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Supplementary material to

Exploring the impact of Al-based electrolytes on the charge storage behaviour of vine shoots derived carbon

Jana Mišurović^{1,⊠}, Aleksandra Gezović Miljanić¹, Veselinka Grudić¹, Robert Dominko², Milica Vujković^{3,4}

¹University of Montenegro - Faculty of Metallurgy and Technology, Cetinjski put bb, 81000 Podgorica, Montenegro

²National Institute of Chemistry, Hajdrihova 19, SI-1000, Ljubljana, Slovenia

³University of Belgrade - Faculty of Physical Chemistry, Studentski trg 12-16, 11158 Belgrade, Serbia

⁴Center for Interdisciplinary and Multidisciplinary Studies, University of Montenegro, Podgorica, Montenegro

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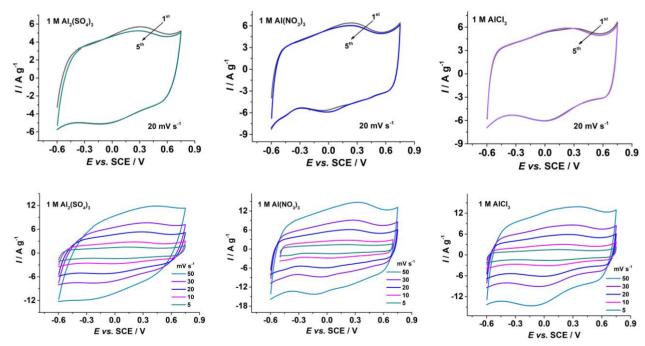


Figure S1. Cyclic voltammograms of $AC_{vs}700$ in 1 M $Al_2(SO_4)_3$, $Al(NO_3)_3$ and $AlCl_3$ at a common scan rate 20 mV s⁻¹ and at different scan rates

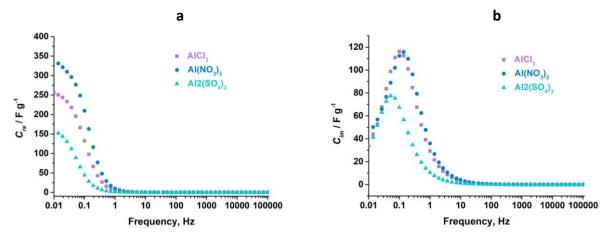


Figure S2. a -real and b - imaginary part of the capacitance as the function of the frequency plot of $AC_{vs}700$ pristine electrode in 1 M aqueous solutions of $Al_2(SO_4)_3$, $Al(NO_3)_3$ and $AlCl_3$ measured in a three-electrode cell

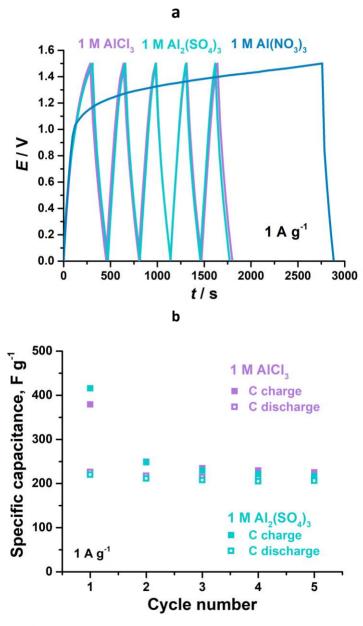


Figure S3. a - charge/discharge curves of $AC_{vs}700$ cells in different Al-based electrolytes and b - the specific capacitance of $AC_{vs}700$ electrode in $Al_2(SO_4)_3$ and $AlCl_3$

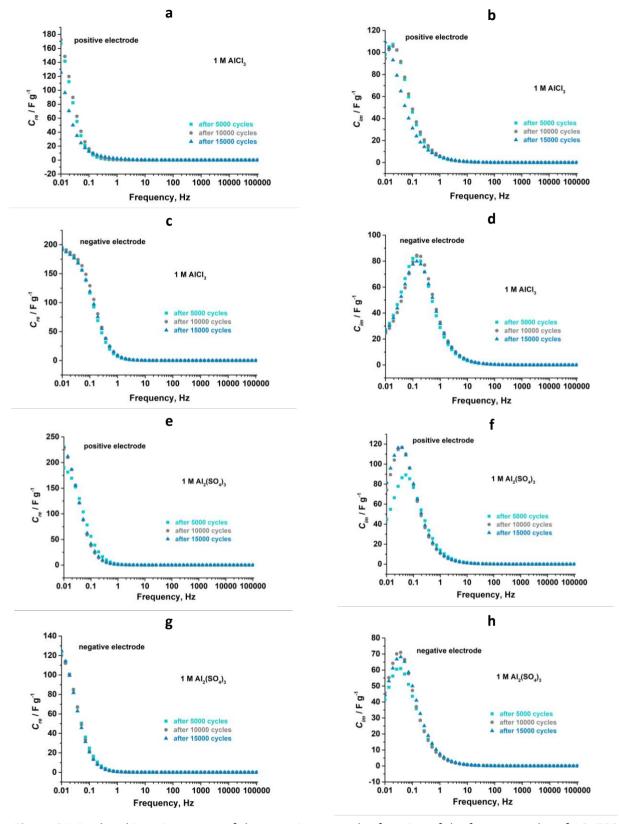


Figure S4. Real and imaginary part of the capacitance as the function of the frequency plot of AC_{vs} 700 positive and negative electrode after 5,000, 10,000 and 15,000 cycles in 1 M aqueous solutions of $AlCl_3$ (a, b, c, d) and $Al_2(SO_4)_3$ (e, f, g, h), measured in a three-electrode cell