Electronic Supplementary Information (ESI) for

**ZIF-8 crystal coatings on polyimide substrate and their catalytic behaviours for Knoevenagel reaction**

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**Fig. S1** The SEM pictures of PI surface after PI film immersing in different concentration of 2-methylimidazole/Zn(NO$_3$)$_2$ (2/1, molar ratio). a, 1.3 $\times$ 10$^{-3}$ M; b, 4.0 $\times$ 10$^{-2}$ M (based on Zn(NO$_3$)$_2$).
Fig. S2 The cross-section SEM pictures of ZIF-8 films on PI membrane after different growth cycles (a, two; b, four; c, eight).
**Fig. S3** The SEM picture of ZIF-8 film growing on hydrolyzed PI membrane.

**Fig. S4** Most ZIF-8 crystals have a plane bonding the PI surface.