Supporting Information

Sulfonylcalix[4]arene functionalized nanofiber membranes for effective removal and selective fluorescence recognition of terbium(III) ions

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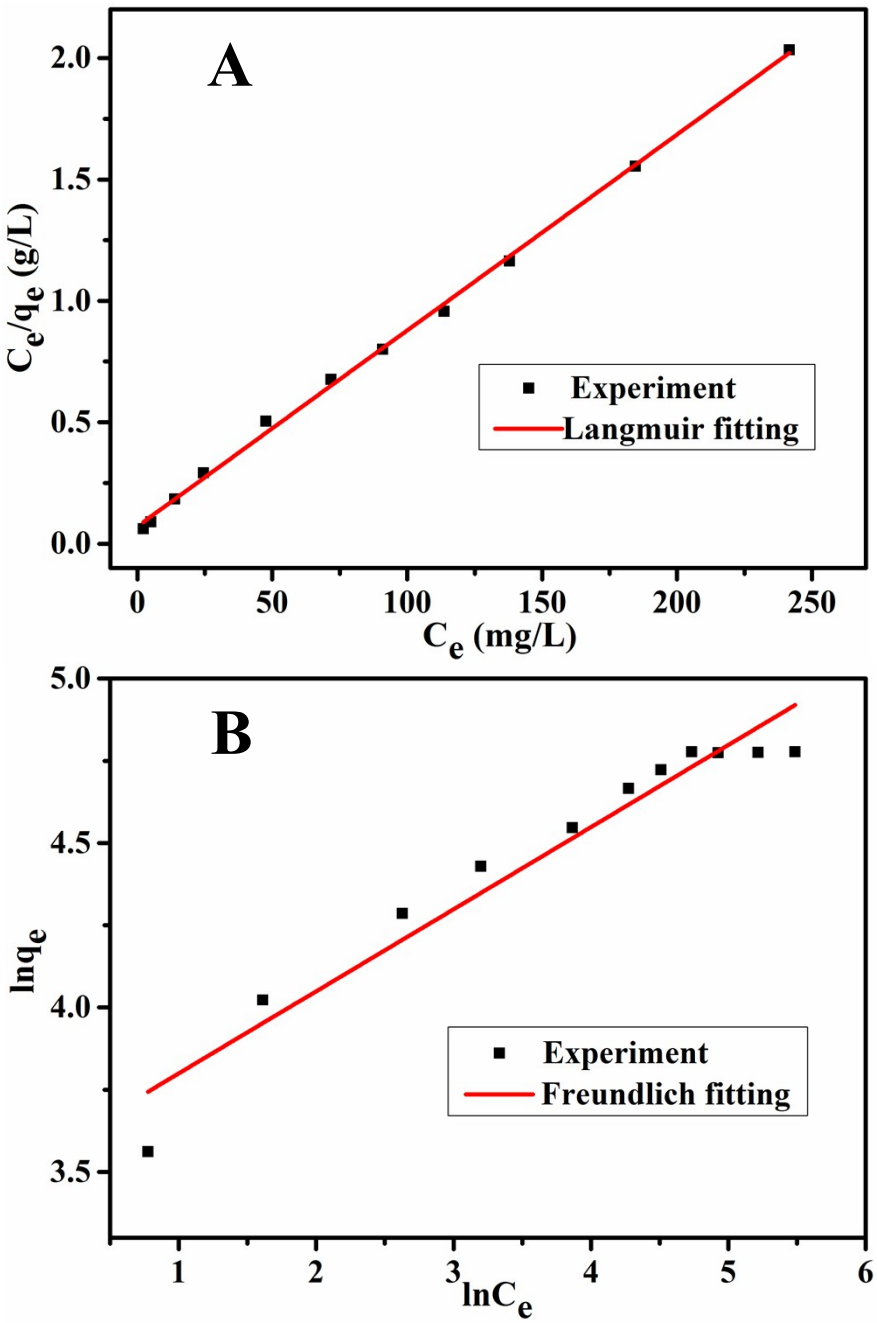

Figure S1. Adsorption isotherms of Tb^{3+} ions on sulfonylcalix[4]arene functionalized APAN nanofibrous membrane according to the Langmuir equation (A) and the Freundlich equation (B).

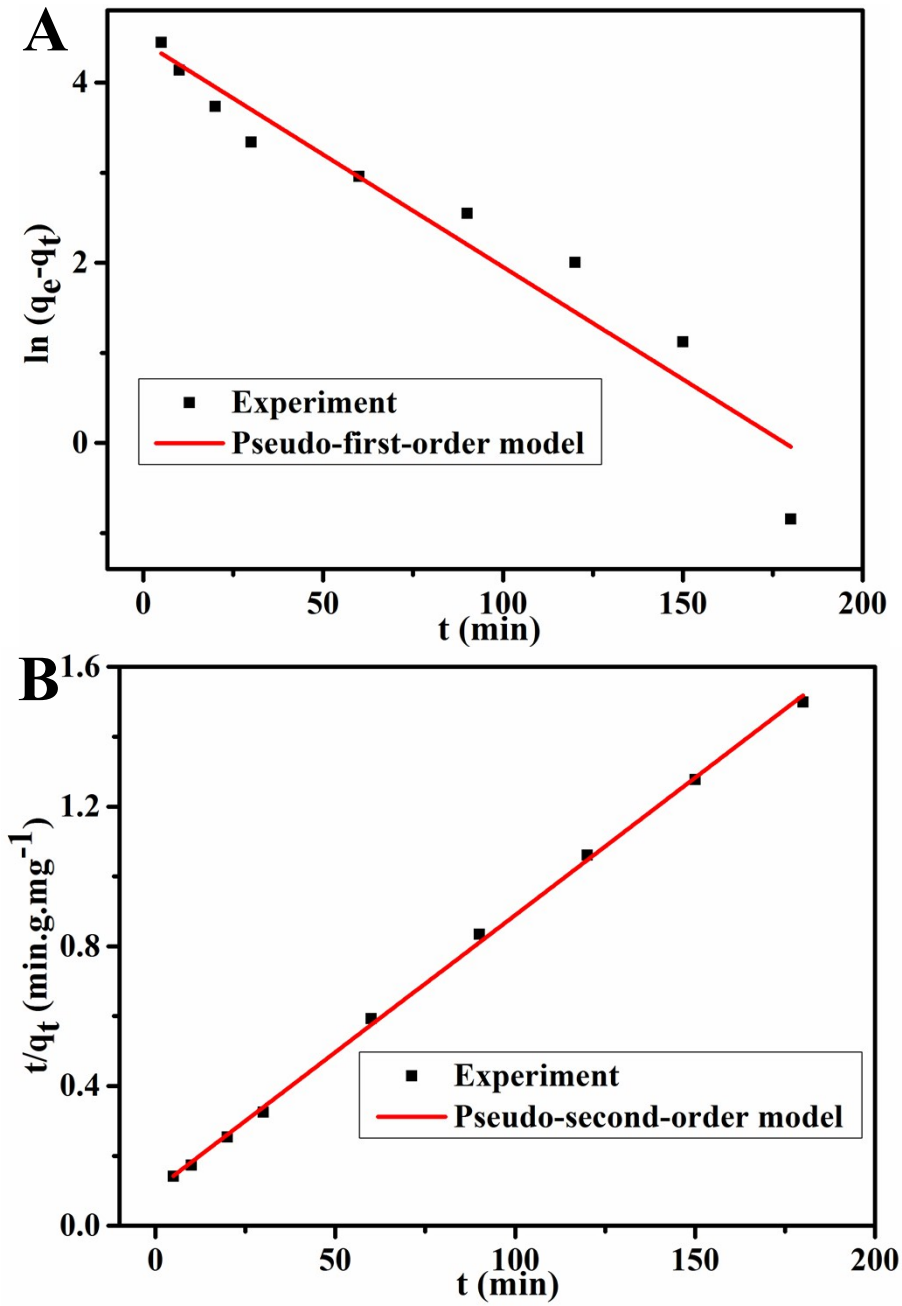

Figure S2. Pseudo-first-order kinetic model (A) and pseudo-second-order kinetic model (B) for the adsorption of Tb^{3+} ions on sulfonylcalix[4]arene functionalized APAN nanofibrous membrane.

Table S1. Langmuir and Freundlich constants for the adsorption of Tb^{3+} ions on sulfonylcalix[4]arene functionalized APAN nanofibrous membrane

Langmuir constants			Freundlich constants		
q_0 (mg/g)	b (L/mg)	R^2	K_F (mg/g)	n	R^2
123.92	0.11	0.9982	34.82	4.01	0.9388

Table S2. Adsorption kinetic parameters for the adsorption of Tb^{3+} ions on sulfonylcalix[4]arene functionalized APAN nanofibrous membrane

Pseudo-first-order model			Pseudo-second-order model		
q_e (mg/g)	K_1 (mg^{-1})	R^2	q_e (mg/g)	K_2 (mg g^{-1} min^{-1})	R^2
85.45	0.0249	0.9261	127.23	5.96×10^{-4}	0.9990