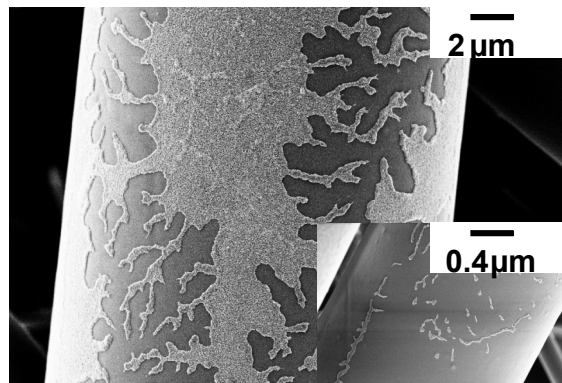
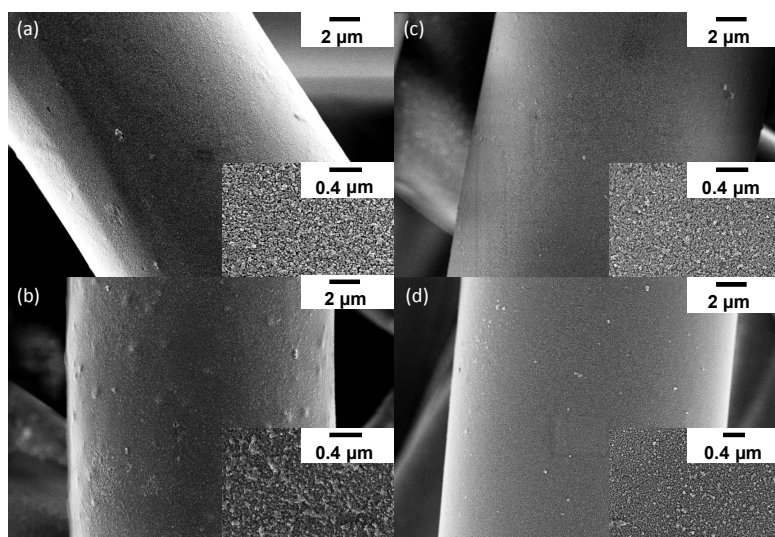


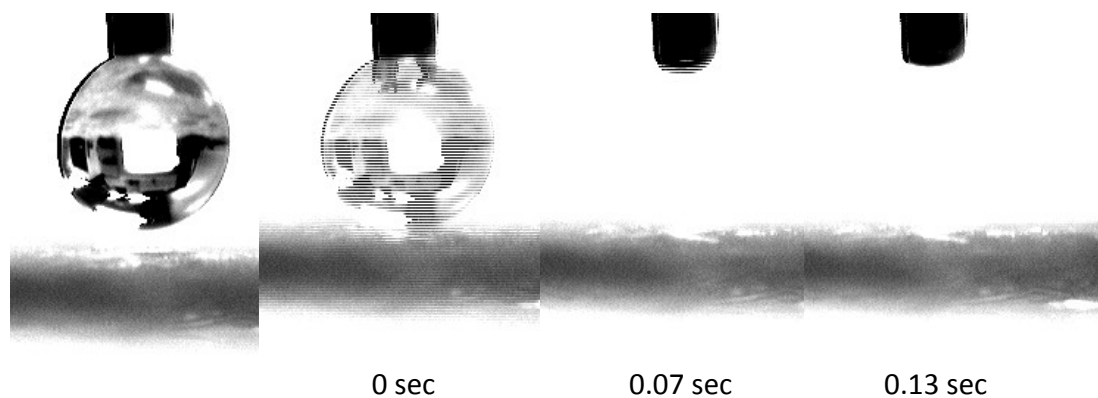
### Supporting Information



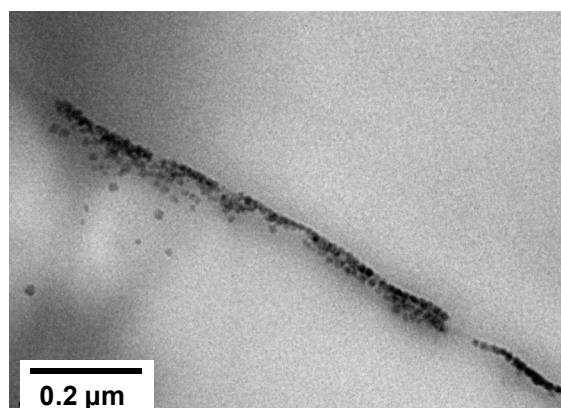
**Figure S1.** SEM image of the untreated polypropylene fabric coated with cationically modified silica nanoparticles ( $\zeta=21.5$  mV) prior to water rinsing. The inset shows the morphology of the surface after water rinsing.



**Figure S2.** SEM images of the plasma treated polypropylene fabric coated with cationically modified silica nanoparticles ( $\zeta=21.5$  mV). Images taken after 1 hour of sonication in various solvents; (a) water, (b) acetone, (c) ethanol, (d) THF.



**Figure S3.** Time dependence of an impinging water droplet onto plasma treated polypropylene fabric coated with cationically modified silica nanoparticles ( $\zeta=21.5$  mV).



**Figure S4.** TEM image of the plasma treated polypropylene fabric coated with an aqueous colloidal solution of unmodified silica nanoparticles at pH=4.