## Coordinated Silicon Elastomer Coating@fabrics with Oil/Water Separation Capabilities, Outstanding Durability and Ultra-fast Room-temperature Self-healing Ability

Figure S1. Self-healing ability of Co-PDMS.

Figure S2. Profiles of a water droplet placed on the PET/Co-PDMS-1 fabric.

Figure S3. Photographs of n-hexane/water separation results.

Figure S4. Durability evaluation of PET/Co-PDMS-1 fabric.

Figure S5. SEM images of framework of PET and modified PET fabrics.



**Figure S1.** Self-healing ability of Co-PDMS. a) photographs which show original, damaged and reformed strips, and stretching of reformed strips; b) Stress-strain curves of original and reformed Co-PDMS.



**Figure S2.** a) Profiles of a water droplet placed on the PET/Co-PDMS-1, PET/Co-PDMS-4 and PET/Co-PDMS-8 fabrics. After one immersing, the modified fabric exhibits good hydrophobic property; b) Profiles of a water droplet placed on the PET/Co-PDMS-1 fabric with time. The pictures indicate stable superhydrophobicity of PET/Co-PDMS-1 fabric.



Figure S3. Photographs of n-hexane/water separation results.



**Figure S4.** Durability evaluation of PET/Co-PDMS-1 fabric. The change of water contact angles of the PET/Co-PDMS-1 fabric after (a) heating treatment under different temperatures for 2 h, and (b) immersion in organic solvents with time.



**Figure S5.** SEM images of framework of a) PET fabric; b) PET/Co-PDMS-1 fabric; c) PET/Co-PDMS-1 fabric after rubbing for 50 min (about 3000 times); d) PET/ PDMS fabric; e) PET/ PDMS fabric after rubbing for 10 min (about 600 times).