Electronic Supplementary Material (ESI) for Biomaterials Science.

Supporting Information

Brain-targeted Ginkgolide B-modified Carbonized Polymer Dots for Alleviating Cerebral Ischemia Reperfusion Injury

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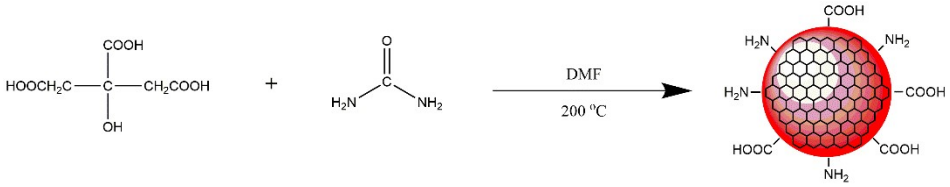

Fig. S1 Schematic illustration of the synthesis process of CPDs.

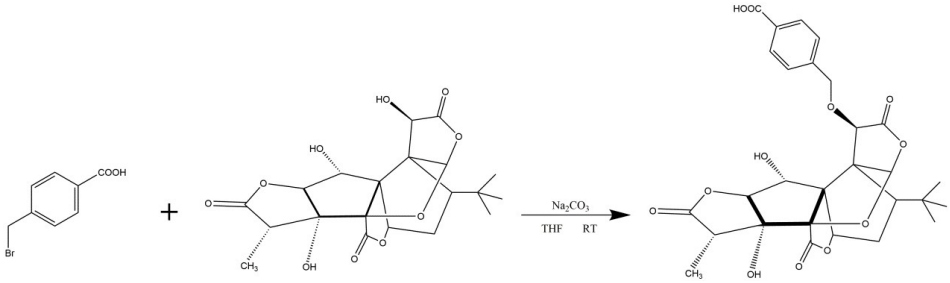

Fig. S2 Schematic illustration of the synthesis process of carboxyl modified-GB.

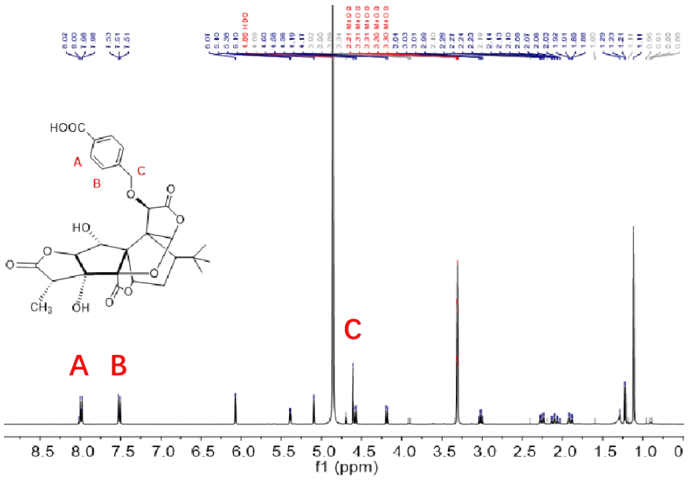

Fig. S3 1H-NMR spectra of carboxyl modified-GB.

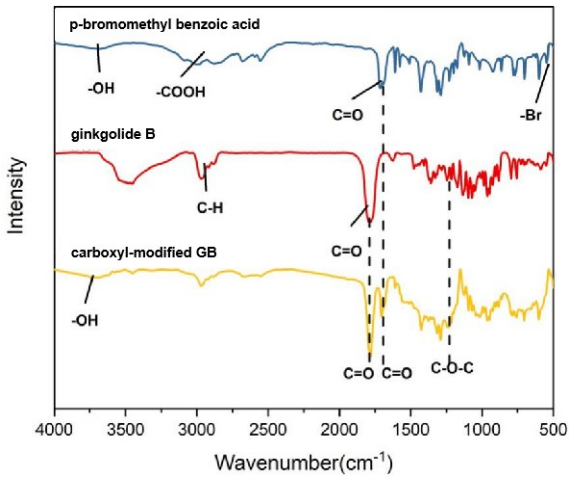

Fig. S4 FTIR spectrum of p-bromomethyl benzoic acid, GB and carboxyl-modified GB.

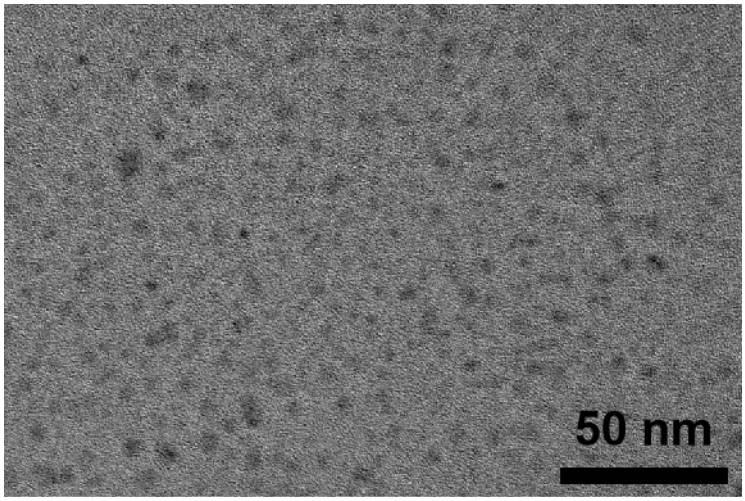

Fig. S5 TEM image of CPDs.

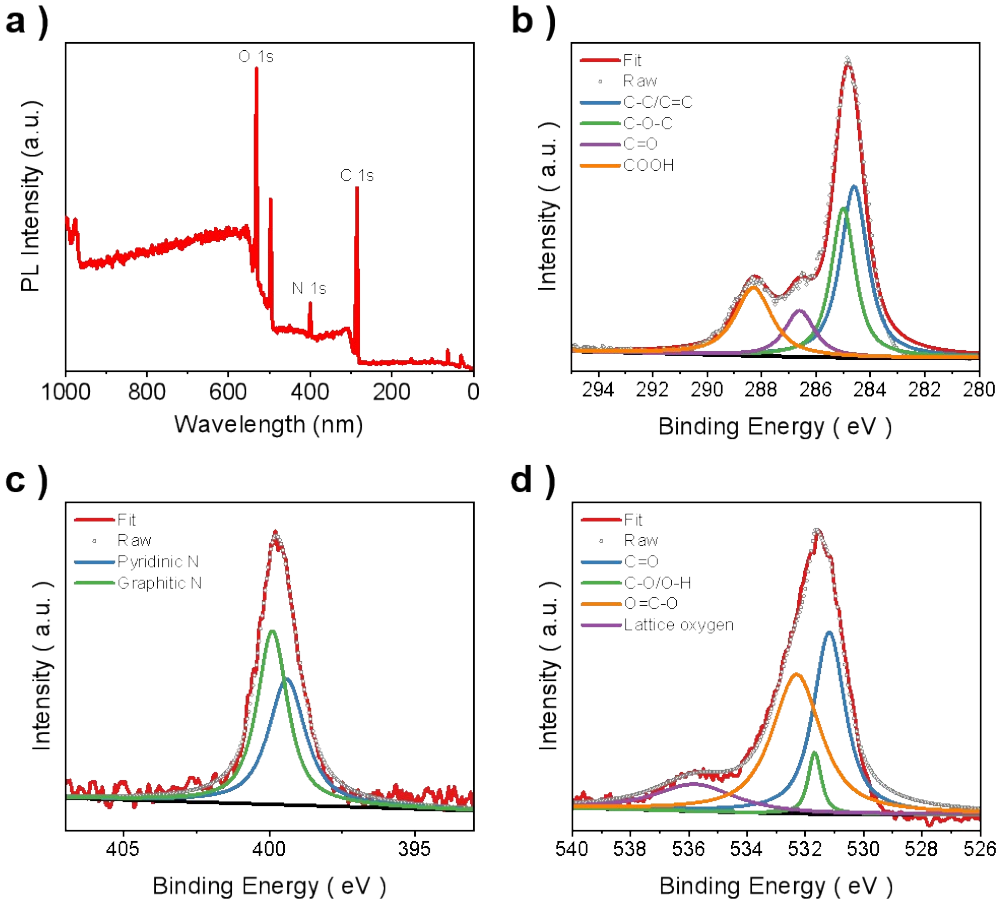

Fig. S6 a) Full-range XPS spectrum of GB-CPDs. b) C 1s, c) N 1s, and d) O 1s deconvoluted XPS spectrum of GB-CPDs.

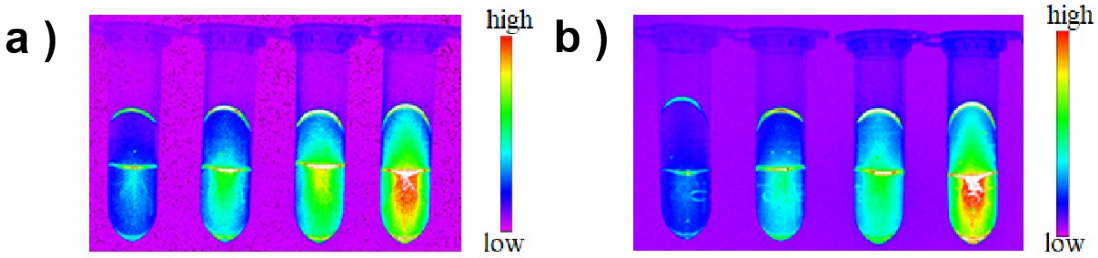

Fig. S7 The fluorescence images of a) CPDs and b) GB-CPDs in saline solution with different concentrations (705 nm emission under 640 nm excitation).

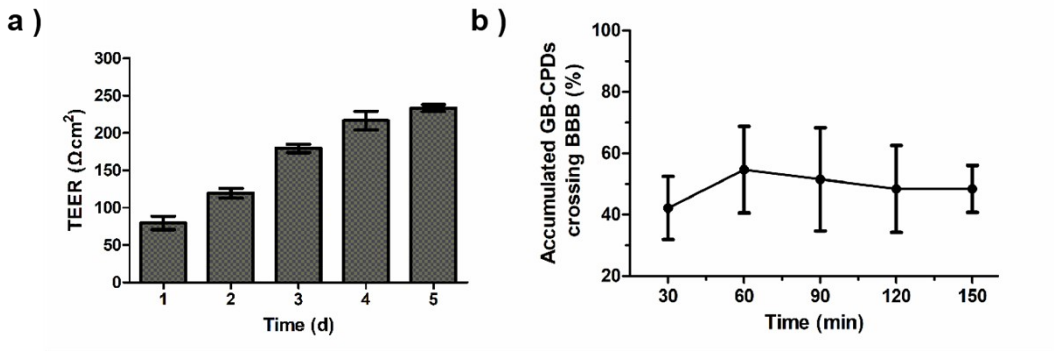

Fig. S8 (a) Time-dependent TEER values of the in vitro BBB model (n = 3, mean ± SD). (b) Accumulated percentages of GB-CPDs that crossed the BBB (n = 6, mean ± SD).

Text	Units	Control	GB-CPDs	P value
WBC	$\times 10^9$/L	7.33±1.47	7.43±1.25	0.9599
RBC	$\times 10^{12}$/L	8.60±0.27	8.51±0.49	0.8836
HGB	g/L	151.3±0.33	154.3±2.96	0.3712
PLT	$\times 10^9$/L	1006.00±148.60	1025.00±113.20	0.9239
AST	U/L	128.00±31.37	108.00±9.87	0.5760
ALT	U/L	72.33±18.34	55.00±2.52	0.4022
UREA	umol/L	6.10±1.10	5.60±0.42	0.6926
CREA	umol/L	34.67±2.85	33.67±0.67	0.7496

Table. S1 Blood routine and blood biochemical tests of rats after 7 d of administration of GB-CPDs.

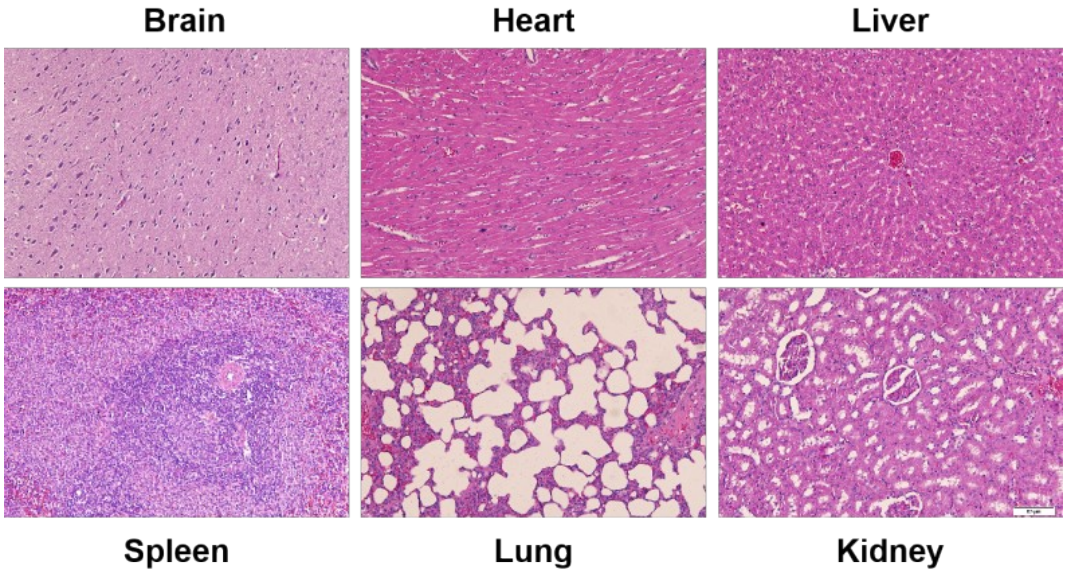

Fig. S9 H&E staining results of important organs (brain, heart, liver, spleen, lung, kidney) after 7 d of administration of GB-CPDs.