

Electronic Supplementary Information for

Large scale poly (vinyl alcohol-co-ethylene)/TiO₂ hybrid nanofibrous filters with efficient fine particle filtration and repetitive-use performance

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Fig. S1. Pore size distribution and contact angle of (a) PP nonwoven scaffold, (b) cross section of PVA-*co*-PE NFFM and (c) PVA-*co*-PE/TiO₂(5) HNFFM with FCD=2.1 g/m² (5 means 5 wt.% TiO₂)

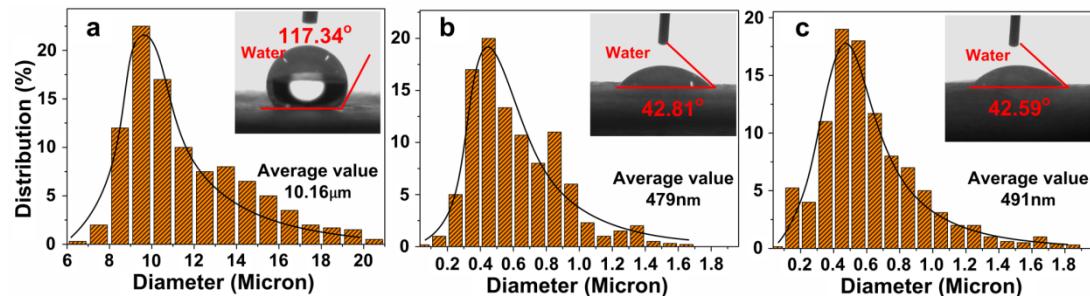


Fig. S2. EDS spectra of PVA-*co*-PE NFFM with different TiO_2 content (1 wt.%, 3 wt.%, 5 wt.% and 7 wt.%) compared to TiO_2 NPs and pristine PVA-*co*-PE NFFM

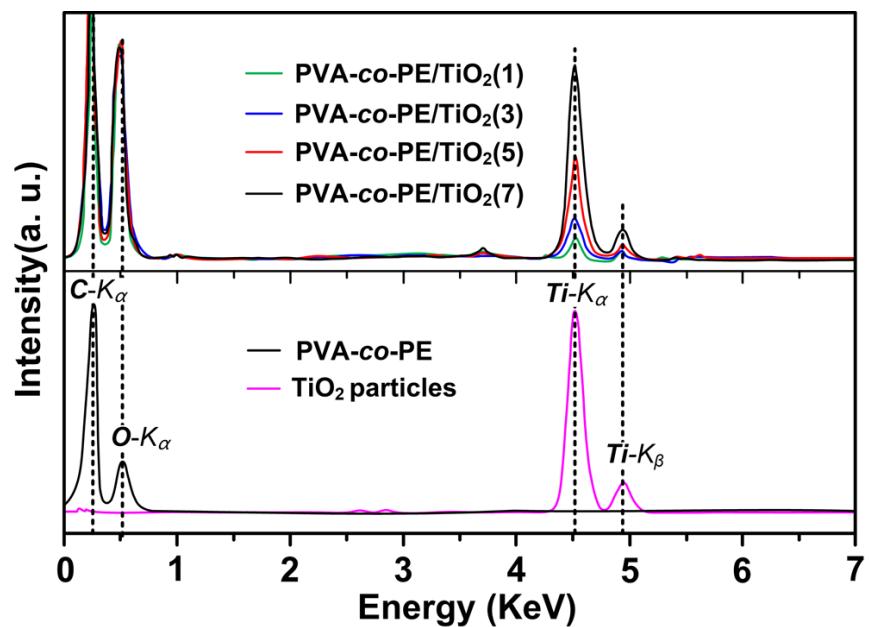


Fig. S3. XRD patterns of PVA-*co*-PE NFFM with different TiO_2 content (1 wt.%, 3 wt.%, 5 wt.% and 7 wt.%) compared to TiO_2 NPs and pristine PVA-*co*-PE NFFM

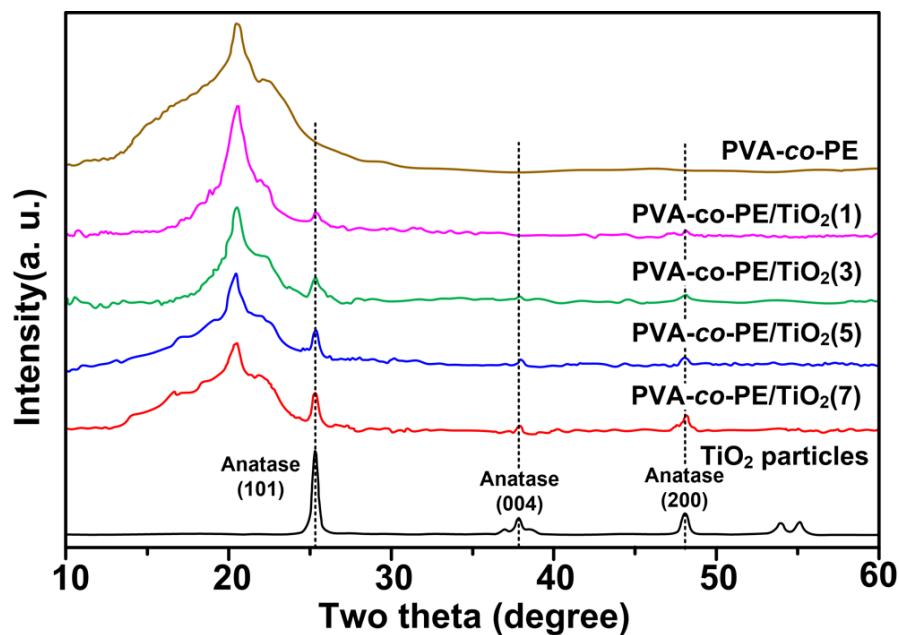


Fig. S4. Surface potential of PVA-*co*-PE NFFM with different TiO₂ content (1 wt.%, 3 wt.%, 5 wt.% and 7 wt.%) compared to PP nonwoven substrate

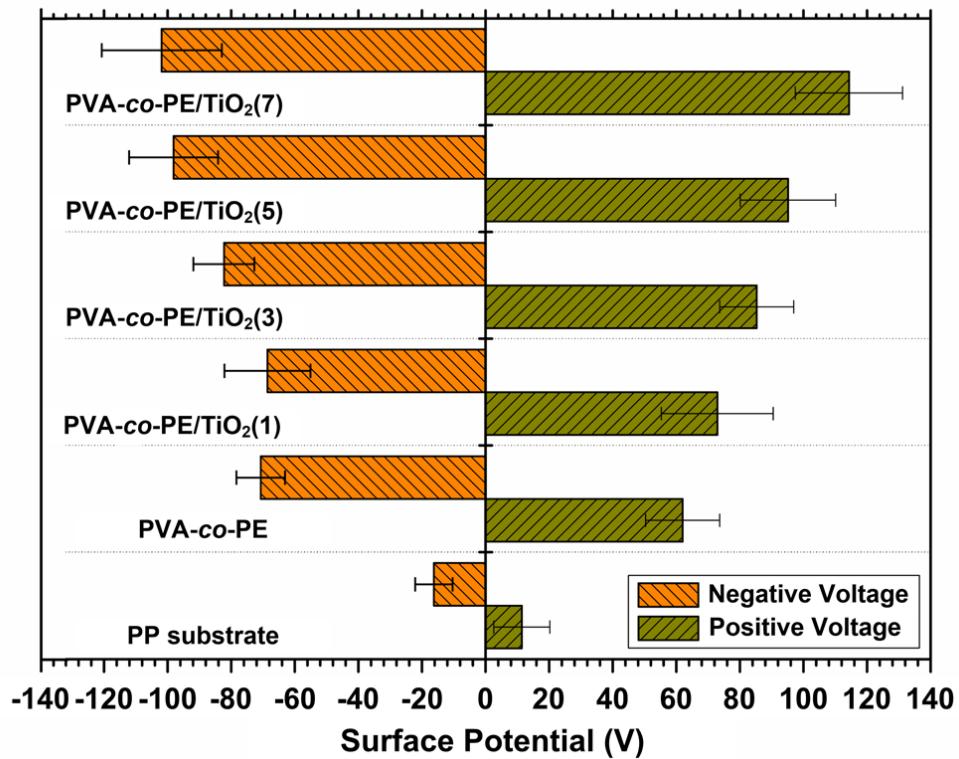


Fig. S5. Diagram of loop experiment for comprehensive analysis of filtration performance

