

ARTICLE

SUPPORTING INFORMATION

Insights into the Sodiation Mechanism of Hard Carbon-like Materials from Electrochemical Impedance Spectroscopy

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Supporting Information

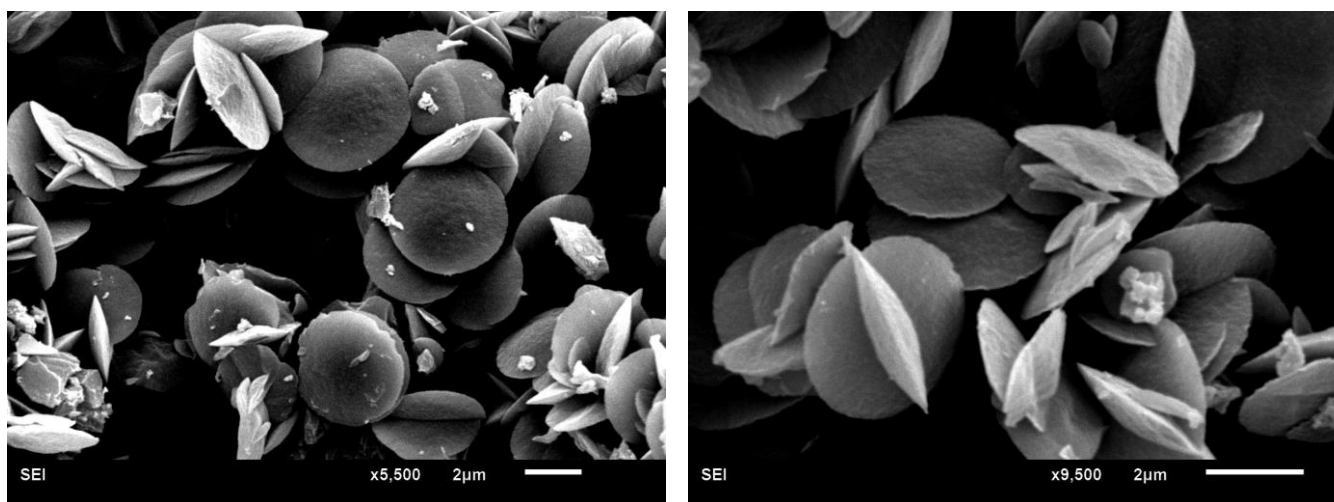


Fig. S1: Scanning electron micrographs of the hard carbon particles.

Table S1: Elemental composition of the studied material.

	C / wt.%	H / wt.%	N / wt.%
C-HAT-1600	98.5	0.12	0.48

Table S1: Parameters employed in the simulation of the impedance spectra.

NUMMM	60
E-Eqs	np.linspace(0.25, 0.1, NUMMM)
NUMMM2	0
FreqLoww	0.01 Hz
FreqUpp	2×10^{-4} Hz
FreqNumm	70
Tot_Drift	0.00 V
kzeroC	0.0000004 cm s ⁻¹
kzeroNa	0.0000002 cm s ⁻¹
kzeroNaC	0.0000004 cm s ⁻¹
D_Sep	4×10^{-13} cm ² s ⁻¹
D_C	1×10^{-9} cm ² s ⁻¹
SepThickn	0.026 cm
DiffDom_C	0.00035 cm
A_Na	0.78 cm ²
A_C	5000 cm
Cap_C_in	5×10^{-4} F
Cap_C_ext	5×10^{-4} F
Cap_Na	10^{-5} F
c_Na_in_Na	0.042 mol cm ³
c_Na_in_C	3.5×10^{-5} mol cm ³