Electronic Supplementary Material (ESI) for Inorganic Chemistry Frontiers.

Table S1 Reagents and their source [a].

Reagents	Supplier
Titanium sulfate (≥ wt.96%)	Sinopharm Chemical Reagent Co., Ltd.
Tetrabutyl titanate (TBOT ≥ 98 wt.%)	
Tetrapropylammonium hydroxide (TPAOH, 25 wt.%)	Zhejiang Kente Catalysts Company Inc.
Fumed silica (SiO_2 > 99 wt.%)	Shenyang Chemical Reagent Co., Ltd.
Toluene	Tianjin Fuyu Fine Chemical Co., Ltd.
Ethanol	
Cyclohexanone	
Tetra-butyl alcohol	
Tetraethyl orthosilicate (TEOS ≥ 98 wt.%)	Tianjin Kemiou Chemical Reagent Co., Ltd.
Hydrogen peroxide (H_2O_2, 30 wt.%)	
Ammonia solution (25 wt.%)	

[a] All of the reagents were used without purification.

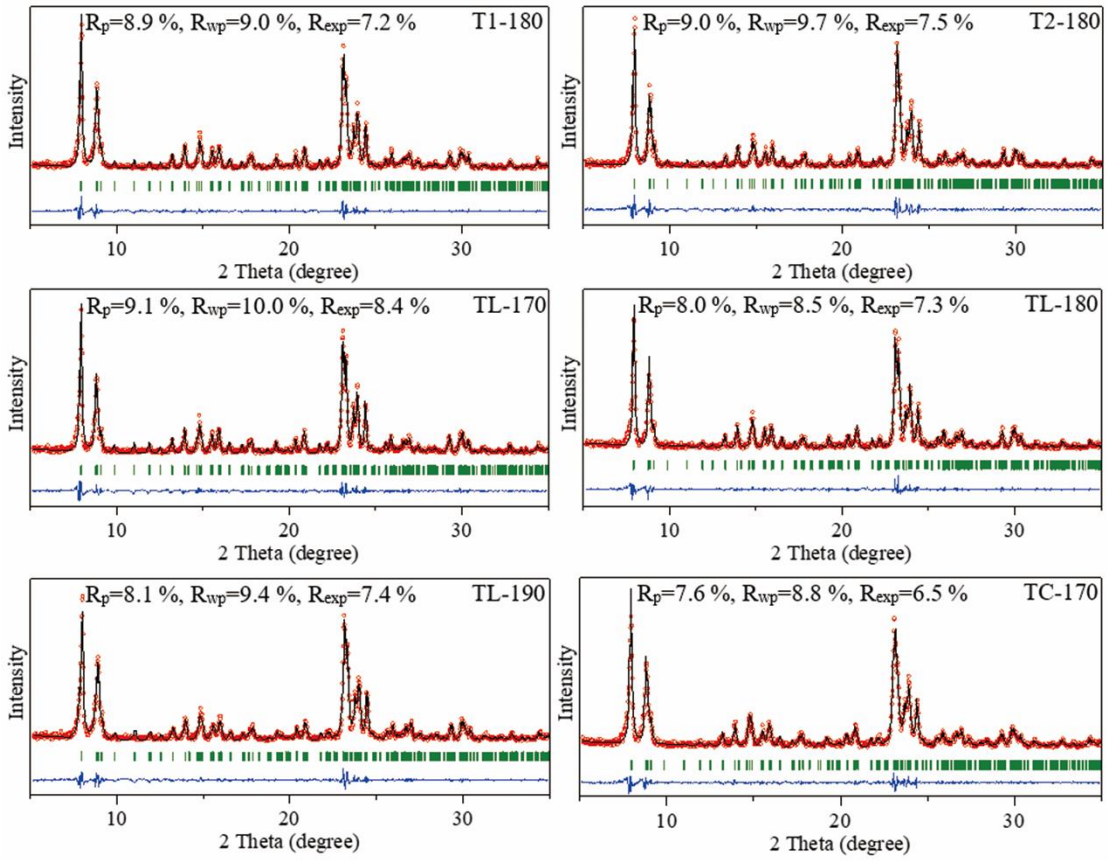

Fig. S1 Experimental (○), calculated (—), and difference (lower) trace of XRD patterns of different TS-l samples. Vertical bars indicate the positions of the Bragg reflections of TS-l.

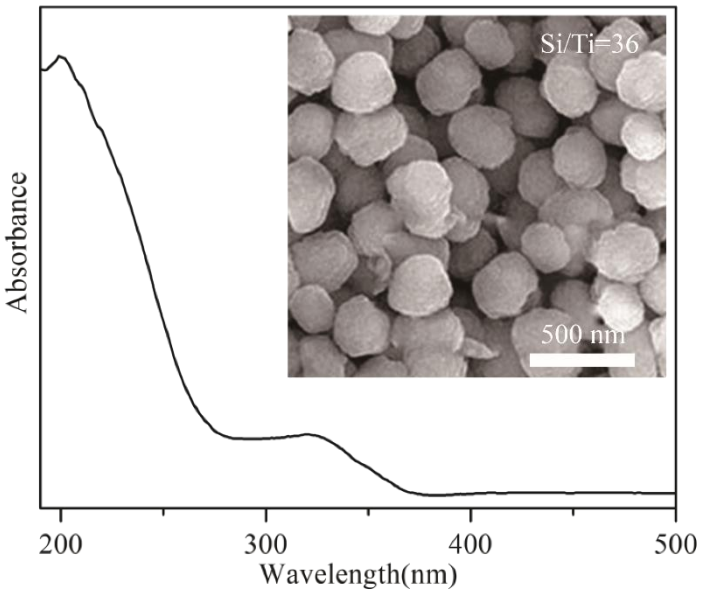

Fig. S2 UV-vis spectra and SEM image of industrial TS-1.
Note: The Si/Ti ratio of the TS-1was measured by ICP.

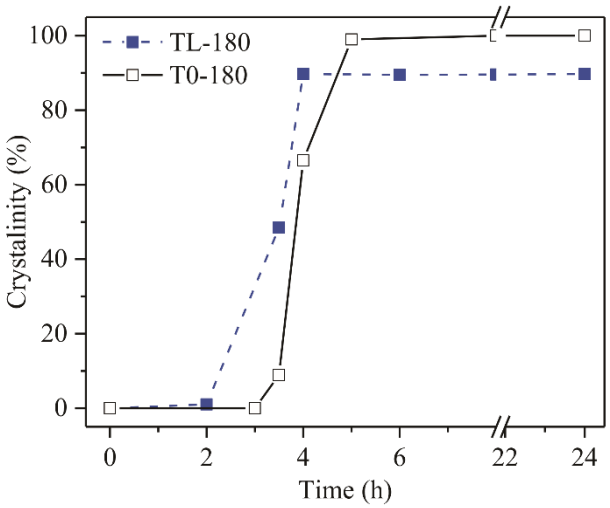

Fig. S3 Crystallization curves of TS-1 crystallized at 180°C with (■) and without liquid seed addition (□).

Table S2 Ti content and unit cell parameters of the TS-1 samples.

Samples	a (Å)	b (Å)	c (Å)	V (Å^3)	x[a]
T1-180	20.118(2)	19.908(2)	13.398(2)	5359.2(12)	0.0153
T2-180	20.119(3)	19.913(3)	13.399(2)	5362.2(14)	0.0165
TL-170	20.125(3)	19.920(3)	13.408(2)	5371.7(13)	0.02
TL-180	20.129(2)	19.925(2)	13.412(1)	5376.3(12)	0.0222
TL-190	20.132(3)	19.931(3)	13.414(2)	5379.8(13)	0.0238
TC-170	20.138(2)	19.937(3)	13.418(2)	5387.1(12)	0.026

[a] [Ti]/([Ti] +[Si]) molar ratio: T1-180 and T2-180 are obtained by linear fitting, and the rest are obtained by ICP measurement.