Rationally Engineered Surface Properties of Carbon Nanofibers on the Enhanced Supercapacitive Performance of Binary Metal Oxide

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**Figure S1** FE-SEM images of binary metal oxides-decorated carbon nanofibers as a function of the added amount of nickel and cobalt reagents.
Figure S2 SEM-EDX analysis results of binary metal oxides-decorated carbon nanofibers at different amount of nickel and cobalt reagents.
**Figure S3** Raman spectra and factors of PAN- and PAN/pitch-derived carbon fibers, respectively.

<table>
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<tr>
<th>I.D.</th>
<th>D band (cm(^{-1}))</th>
<th>G-band (cm(^{-1}))</th>
<th>(I_D/I_0)</th>
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<td>Position</td>
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<td>PAN</td>
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<td>110.73</td>
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<td>PAN/pitch</td>
<td>1351.36</td>
<td>105.82</td>
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Figure S4 Detailed C 1s, O 1s and N 1s XPS spectra of PAN- and PAN/pitch-derived carbon nanofibers, respectively.
Figure S5 Wide-scan XPS spectra of pristine carbon nanofibers and metal oxide-decorated carbon nanofibers, respectively.