Supporting Information

Structure architecture of novel micro-nanoscale ZIF-L on 3D printed membrane for superhydrophobic and underwater superoleophobic surface

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Figure S1 XRD Pattern of leaf-crossed ZIF-L

The XRD pattern of leaf-crossed ZIF-L and the simulated normal ZIF-L are compared. These two types ZIF-Ls display exactly the same XRD pattern, indicating the same crystal even with different structures.

Figure S2 ZIF-L crystals on support membrane
Figure S3 SEM image of Figure 1f with a larger size.

Figure S4 ZIF-L coated PA membrane a lower magnification (200 μm and 20 μm)
Figure S5 Cross-section of membrane ZIF-PA

Figure S6 Thickness of ZIF-L after reaction with different time (5, 10, 20, 30, 40, 60, 80, 100, 120 min) on polyacrylonitrile (PAN) substrate membrane.
Figure S7 EDX spectrum of membrane ZIF-PA and PDMS-ZIF-PA

Table S1 Thickness of ZIF-L layer on PA membrane after reaction with different time

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<th>Time (min)</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
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<tbody>
<tr>
<td>Thickness</td>
<td>0.15</td>
<td>0.32</td>
<td>0.85</td>
<td>1.14</td>
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<td>2.01</td>
<td>2.32</td>
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<td>(µm)</td>
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