

Table S1. Variation of adsorption by curing age for reference and TiO₂ coated specimens.

Curing Age [days]	Adsorption [%]			
	Reference		TiO ₂ Coated	
	Average	SD	Average	SD
2	12.92	0.49	19.72	4.09
5	9.13	0.72	12.31	2.30
14	8.83	2.88	7.07	2.13
28	3.55	1.77	5.79	3.33
90	3.08	1.57	5.25	2.56

Table S2. The influence of TiO₂ coating time gap on the photocatalytic efficiency

Irradiation time [h]	Photocatalytic efficiency [%]											
	SP_1.5 h		SP_5 h		SP_9 h		SP_24 h		SP_32 h		SP_7 d	
	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD
1	3.23	1.76	2.42	2.40	1.19	0.67	1.84	0.36	2.12	0.57	4.82	0.90
2	6.69	2.09	4.44	2.30	4.36	1.03	4.78	2.18	5.95	1.20	8.91	1.57
4	14.34	1.38	13.72	1.72	10.44	1.09	12.14	1.23	12.45	1.88	21.74	1.14
8	21.12	1.92	20.74	1.95	19.25	0.73	19.33	1.18	22.07	2.39	28.90	1.63

Table S3. The influence of TiO₂ coating rates on the photocatalytic efficiency.

Irradiation time [h]	Photocatalytic efficiency [%]									
	R		CR10		CR20		CR40		CR80	
	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD
1	1.96	1.34	3.20	1.48	2.46	2.52	2.73	0.81	3.48	0.41
2	6.28	1.44	5.99	2.89	5.66	2.17	6.56	1.20	5.96	0.32
4	13.17	1.41	13.21	3.13	14.02	1.80	13.13	1.85	13.22	0.68
8	16.78	2.91	16.70	5.93	17.62	4.65	19.70	4.18	21.03	0.59