Supplementary Materials

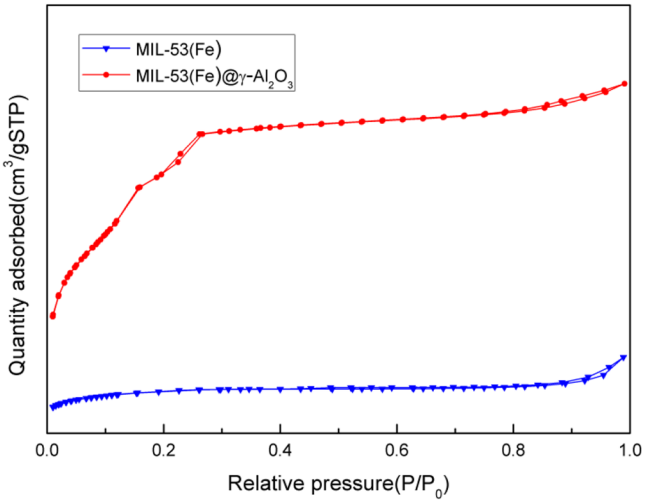

Fig. S1. N_2 adsorption and desorption isotherms of the MIL-53(Fe) and MIL-53(Fe)@γ-Al_2O_3.

Table S1. S_{BET} and the Porous Structure of MIL-53(Fe) and MIL-53(Fe)@γ-Al_2O_3

Samples	S_{BET} (m^2 g^{-1})	BJH pore volume (cm^3 g^{-1})	Average pore size(nm)
MIL-53(Fe)	222	0.129	5.38
MIL-53(Fe)@γ-Al_2O_3	1698	0.444	2.63

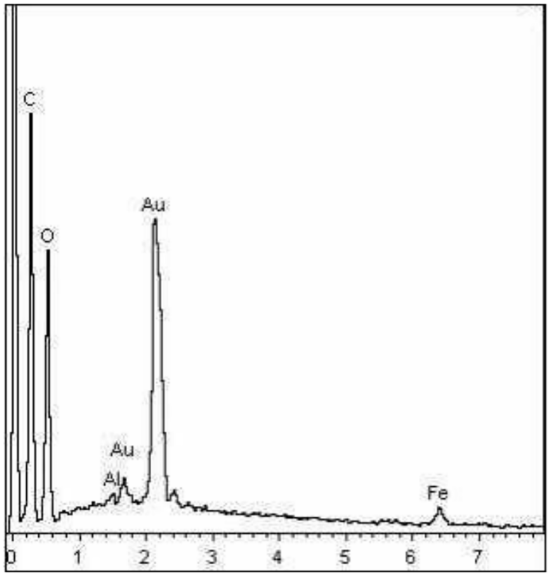

Fig. S2. EDS of the MIL-53(Fe)@γ-Al_2O_3/CA membrane.

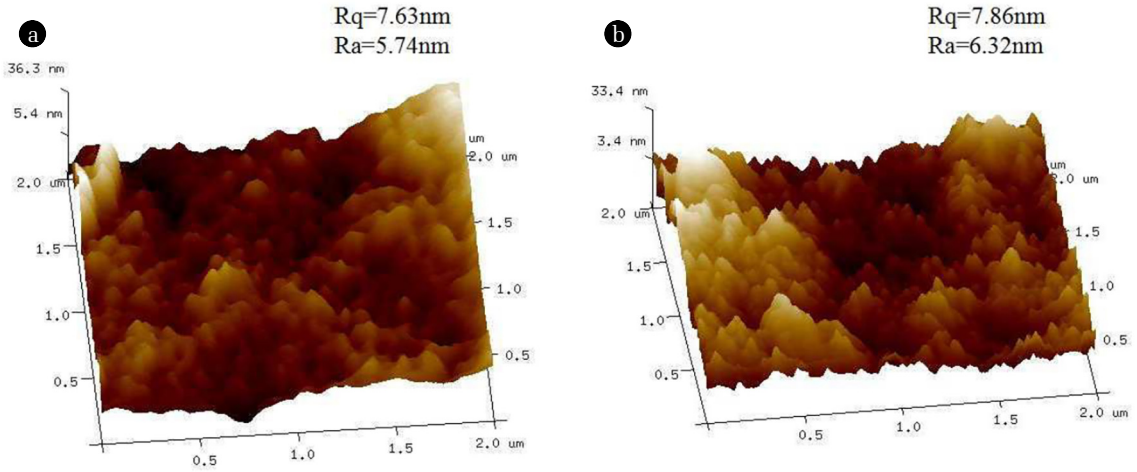

Fig. S3. AFM images of the MIL-53(Fe)/CA membrane (a) and MIL-53(Fe)@γ-Al_2O_3/CA membrane (b).

Table S2. Water Contact Angles of the MIL-53(Fe)/CA Membrane and MIL-53(Fe)@γ-Al_2O_3/CA Membrane

Membranes	Water contact angle (o)
MIL-53(Fe)	53.6
CA/MIL-53(Fe)@γ-Al_2O_3	52.4

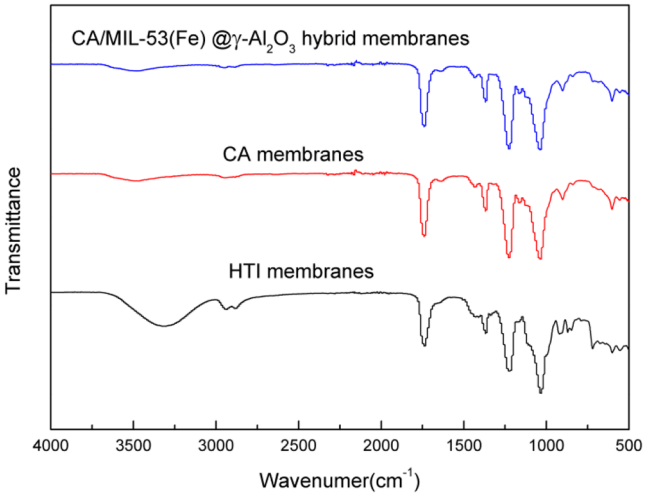

Fig. S4. The FTIR spectroscopy of MIL-53(Fe)/CA membrane and MIL-53(Fe)@γ-Al_2O_3/CA membrane.

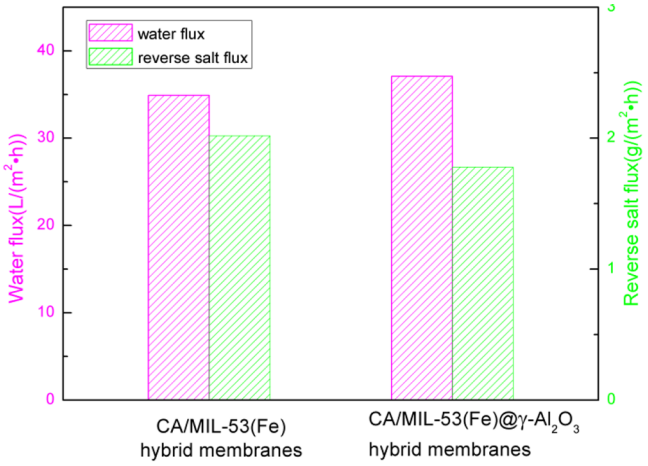

Fig. S5. The property of MIL-53(Fe)/CA membrane and MIL-53(Fe)@γ-Al_2O_3/CA membrane.