Supporting Information

Flexible TPU inverse opal fabrics for colorimetric detecting of VOCs

Xinbo. Gong,[a] Chengyi. Hou,[a,*] Qinghong. Zhang,[b] Yaogang. Li,[b,*] Hongzhi. Wang.[a]

[a] State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, College of Materials

Science and Engineering, Donghua University, Shanghai, 201600, China.

[b] Engineering Research Center of Advanced Glasses Manufacturing Technology, College of Materials

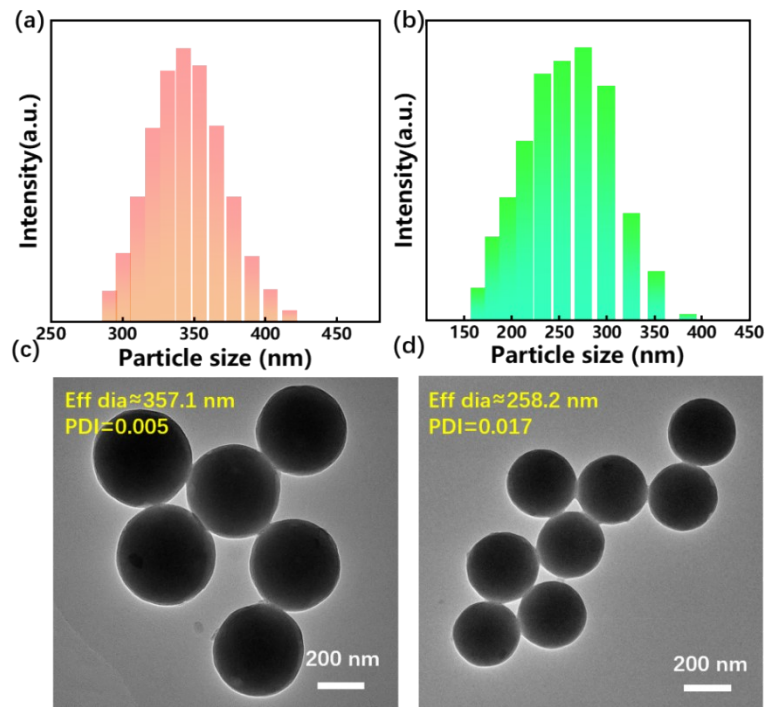Science and Engineering, Donghua University, Shanghai, 201600, China.

Fig. S1 Size distribution of SiO$_2$ nanoparticles with a particle size of (a) 357 nm and (b) 258 nm and their
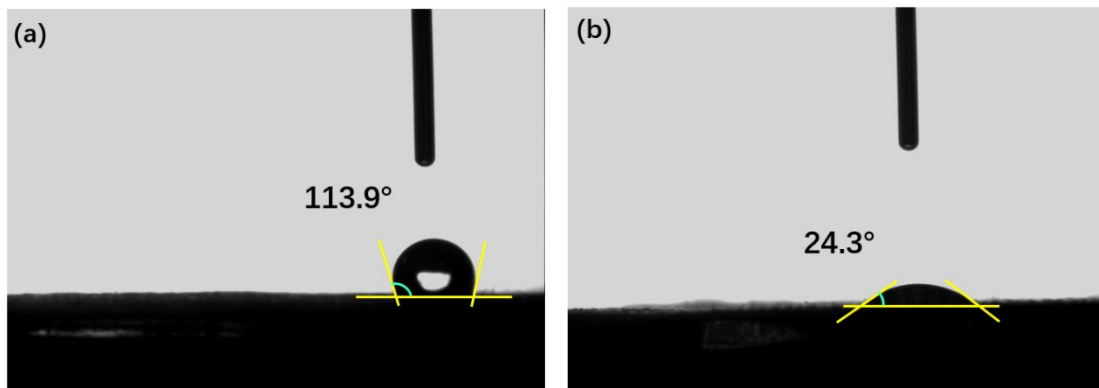
corresponding (c, d) TEM images

Fig. S2 Contact angles of (a) original and (b) oxygen plasma treated polyester fabrics
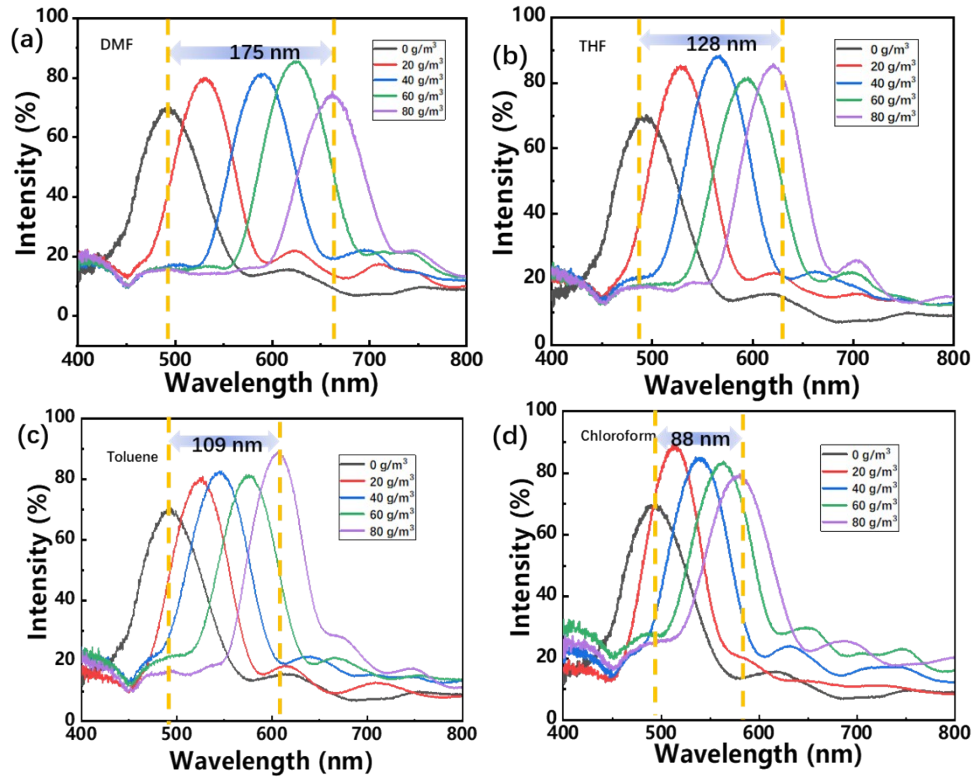
Fig. S3 Reflection spectrums of TPU IOs fabrics in (a) DMF, (b) THF, (c) toluene and (d) chloroform of different concentrations from 0 to 80 g/m^3
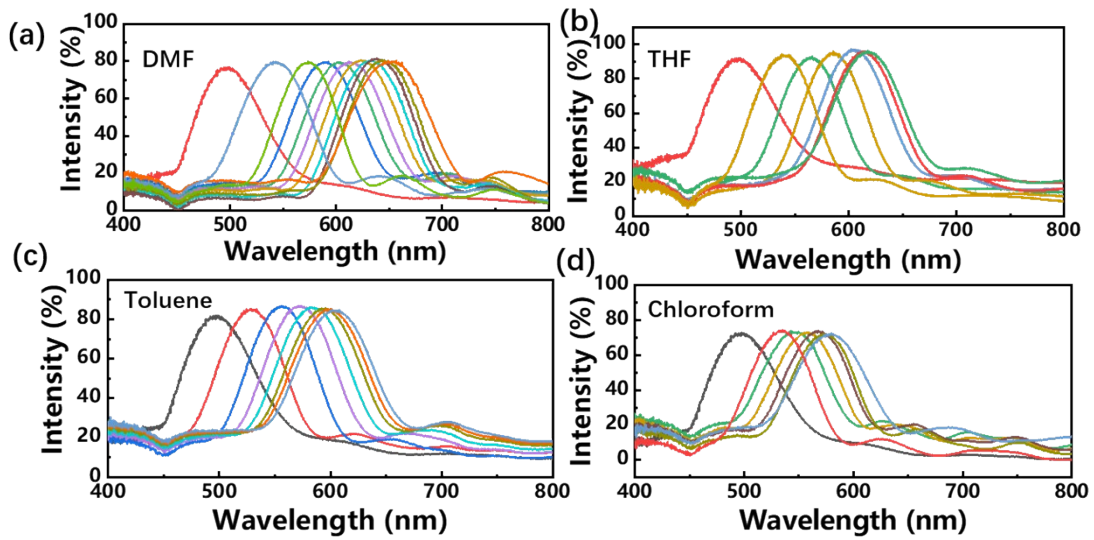

Fig. S4 Reflection spectrums of the response process of TPU IOs fabrics in (a) DMF, (b) THF, (c) toluene, and (d) chloroform, respectively