

Supplementary Materials

Rapid microwave activation of waste palm into hierarchical porous carbons for supercapacitors using biochars from different carbonization temperature as catalysts

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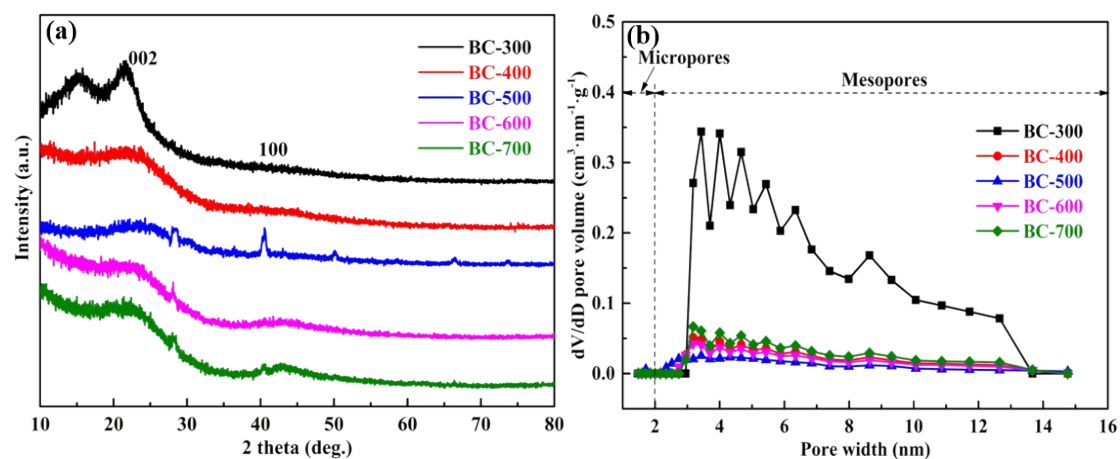


Fig. S1 XRD patterns (a) and pore size distribution (b) of the BCs.

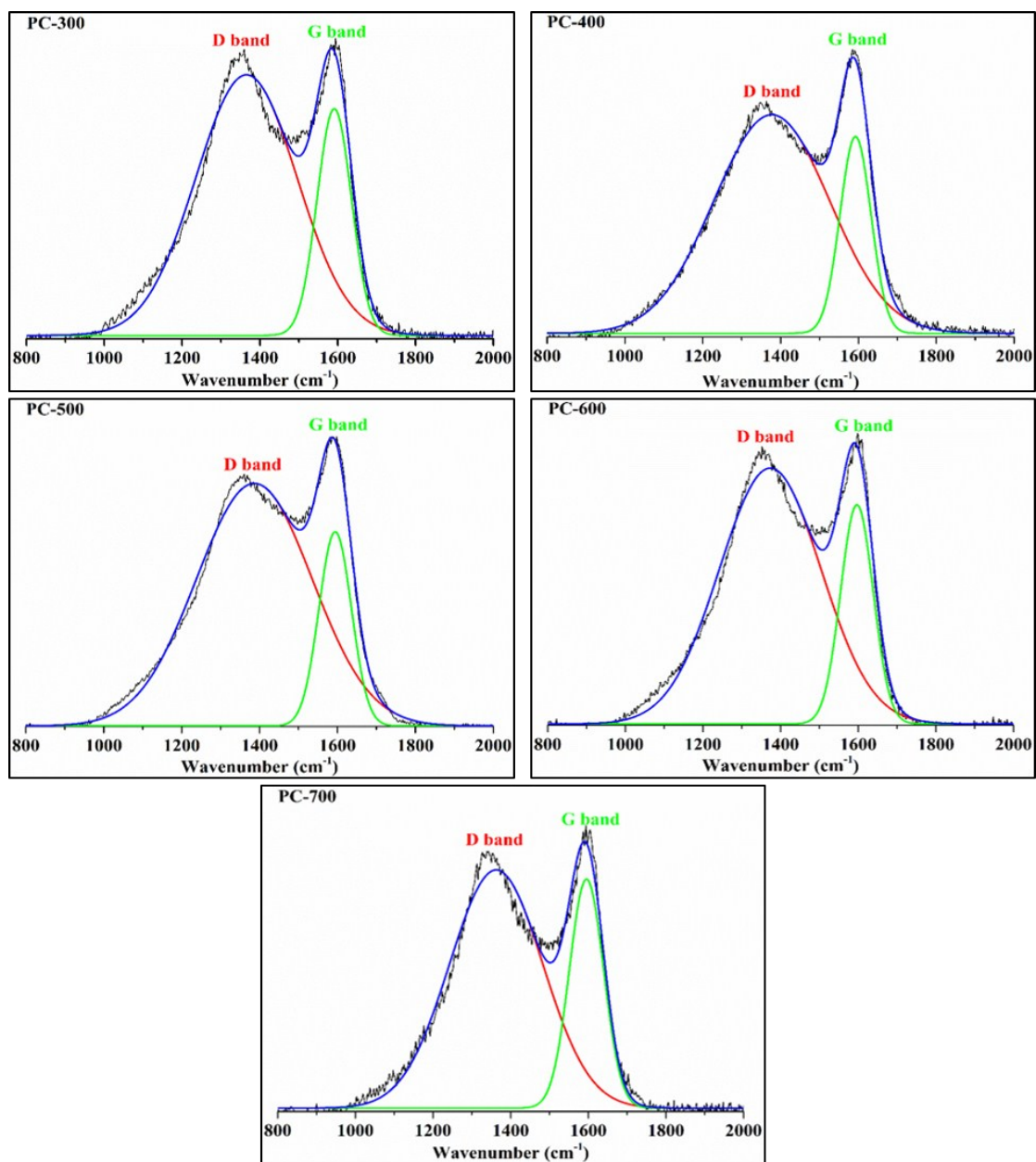


Fig. S2 Fitted Raman spectra of all PCs

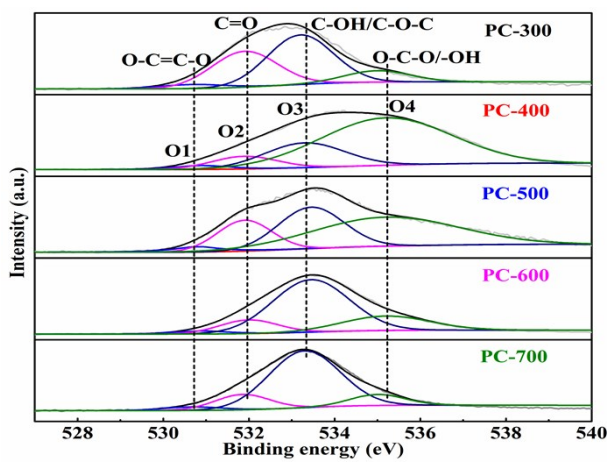


Fig. S3 XPS spectra of O1s for all PCs.

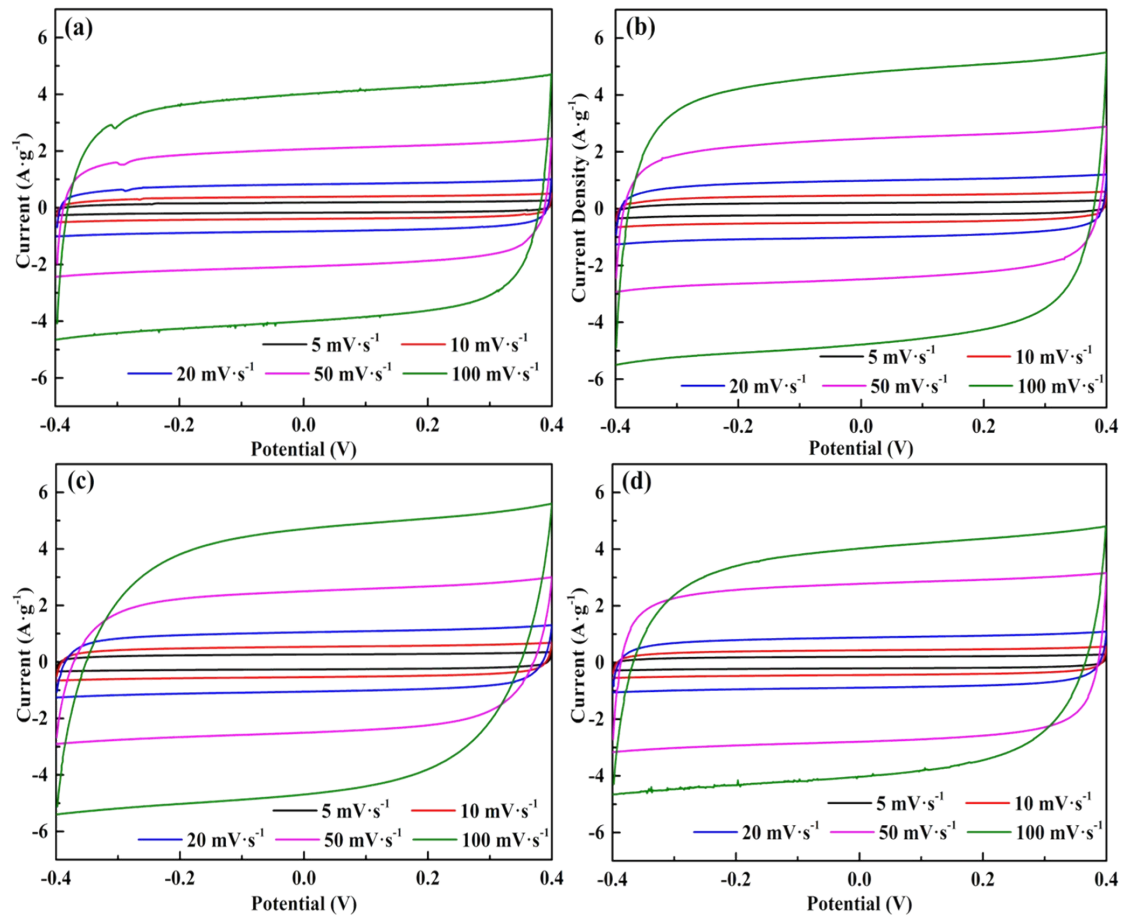


Fig. S4 CV curves of the PC-400 (a), PC-500 (b), PC-600 (c) and PC-700 (d) at different scan rates from 5 to 100 $\text{mV}\cdot\text{s}^{-1}$ in a voltage range from -0.4 V to 0.4 V.

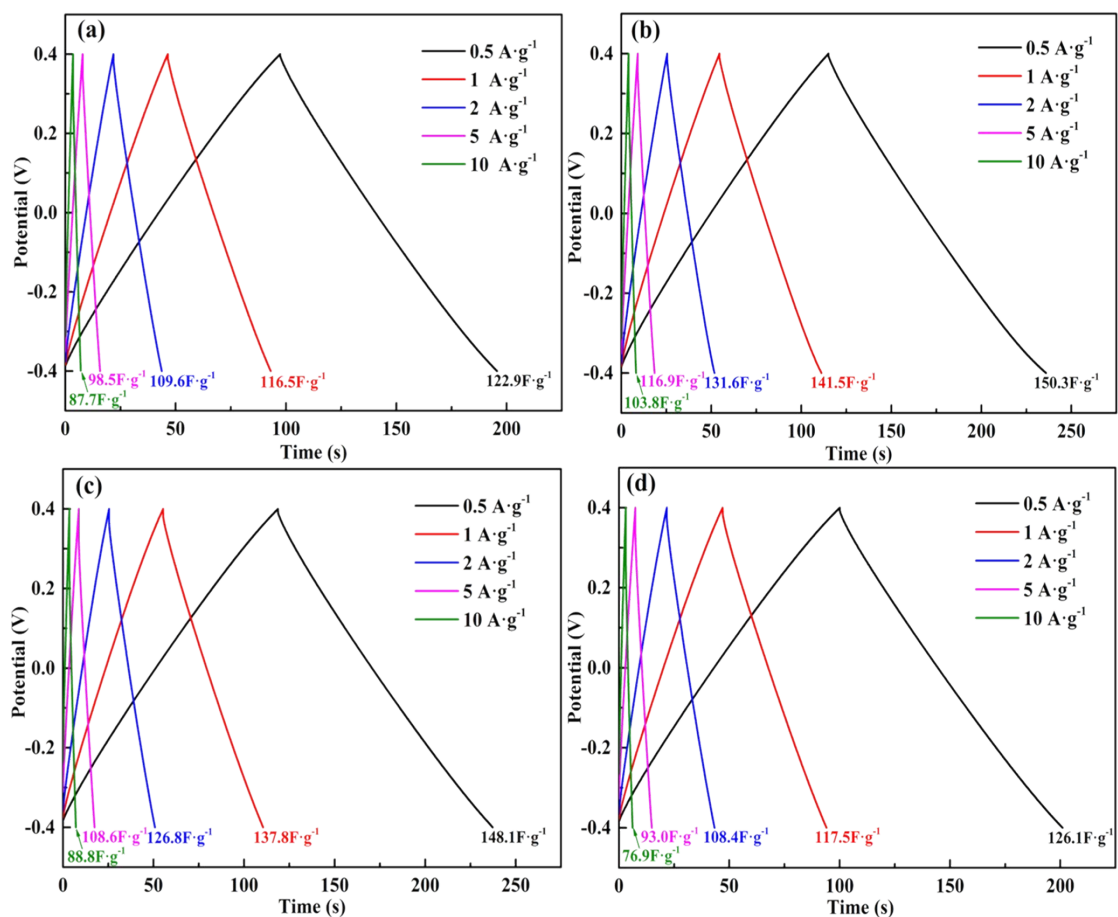


Fig. S5 GCD curves of the PC-400 (a), PC-500 (b), PC-600 (c) and PC-700 (d) at various current densities from 0.5 to 10 A·g⁻¹ in a voltage range from -0.4 V to 0.4 V.

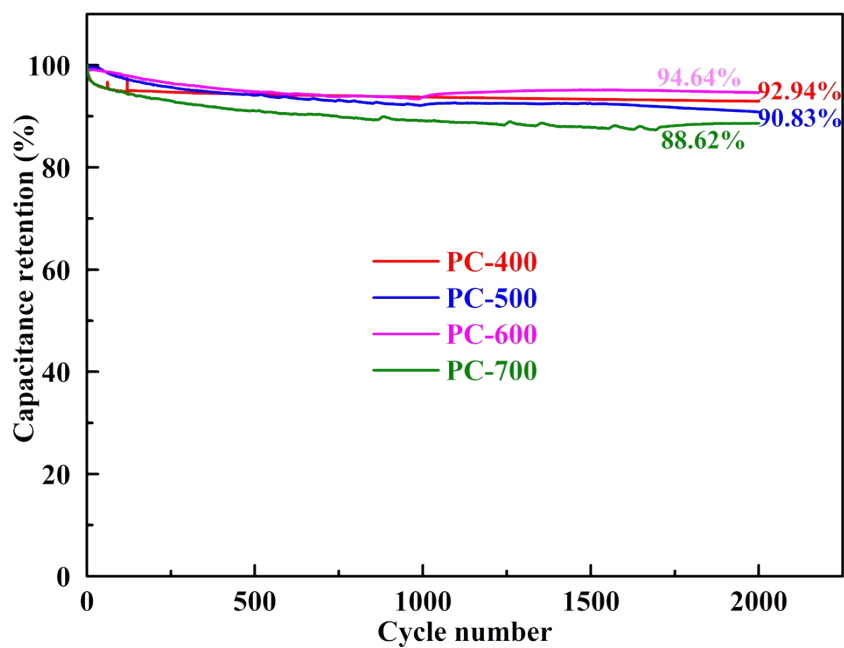


Fig. S6 Cycling stability performance at a current density of 5 A·g⁻¹ after 2000 cycles.