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 $\,\mu$ m and 20 $\,\mu$ m)



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

Time (min)	5	10	20	30	40	60	80	100	120
Thickness	0.15	0.32	0.85	1.14	1.43	2.01	2.32	2.62	2.77
(µm)									