Electronic Supplementary Material (ESI) for RSC Advances.

Table SM 1. First-order kinetic model parameters for photodegradation of MO and RhB at different concentrations

MO concentration (mg/L)	Reaction rate (k) (min^{-1})	Correlation coefficient (R^2)	Fitting equation
1	0.0142	0.9977	Y=0.0142x+2.0699
5	0.0136	0.9914	Y=0.0136x+1.7015
10	0.0127	0.9822	Y=0.0127x+1.3732
20	0.0103	0.9822	Y=0.0103x+1.1328
30	0.0079	0.9814	Y=00079x+0.9359
40	0.0076	0.9805	Y=00076x+0.6818
RhB concentration (mg/L)	Reaction rate (k) (min^{-1})	Correlation coefficient (R^2)	Fitting equation
1	0.0152	0.993	Y=0.0152x+1.7983
5	0.0132	0.993	Y=0.0132x+1.6332
10	0.0131	0.9858	Y=0.0131x+1.4304
20	0.01	0.9825	Y=0.01x+1.2601
30	0.0099	0.9891	Y=00099x+0.9577
40	0.0093	0.9821	Y=00093x+0.79

Table SM 2. Zeta potentials of the aged Ca(30%)/TiO_2/NH_2-MIL-125 photocatalyst versus aging times

Aging time (month)	Zeta potential
0	4.6
1	7.21
2	11.35
4	16.75
6	20.42
9	24.63
12	30.06