## **Supporting Information**

## Self-cleaning superhydrophobic films by supersonicspraying polytetrafluoroethylene-titania nanoparticles

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Figure S1. Energy dispersive X-ray spectroscopy data for chemical composition of film surface produced using various PTFE-TiO<sub>2</sub> wt. % ratios.

Case	<b>Ti</b> [wt%]	<b>O</b> [wt%]	<b>F</b> [wt%]	<b>C</b> [wt%]
1	62.78	37.22	0	0
2	45.23	28.79	20.6	5.38
3	38.69	25.15	30.03	6.13
4	22.02	12.49	53.08	12.41
5	9.82	8.05	62.18	19.95
6	0	0	76.67	23.33

Table S1. The raw energy dispersive X-ray spectroscopy data for chemical composition of film surface produced using various PTFE-TiO<sub>2</sub> wt. % ratios.



Figure S2. The optical profiler measurement of the films for Case 1, 4, and 6.



Figure S3. The water contact angle of the Case 1 films for N = 2, 4, and 8, where N is the number of spraying sweep.