

Biomass Derived High Porous Carbon via CO₂ Activation for Supercapacitor Electrodes

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Table S1 – References considered in Figure 1

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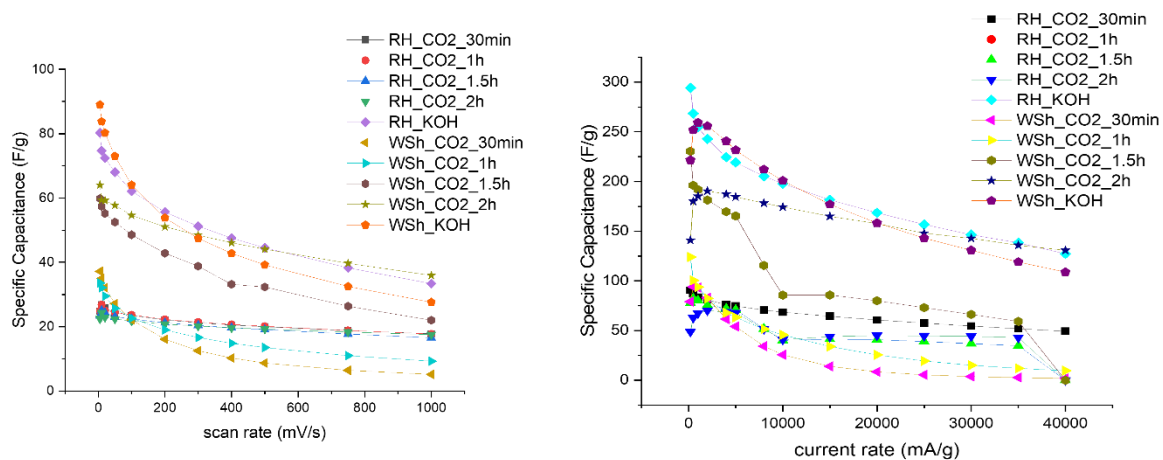


Figure S1 – Comparison of all results on specific capacitance by scan and current rate

Table S2. Comparison of the electrochemical performance of the electrodes of the present work and previous.

Electrodes	Electrolyte	Specific capacitance (GCD)	Specific capacitance (CV)
OMC-imp-7*	1 M H ₂ SO ₄	43 F/g at 0.5 A/g 18 F/g at 20 A/g	50 F/g at 5 mV/s 15.5 F/g at 500 mV/s
OMC-pm-5*	1 M H ₂ SO ₄	49 F/g at 0.5 A/g 25 F/g at 20A/g	50 F/g at 5 mV/s 18 F/g at 500 mV/s;
OMC-pm-4*	1 M H ₂ SO ₄	49 F/g at 0.5 A/g about 14 F/g at 20 A/g	
OMC-CO ₂ -75*	1 M H ₂ SO ₄	about 36 F/g at 0.5 A/g about 11 F/g at 20 A/g	
WS_KOH	1 M H ₂ SO ₄	148 F/g at 0.5 A/g 93 F/g at 20 A/g;	89 F/g at 5 mV/s 39 F/g at 500 mV/s
WS_CO ₂ _2h	1 M H ₂ SO ₄	106 F/g at 0.5 A/g 92,7 F/g at 20 A/g	64 F/g at 5 mV/s 44 F/g at 500 mV/s
RH_KOH	1 M H ₂ SO ₄	158 F/g at 0.5 A/g 99 F/g at 20 A/g	80.3 F/g at 5 mV/s 44.5 F/g at 500 mV/s
RH_CO ₂ _2h	1 M H ₂ SO ₄	37 F/g at 0.5 A/g 26,5 F/g at 20 A/g	22,41 F/g at 5 mV/s 19 F/g at 500 mV/s

*Ordered mesoporous carbons (OMCs) produced by a mechanochemical synthesis method from mimosa tannin. OMC-imp-7: OMC material activated by impregnation with KOH using a KOH/OMC mass ratio of 7. OMC-pm-5: OMC material activated by physical mixing with KOH using a KOH/OMC mass ratio of 5. OMC-CO₂-75: OMC activated using CO₂ during 75 minutes.