

Supporting Information

Blotting Paper-derived Activated Porous Carbon/Reduced Graphene Oxide Composite Electrodes for Supercapacitor Applications

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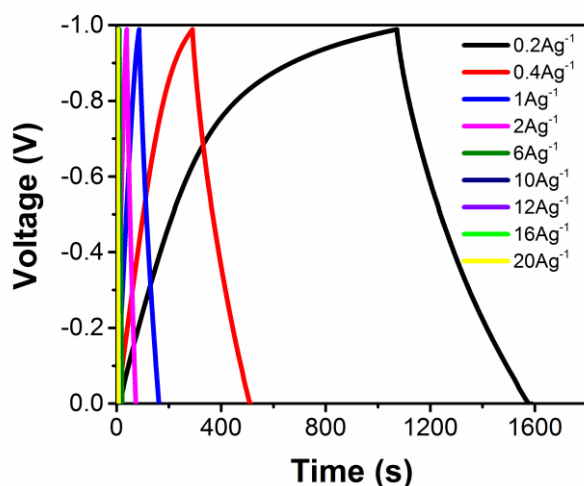


Figure S1. GCD curves of GBCP-1 from 0.2 A g⁻¹ to 20 A g⁻¹.

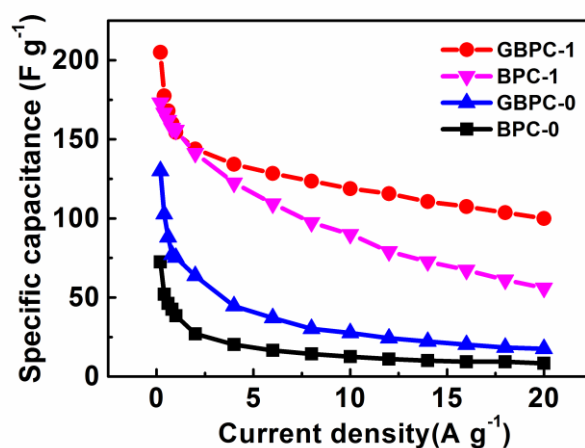


Figure S2. specific capacitance at current densities from 0.2 A g⁻¹ to 20 A g⁻¹.

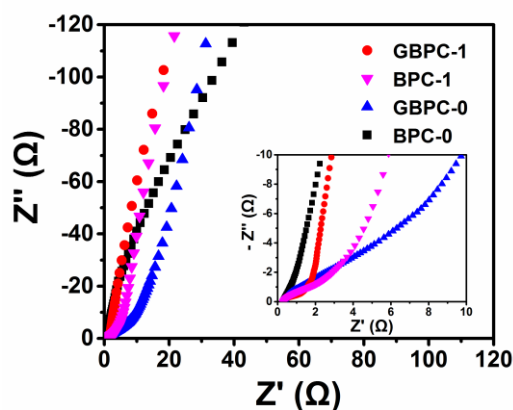


Figure S3. Electrochemical impedance spectra of GBPCs-1, BPC-1, GBPC-0, and GBPCs-0.

Table S1 Comparison of the capacitive performance of other biomass-based thermal annealed electrodes.

Material	Surface Area	Electrochemical Performance	Ref.
Cotton/rGO	392.6 m ² g ⁻¹	120F g ⁻¹ at 3 A g ⁻¹ in PVA/ KOH	[51]
Bacterial cellulose/rGO	137 m ² g ⁻¹	216 F g ⁻¹ at 0.1 A g ⁻¹ in 6.0 M KOH	[52]
Silk/GO	1927 m ² g ⁻¹	52.8 F g ⁻¹ at 0.18 A g ⁻¹ in 6.0 M KOH	[53]
Lignin/rGO	1744 m ² g ⁻¹	165 F g ⁻¹ at 20 A g ⁻¹ in 1.0 M H ₂ SO ₄	[54]
Basewood	1438 m ² g ⁻¹	135 F g ⁻¹ at 0.2 A g ⁻¹ in 4.0 M KOH	[55]
Gelatin	50.8 m ² g ⁻¹	168 F g ⁻¹ at 5 A g ⁻¹ in 2.0 M Na ₂ SO ₄	[56]
Peanut shell	2070 m ² g ⁻¹	186 F g ⁻¹ at 0.5 A g ⁻¹ in 1.0 M H ₂ SO ₄	[57]
Chitin	1000 m ² g ⁻¹	138 F g ⁻¹ at 0.92 A g ⁻¹ in 1.0 M H ₂ SO ₄	[58]
Sisal leaves	1137 m ² g ⁻¹	204 F g ⁻¹ at 1 A g ⁻¹ in 1.0 M LiOH	[59]
Viscose cloth	1205 m ² g ⁻¹	121 F g ⁻¹ at 0.02 A g ⁻¹ in 1.0 M H ₂ SO ₄	[60]
Blotting paper/rGO	1066.9 m ² g ⁻¹	204 F g ⁻¹ at 0.2A g ⁻¹ in 6.0 M KOH	This work