Supporting Information

A facile morphology tunable strategy of Zn-MOF derived hierarchically carbon materials with enhanced supercapacitive performance through solvent effect

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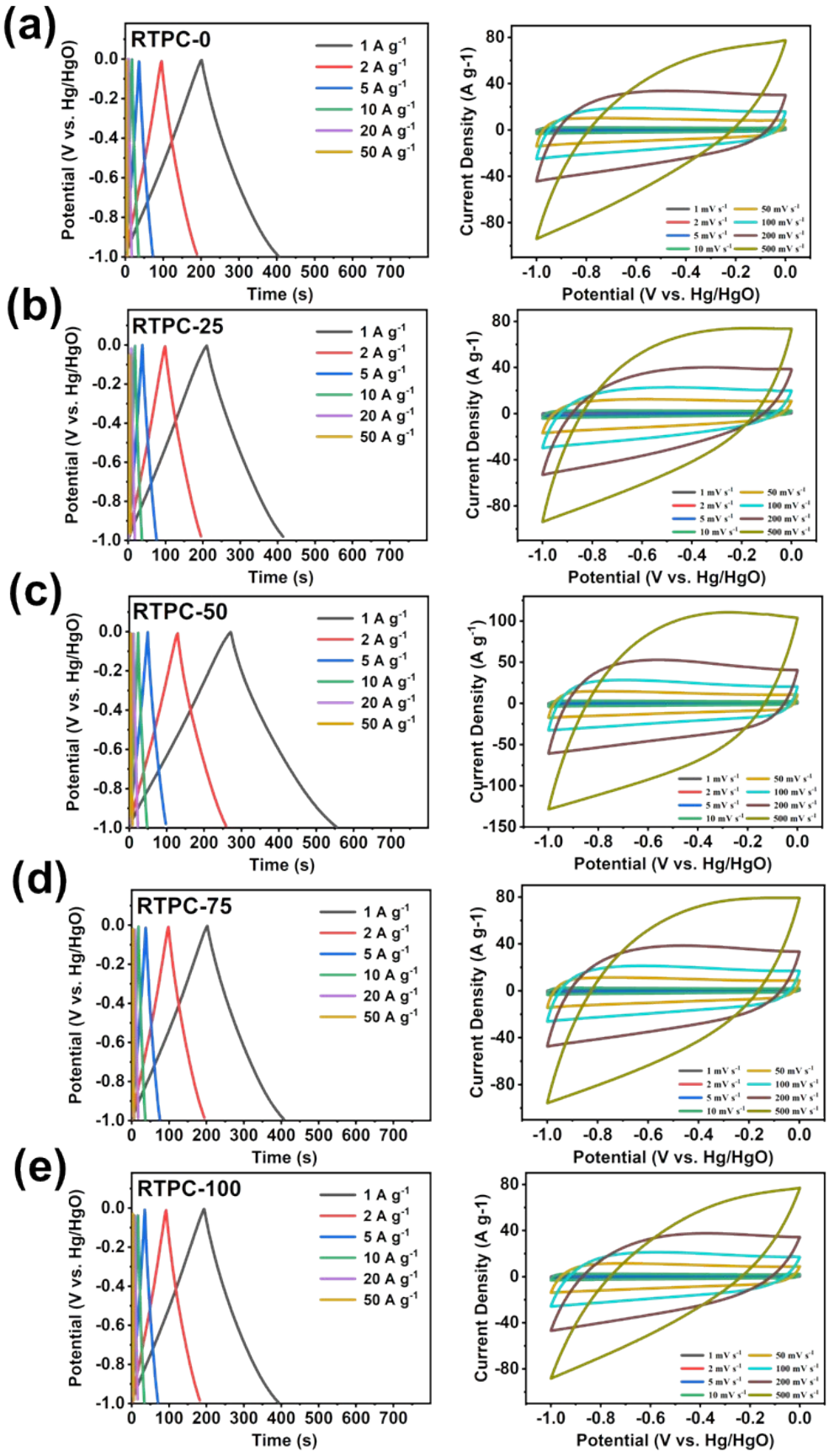

Fig. S1 The GCD and CV curves of RTPC prepared in different solvents at different current densities.

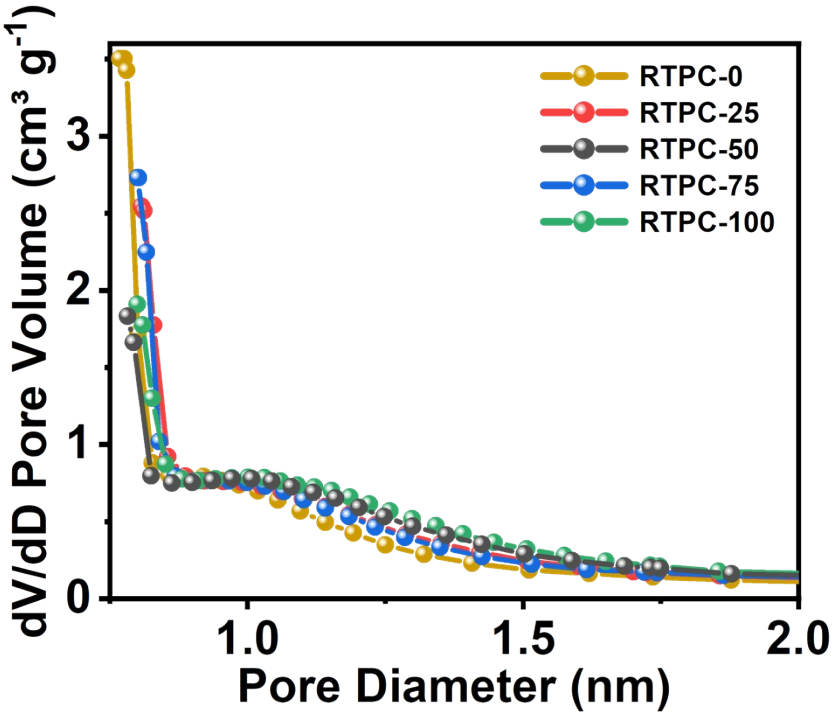

Fig. S2 HK pore size distribution of the five samples

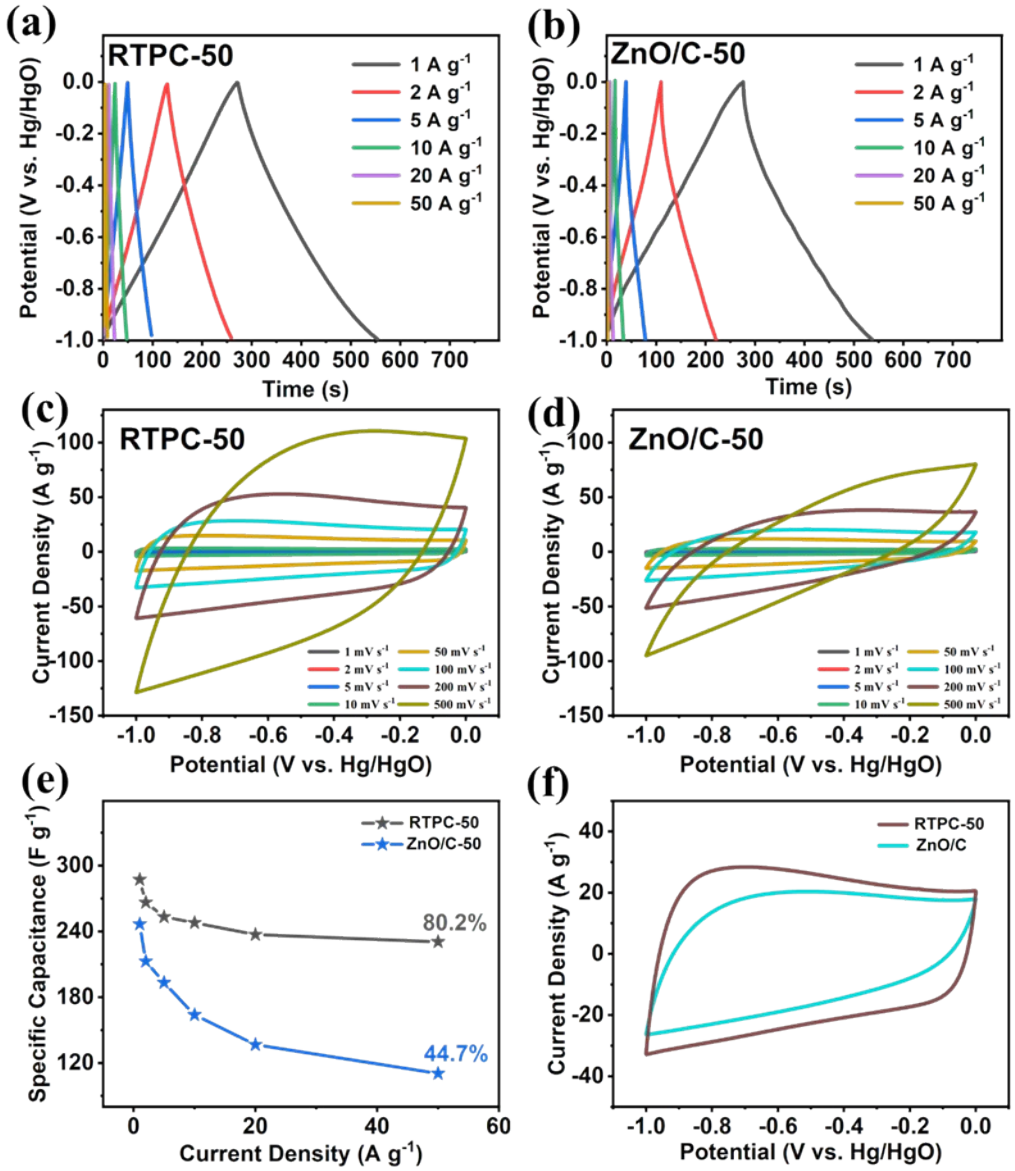

Fig. S3 (a, b): GCD curves at different current density of RTPC-50 and ZnO/C-50; (c, d): CV curves at different scanning rates of RTPC-50 and ZnO/C-50; (e) The comparation of specific capacitance at different current density of RTPC-50 and ZnO/C-50; (f) The comparation of CV curve at 100 mV s^{-1} of RTPC-50 and ZnO/C-50.

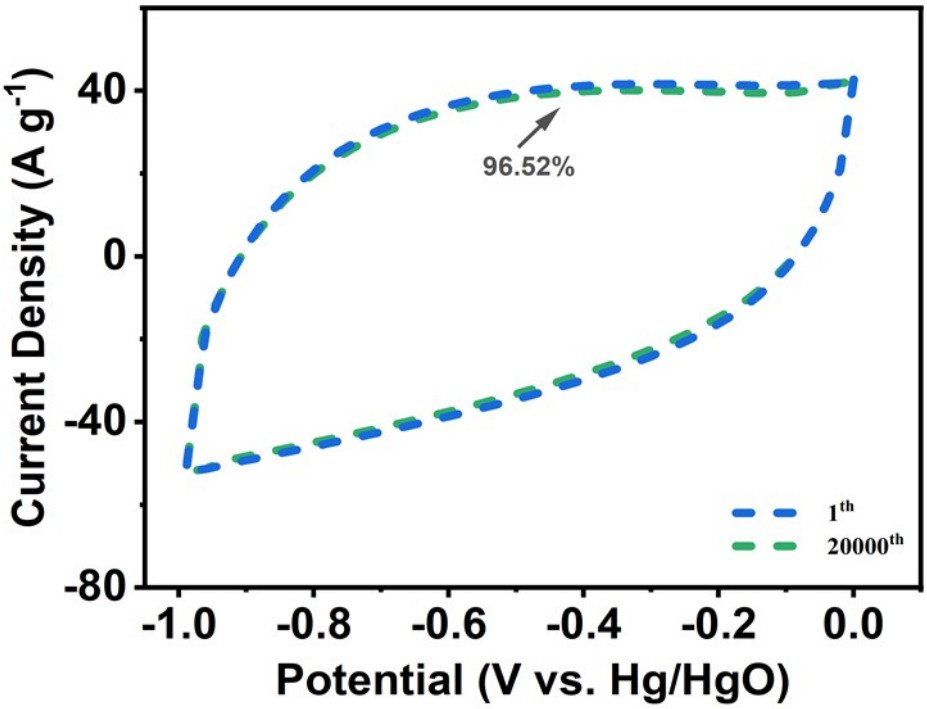

Fig. S4 Comparison diagram of CV curves for 1st and 20000th cycle at the scanning speed of 200 mV s^{-1}.

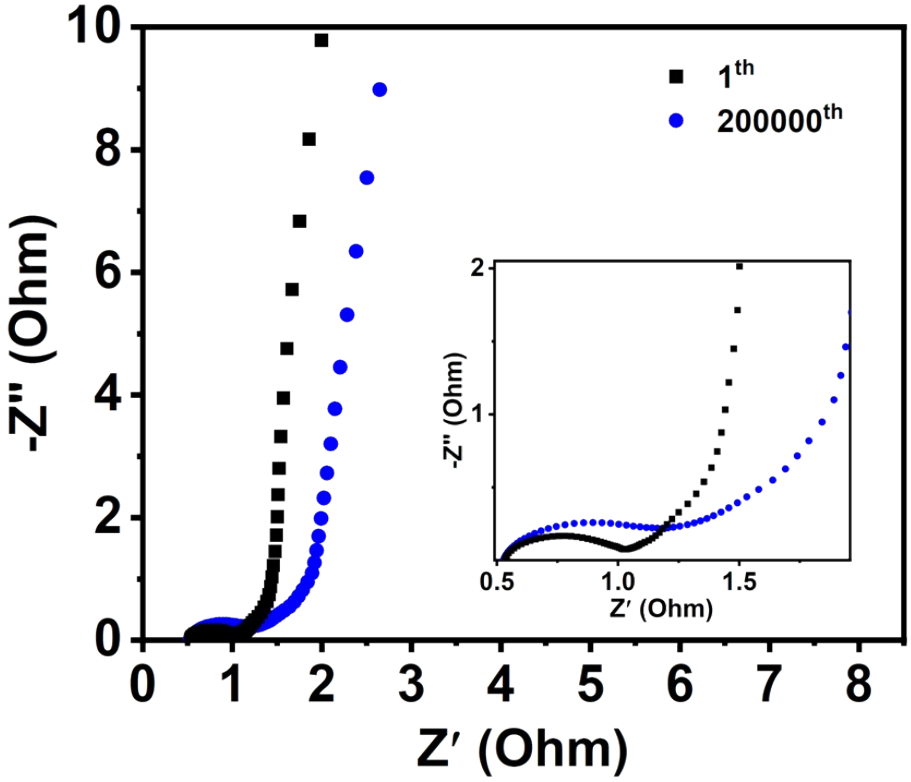

Fig. S5 Nyquist plots after 1st and 200000th GCD cycles (Inset is the magnified image in high-frequency regions)

Table S1 The detailed information of characterization instruments

Technique	Model	Manufacturer
Scanning Electron Microscope (SEM)	SUPRA 55 SAPPHIRE	Carl Zeiss AG
Energy Dispersive Spectroscopy (EDS)	SUPRA 55 SAPPHIRE	Carl Zeiss AG
Thermal Gravimetric Analysis (TGA)	STA 449 F3	NETZSCH-Gerätebau GmbH
X-ray Diffraction (XRD)	XRD-6000	Shimadzu
X-ray Photoelectron Spectra (XPS)	AXIS ULTRA DLD	Shimadzu
Brunauer-Emmett-Teller (BET)	ASAP 2460	Micromeritics Instrument Corporation

Table S2 The specific surface area and pore structure of five samples

	BET Surface Area (cm^2 g^{-1})	average pore diameter (nm)	t-Plot Micropore Area (cm^2 g^{-1})	t-Plot micropore volume (cm^3 g^{-1})
RTPC-0	1597.4	1.8	1009.0	0.40
RTPC-25	1760.9	2.6	740.9	0.31
RTPC-50	1930.4	2.9	638/1	0.27
RTPC-75	1764.7	2.4	893.8	0.36
RTPC-100	2061.7	3.3	454.5	0.19

Table S3 C 1s, Zn 2p and O 1s parameters of Zn-BTC, ZnO/C and RTPC-50

	Zn-BTC	ZnO/C	RTPC-50
C 1s (at.%)	66.76	90.13	92.57
O 1s (at.%)	19.76	9.72	7.43
Zn 2p (at.%)	13.48	0.15	0