Support information

Honeycombed activated carbon with greatly increased specific surface by direct activation of glucose for supercapacitors

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Fig. S1. Chemical structure of D(+) glucose in (a) acyclic and (b) cyclic form.

Fig. S2. XRD patterns of (a) AC-2 and (b) AC-12h.
Fig. S3. (a) Nitrogen adsorption-desorption isotherm and (b) pore size distribution of AC-2.

Fig. S4. Specific capacitance and SSA of ACs via one-step method vs. C/O ratio of Deoxy-glucoses.
Fig. S5. EIS spectra of AC-2, AC-6h, AC-12h and AC-24h in three-electrode cells.

Fig. S6. Cyclic performance of AC-12h in two-electrode cell in KOH at 1 A g⁻¹.
Fig. S7. CV of AC-12h in 2 mol L⁻¹ KBr in three-electrode cell.

Fig. S8. CVs of two-electrode cells based on AC-12h with different ratios in 2 mol L⁻¹ KBr at scan rate of 5 mV s⁻¹.
Fig. S9. GCD curves of two-electrode cell and corresponding negatode and positrode based on AC-12h with ratio of 1:1 at specific current of 0.5 A g\(^{-1}\) in 2 mol L\(^{-1}\) KBr.

Fig. S10. CV of two-electrode cell based on AC-12h with ratio of 3:1 at scan rate of 100 mV s\(^{-1}\) in 2 mol L\(^{-1}\) KBr.
Fig. S11. GCD curves of two-electrode cell based on AC-12h with ratio of 3:1 at different specific current in 2 mol L$^{-1}$ KBr.

Fig. S12. Cyclic performance of two-electrode cell based on AC-12h with ratio of 3:2 in 2 mol L$^{-1}$ KBr.
<table>
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<th>Deoxy-glucose 6h</th>
<th>C–C/C=C</th>
<th>C–O</th>
<th>C=O</th>
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<tr>
<td></td>
<td>21.25%</td>
<td>41.06%</td>
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<td>Deoxy-glucose 24h</td>
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