Enhanced Moisture Repulsion of Ceramic-coated separators from Aqueous Composite Coating Solution for Lithium-Ion Batteries Inspired by surface of Plant Leaf

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\textbf{Figure S1.} Two different types of wax showing well distribution in aqueous solution (left) used in this work and phase separation of conventional liquid oil-type wax in water (right). Water is dyed with blue ink to clearly show the phase separation.
Figure S2. Cross-sectional SEM image of the CCS

Figure S3. Water contact angle (a) of paraffin wax layer coated onto glass substrate (b).
Figure S4. Water contact angle (a) of the surface of CCS-100phr (b).

Figure S5. SEM image of ceramic-coated separator, CCS-100 phr, showing connection of wax region on the surface.
Figure S6. Ionic conductivity of cell equipped with CCS-100phr.

Table S1. Gurley value of CCS-100phr.

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<th>Gurley value (sec/100cc)</th>
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<td>CCS-100phr</td>
<td>3817.6</td>
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Figure S7. Thermal shrinkage of CCS-100phr.