## Bioinspired polyethylene terephthalate nanocone arrays with

## underwater superoleophobicity and anti-bioadhesion properties

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**1. Figure S1.** The optical microscopy image of the self assembled 2D PS microspheres over a large area, the diameter of the PS microsphere is 580 nm.

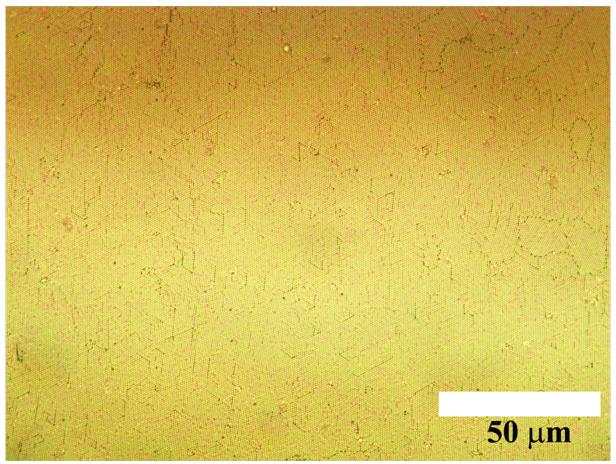
**2. Figure S2.** The top-view SEM image of the PET nanocone arrays over a large area, the aspect ratio of the nanocone is 6.

3. Figure S3. The SEM image of the PET nanocone arrays obtained after 30 min etching.

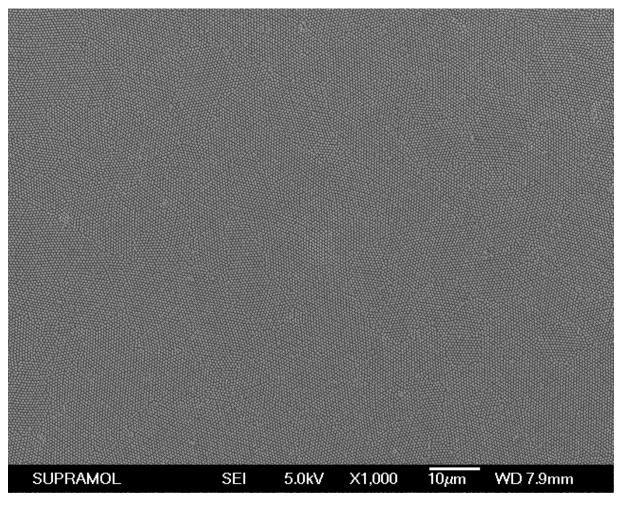
**4. Figure S4.** The optical image of the water droplet on the PET nanocone arrays with the aspect ratio of 6.

5. Figure S5. The schematic illustration of the nanocone arrays modification with PNIPAAm.

6. Figure S6. High resolution XPS spectra of the PNIPAAm modified PET nanocone arrays.



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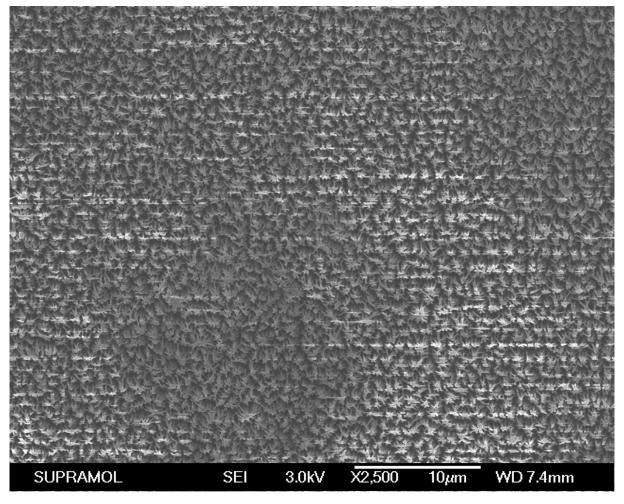
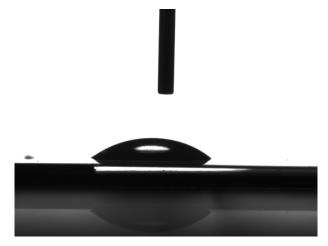


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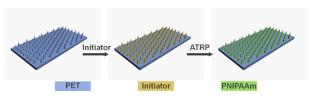


Figure S5. The schematic illustration of the nanocone arrays modification with PNIPAAm.

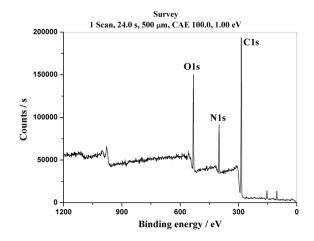


Figure S6. High resolution XPS spectra of the PNIPAAm modified PET nanocone arrays.