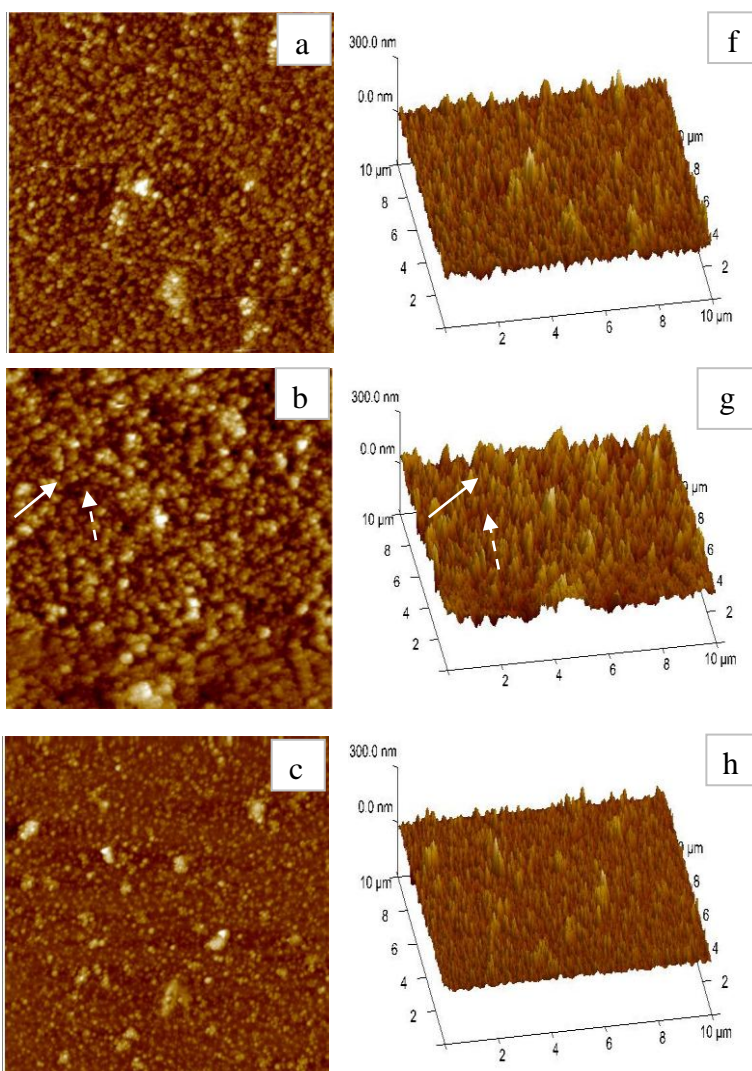


## Supporting Information

Fabrication of visible/near-IR antireflective and superhydrophobic coatings from hydrophobically modified hollow silica nanoparticles and poly(methyl methacrylate)

Ligang Xu<sup>a,b</sup> Liangjuan Gao<sup>a,b</sup> and Junhui He<sup>a,\*</sup>



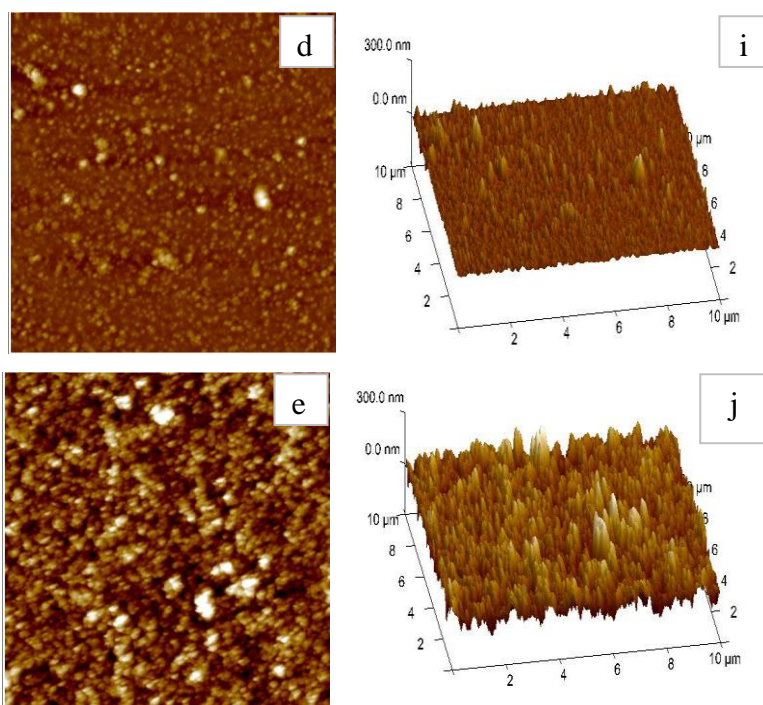


Figure S1. Two-dimensional AFM images of coatings dip-coated from suspensions containing varied concentrations of HMDS-HSNs and PMMA after POTS treatment: (a) 0.50 wt% HMDS-HSNs and 0.50 wt% PMMA; (b) 0.50 wt% HMDS-HSNs and 1.00 wt% PMMA; (c) 0.50 wt% HMDS-HSNs and 1.50 wt% PMMA; (d) 0.25 wt% HMDS-HSNs and 1.00 wt% PMMA and (e) 0.75 wt% HMDS-HSNs and 1.00 wt%; (f), (g), (h), (i) and (j) are the corresponding three-dimensional AFM images of (a), (b), (c), (d) and (e), respectively.

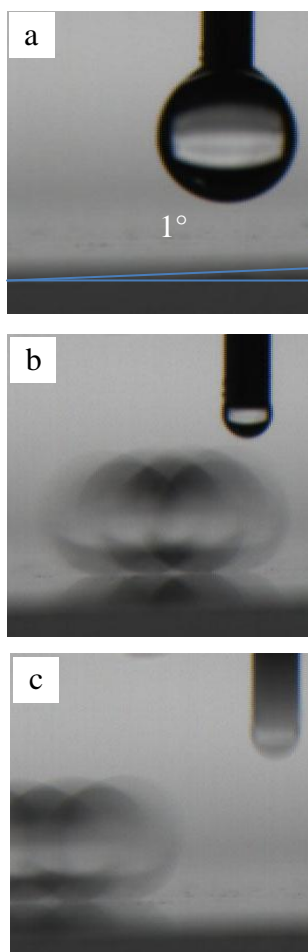


Figure S2. (a-c) Digital images of the rolling process of water droplet on the surface of coating dip-coated from a suspension containing 0.5 wt% HMDS-HSNs and 1.0 wt% PMMA after POTS treatment and tilted by an angle of  $1^\circ$ . The sliding speed of water droplet was estimated to be 66 mm/s

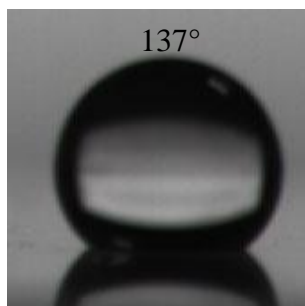


Figure S3. Shape of water droplet (4  $\mu\text{L}$ ) on the surface of coating dip-coated from a suspension containing 0.5 wt% HMDS-HSNs and 1.0 wt% PMMA before POTS treatment.