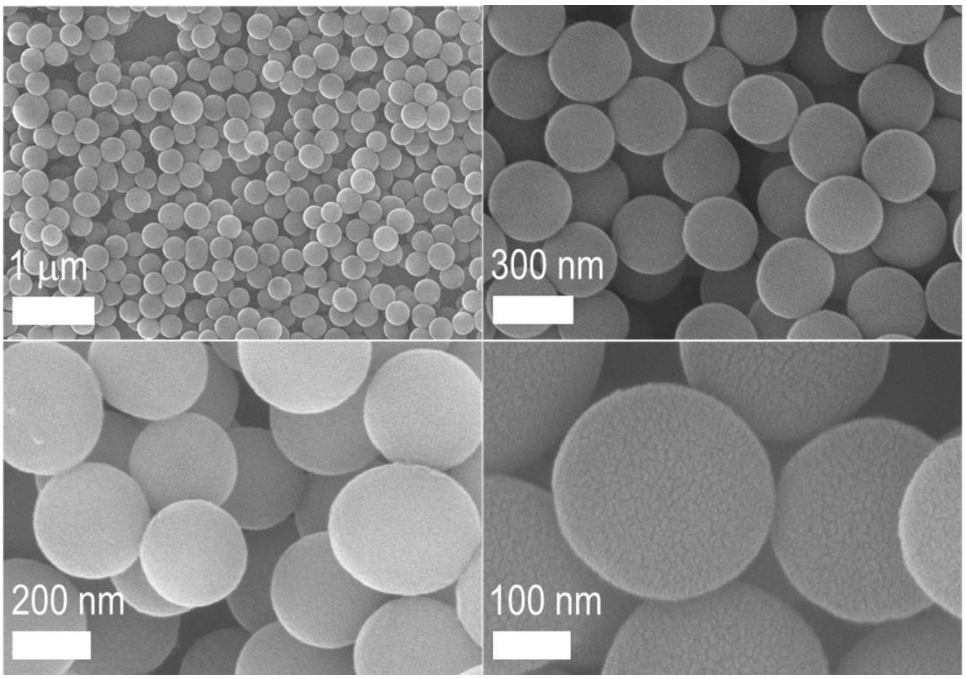

Figure S1: SEM images of FE-HS.

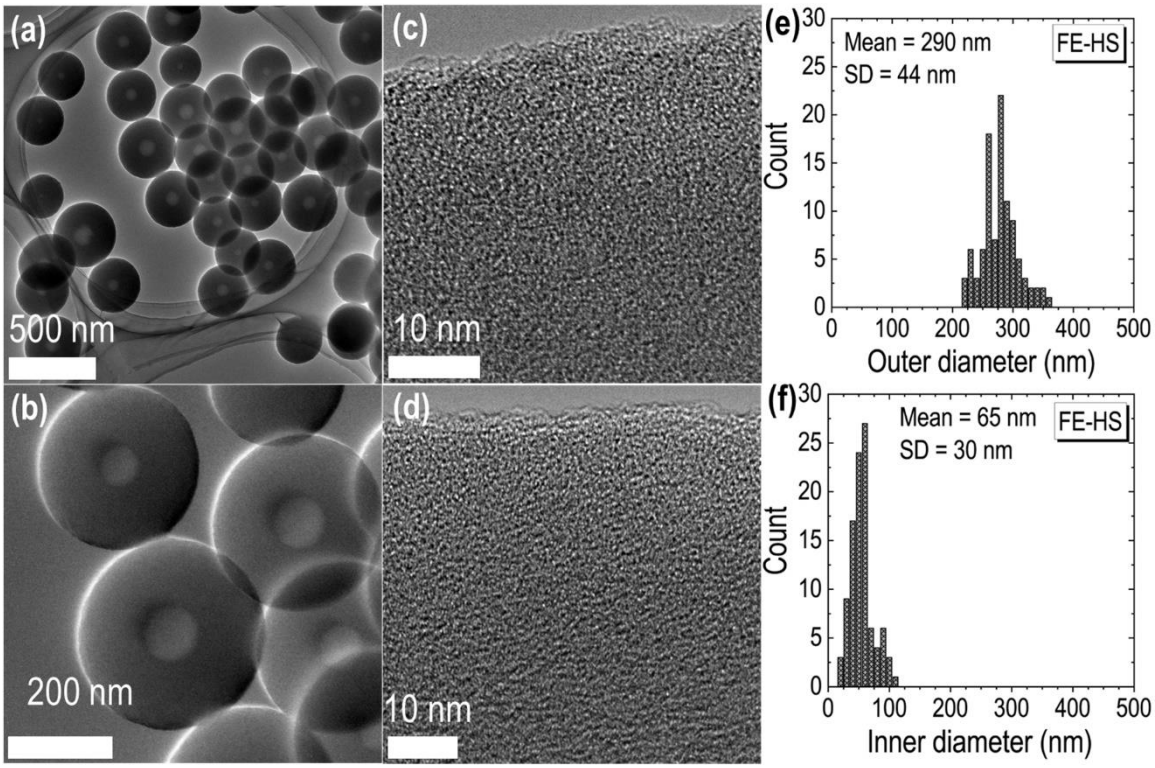

Figure S2: (**a-b**) TEM images; (**c-d**) HR-TEM images; (**e**) histogram of the outer diameter distribution; and (**f**) histogram of the inner diameter distribution.

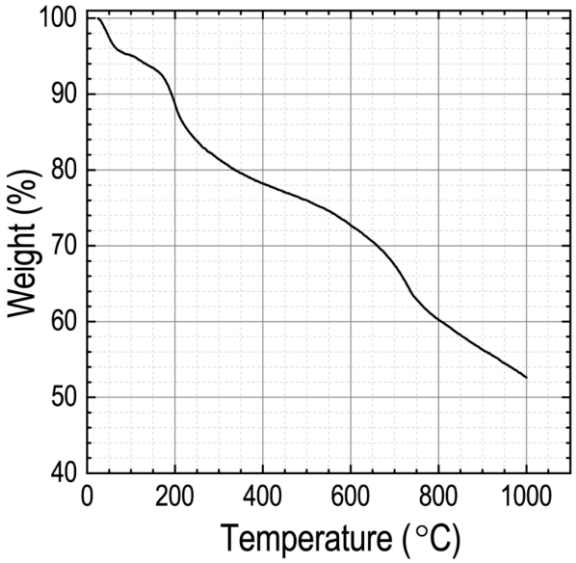

Figure S3: TGA curve of FE-HS.

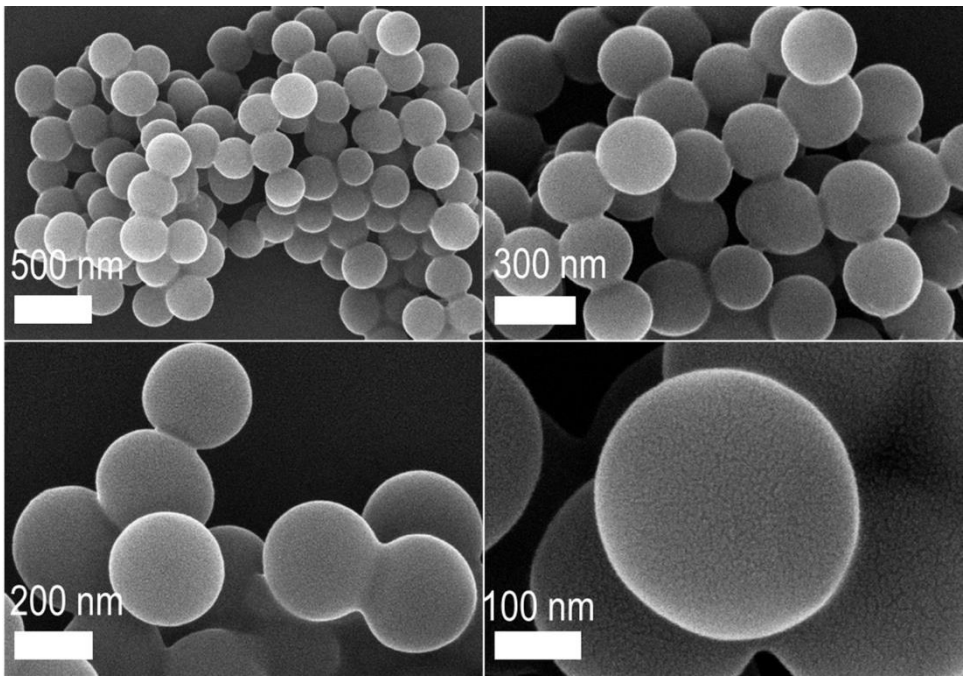

Figure S4: Additional SEM images of FE-HS_900.

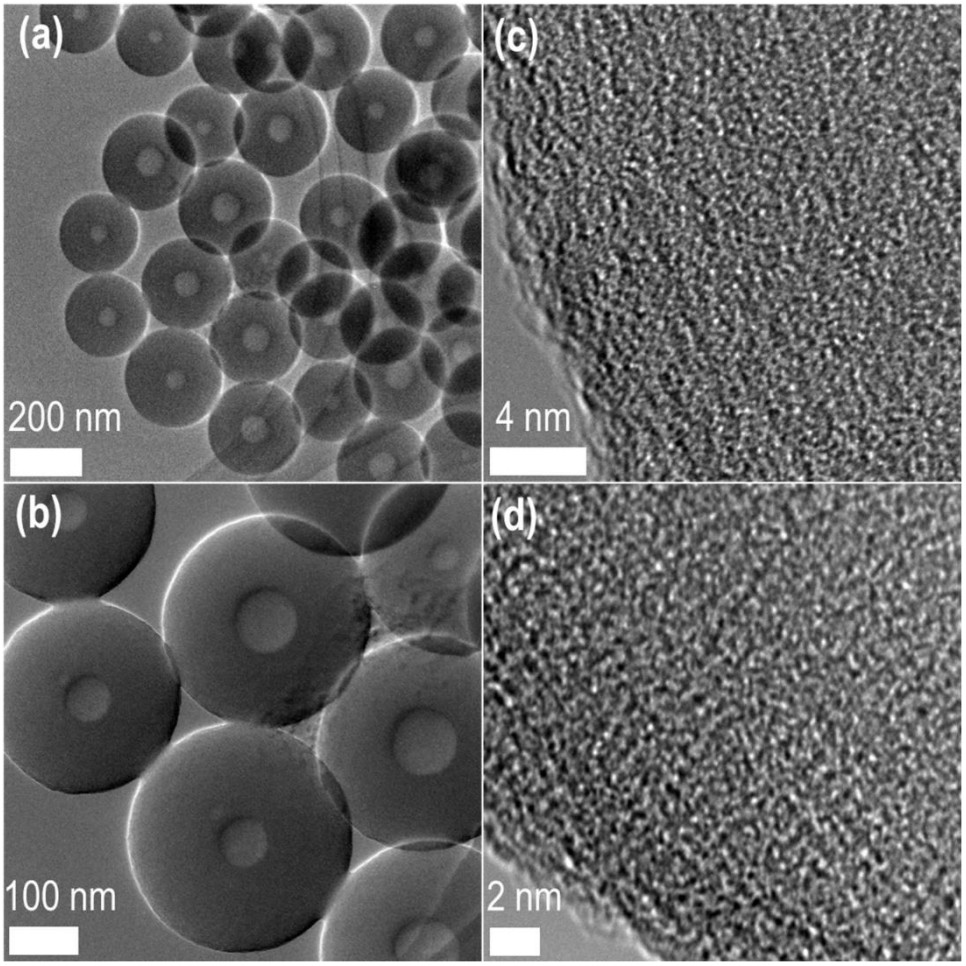

Figure S5: (**a-b**) Additional TEM images of FE-HS_900; and (**c-d**) corresponding additional HR-TEM images.

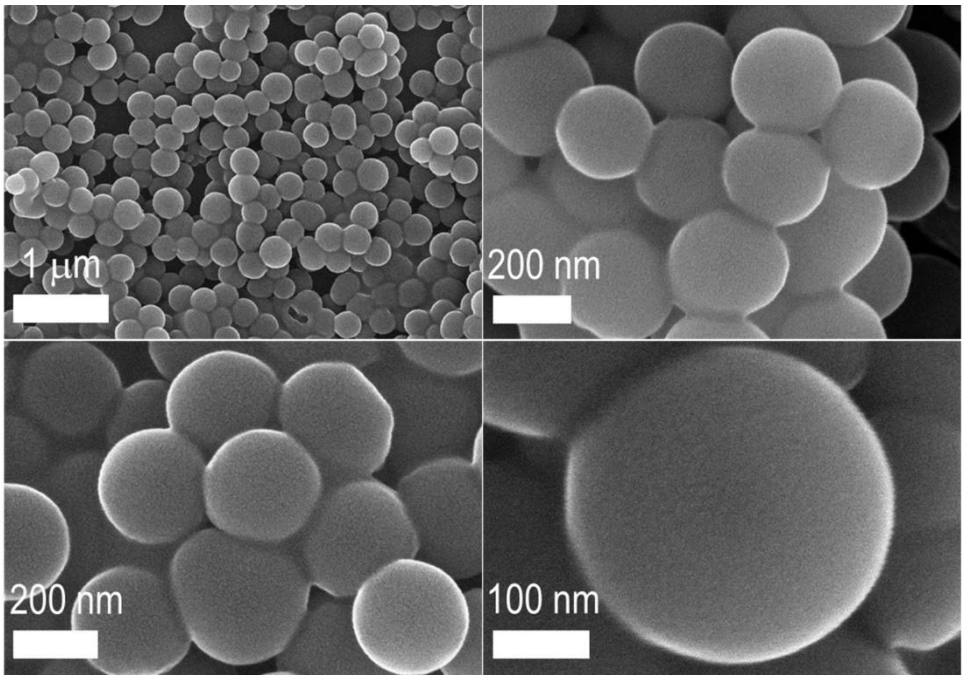

Figure S6: SEM images of FE-HS_700.

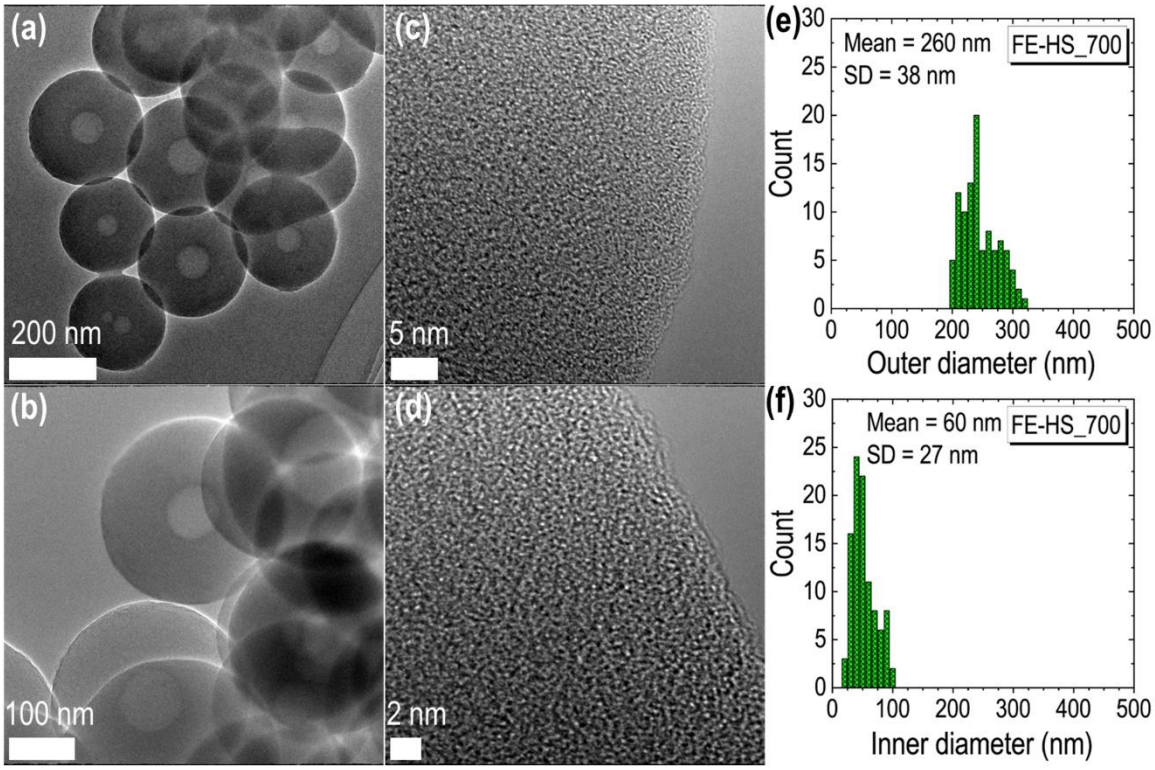

Figure S7: (**a-b**) TEM images; (**c-d**) HR-TEM images; and (**e-f**) histograms of the outer diameter (**e**) and inner diameter distributions (**f**) of EF-HS_700.

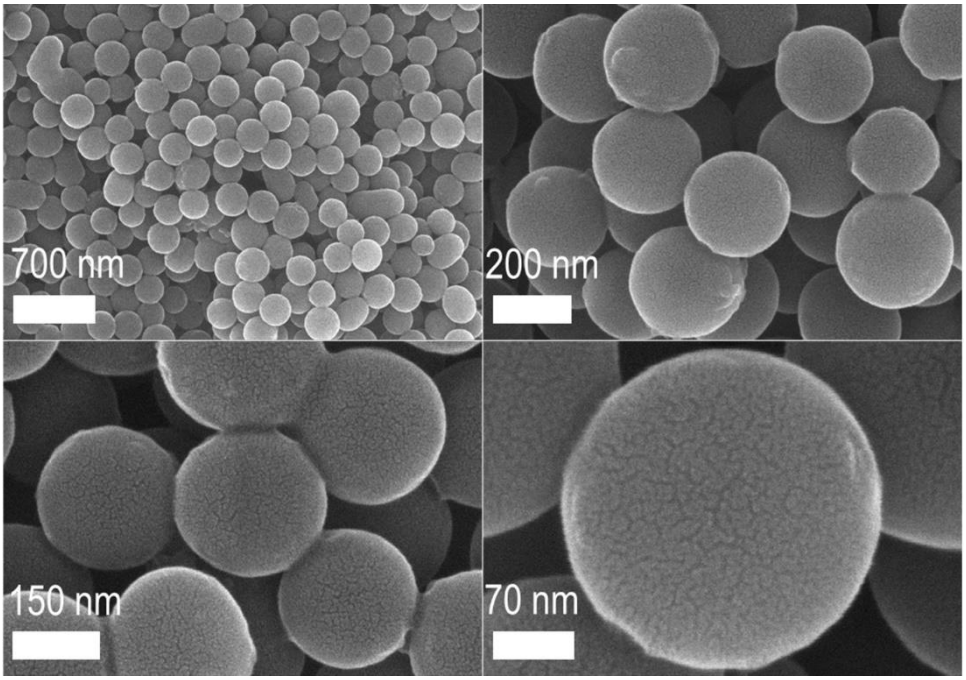

Figure S8: SEM images of FE-HS_1100.

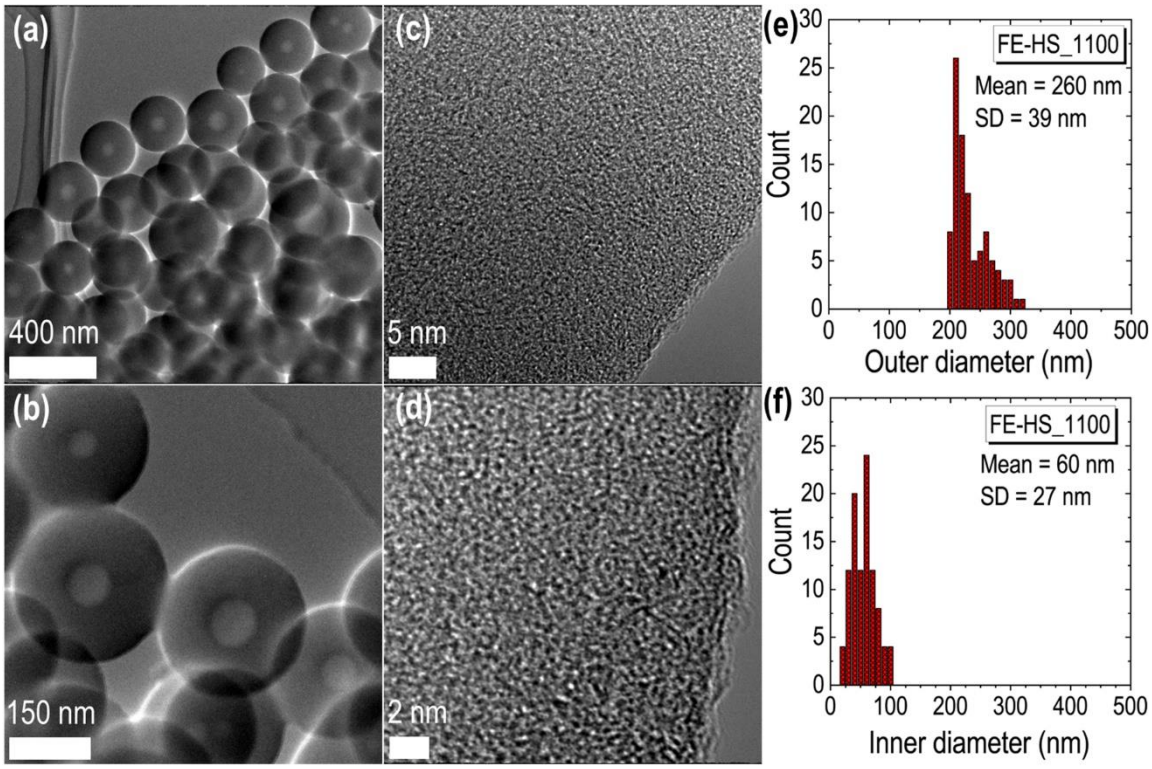

Figure S9: (**a-b**) TEM images; (**c-d**) HR-TEM images; and (**e-f**) histograms of the outer diameter (**e**) and inner diameter distributions (**f**) of EF-HS_1100.

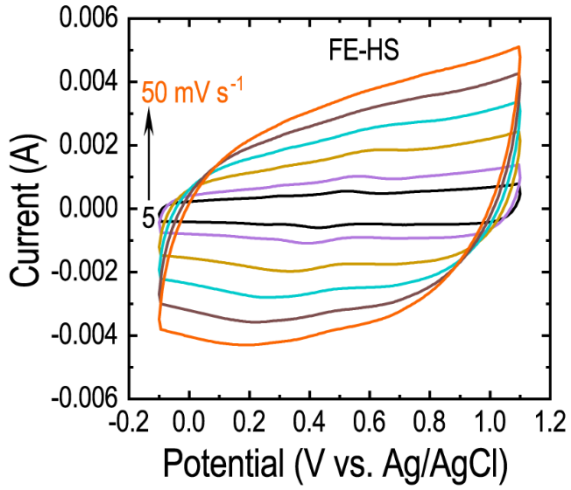

Figure S10: CV *vs*. scan rate profiles of the as-prepared FE-HS sample in a three-electrode cell setup.

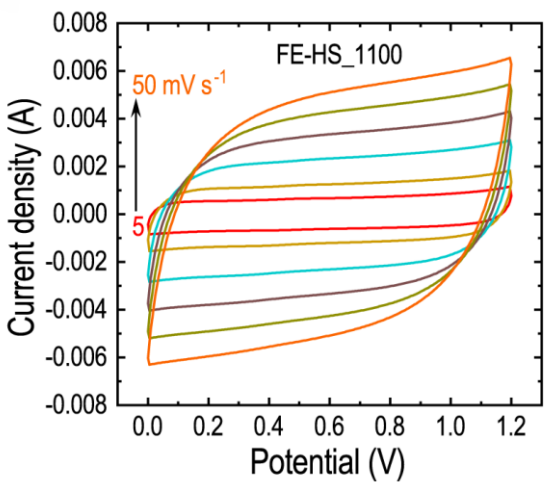

Figure S11: CV curves *vs*. scan rate of the symmetric supercapacitor prepared using FE-HS_1100 sample.

Table S1. Comparison of the electrochemical supercapacitance performance of the porous hollow carbon spheres with the other porous carbon materials including graphene and CNTs-based supercapacitors.

Sample	Electrolyte	Test System	Current density /Scan rate	Specific Capacitance (F g^{-1})	Ref.
Mesoporous carbon cubes derived from C_{70} cubes	1 M H_2SO_4	Three-electrode	1 A g^{-1}	205	[10]
Wheat straw-derived carbon	2 M NaOH	Three-electrode	2 mA cm^{-2}	162	[28]
Mango Seed husk carbon	2 M NaOH	Three-electrode	5 mA cm^{-2}	135	[30]
Chitin derived nitrogen-doped porous carbon	1 M H_2SO_4	Three-electrode	0.5 A g^{-1}	245	[31]
Sandwich-like chitosan porous carbon Spheres/MXene composite	1 M H_2SO_4	Three-electrode	0.5 A g^{-1}	362	[32]
Mesoporous carbon tubes derived from C_{60} tubes	1 M H_2SO_4	Three-electrode	5 mV s^{-1}	145.5	[33]
Mesoporous carbon rods derived from C_{60} rods	1 M H_2SO_4	Three-electrode	5 mV s^{-1}	132.3	[33]
Nanoporous carbon from "Konpeito-like C_{60} crystals"	1 M H_2SO_4	Three-electrode	5 mV s^{-1}	175	[34]
2D mesoporous carbon microbelts	1 M H_2SO_4	Three-electrode	1 A g^{-1}	290	[35]
Activated C_{70}	1 M H_2SO_4	Three-electrode	0.1 A g^{-1}	362	[36]
Mesoporous carbon tubes derived from C_{70} tubes	1 M H_2SO_4	Three-electrode	0.1 A g^{-1}	184.6	[37]
Wood-derived thick carbon	6 M KOH	Three-electrode	2 mA cm^{-2}	330.2	[62]
Porous graphene spheres	6 M KOH	Two-electrode	0.2 A g^{-1}	179	[63]
Graphene fiber	1 M H_2SO_4	Three-electrode	0.2 A g^{-1}	279	[64]
Graphene	$EMIMBF_4$	Two-electrode	1 A g^{-1}	154.1	[65]
Graphene	1 M H_2SO_4	Three-electrode	1 mV s^{-1}	226	[66]
RG-O /NH_2RG-O	1 M H_2SO_4	Three-electrode	2 mV s^{-1}	68	[67]
Graphene/Graphene oxide	6 M KOH	Two-electrode	0.5 A g^{-1}	189	[68]
N-doped Graphene	6 M KOH	Two-electrode	1 A g-1	405	[69]
N-doped Carbon	20 M LiTFSI	Two-electrode	0.1 A g^{-1}	167	[70]
N-doped Carbon	6 M KOH	Three-electrode	1 A g^{-1}	293 [1]	[71]
N-doped Carbon	0.5 M H_2SO_4	Three-electrode	1 A g^{-1}	855	[72]
Graphene/CNT fiber	PVA-KOH gel	Two-electrode	0.8 A g^{-1}	139	[73]
r-GO/CNT fiber	PVA-H_3PO_4 gel	Two-electrode	10 mV s^{-1}	39.3 F cm^{-3}	[74]
Activated C_{60}	1 M BMIM BF_4/AN	Two-electrode	0.2 A g^{-1}	118	[75]
N-doped activated C_{60}	1 M BMIM PF_6/AN	Two-electrode	1 A g^{-1}	114.6	
Mesoporous carbon tubes derived from macaroni C_{60} crystals	1 M H_2SO_4	Three-electrode	1 A g^{-1}	422	[76]
Hiearchically porous hollow carbon spheres derive from C_{60}-EDA hollow spheres	1 M H_2SO_4	Three-electrode	1 A g^{-1}	293	This work
	1 M H_2SO_4	Two-electrode	1 A g^{-1}	164	

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