Supporting Information

A Highly Responsive and Robust Micro/Nano-Textured Self-Powered Triboelectric Humidity Sensor

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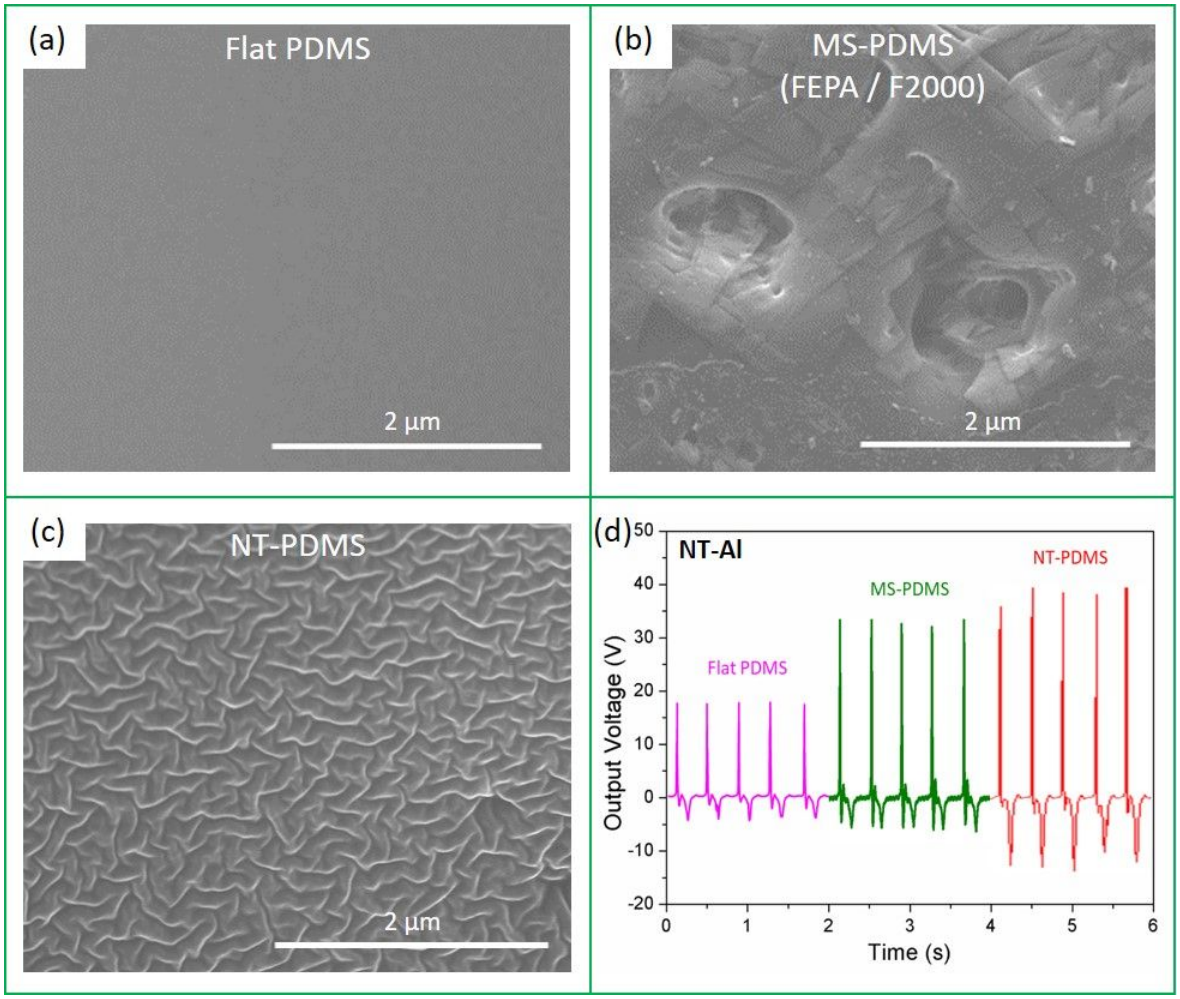

Figure S1 (a–c) The scanning electron microscopy (SEM) images of the untreated flat PDMS surface, sandpaper template replicated microstructured PDMS (MS-PDMS) surface, and oxygen plasma etched nano-textured PDMS (NT-PDMS) surface. (d) The measured open-circuit output voltage profiles of the as-fabricated TEHS incorporating as-fabricated nano-textured aluminum (NT-Al) film and one of the three different PDMS films (10 %RH; Room temperature).

Table S1. R-Square values for Figure 6(d).

Equation	y = a + b*x		
Plot	Output Voltage **at -10°C**	Output Voltage **at 10°C**	Output Voltage **at 30°C**
Weight	Instrumental (=1/ei^2)		
Intercept	130.12342 ± 0.20694	126.88889 ± 0.35019	122.30045 ± 0.49158
Slope	-0.22655 ± 0.00411	-0.22754 ± 0.00577	-0.21439 ± 0.00859
Residual Sum of Squares	1.08373	2.30623	7.10675
Pearson's r	-0.99885	-0.99776	-0.99442
R-Square (COD)	0.99771	0.99553	0.98888
Adj. R-Square	**0.99738**	**0.99489**	**0.98729**