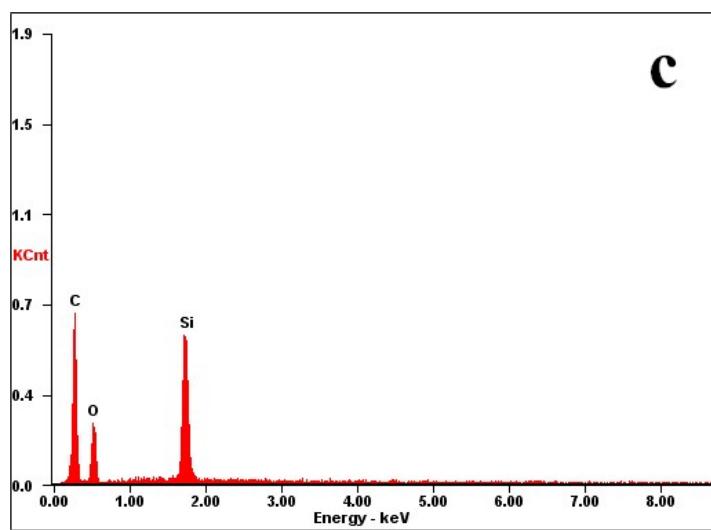
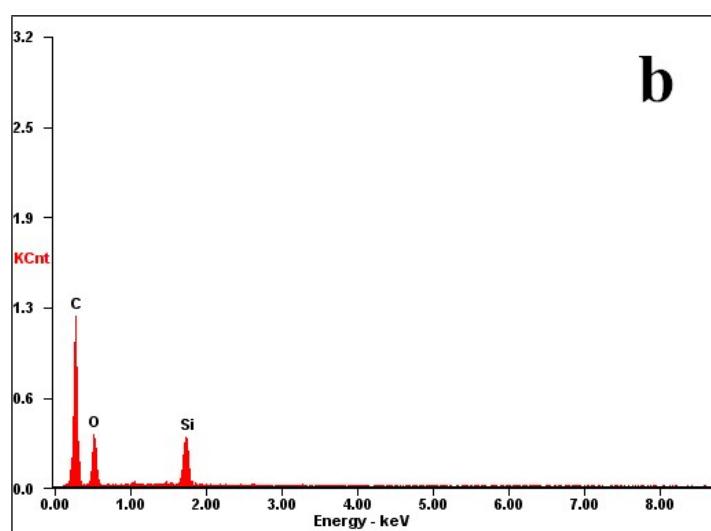
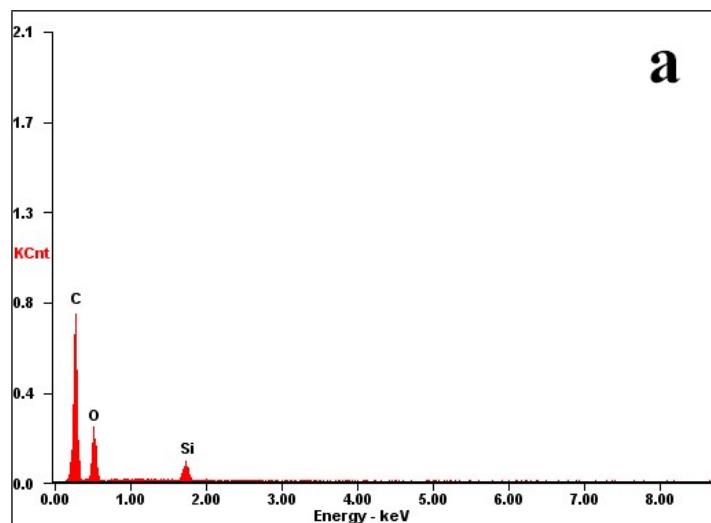
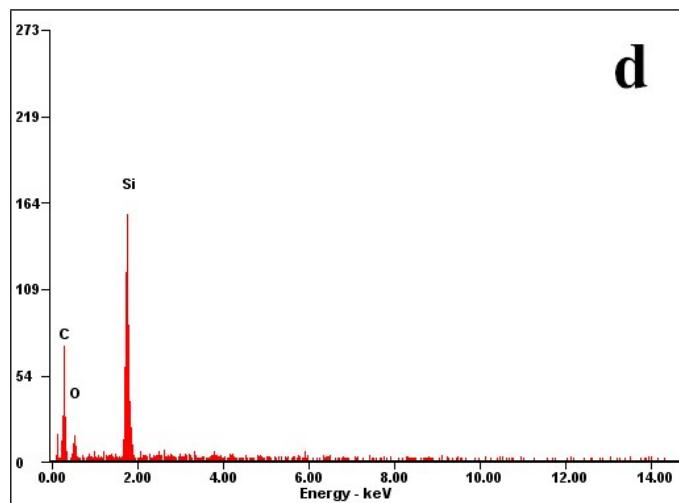
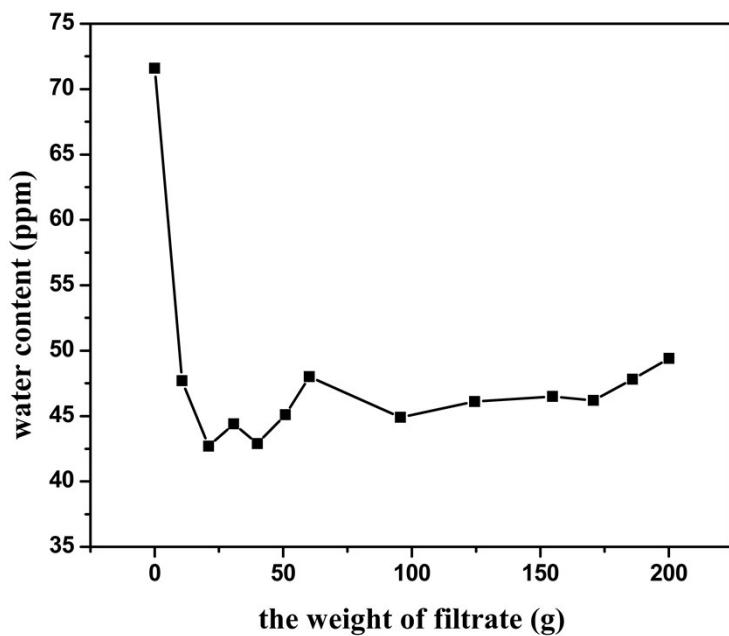


**Fig. S1** SEM of the membrane samples: (a) A-1; (b) A-2; (c) A-3

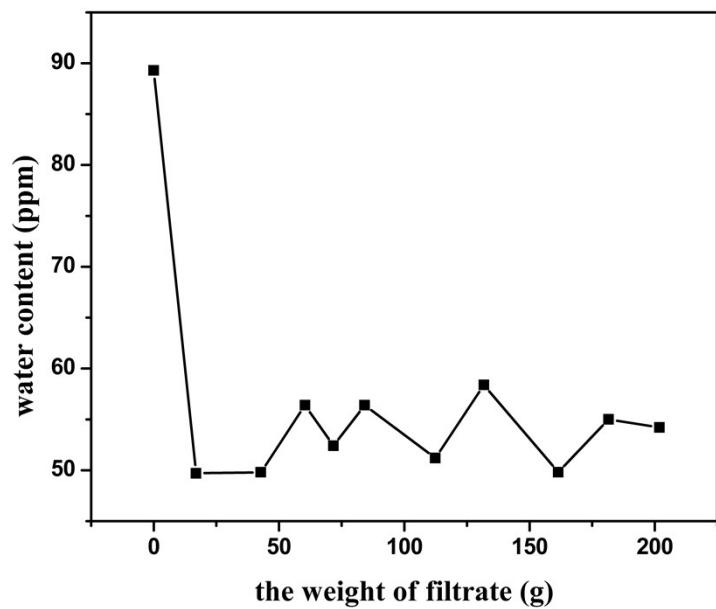




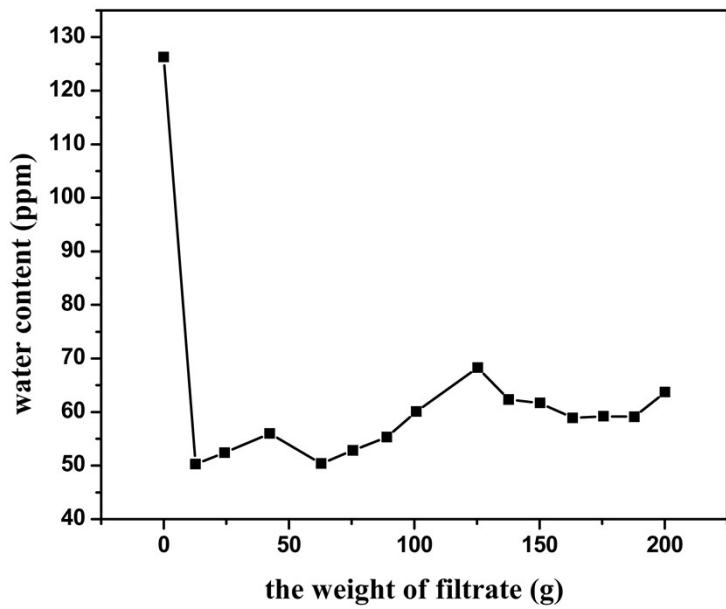
**Fig. S2** EDS of the membrane samples: (a) A-1; (b) A-2; (c) A-3; (d) A-5



**Fig. S3 (a)** initial water content 71.6 ppm, temperature 29.0 °C, humidity 67%



**Fig. S3 (b)** initial water content 89.3 ppm, temperature 27.1 °C, humidity 67%



**Fig. S3 (c)** initial water content 126.3 ppm, temperature 26.9 °C, humidity 64%

**Fig. S3** The weight and water content of the filtrate