Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C

Supporting Information

Multifunctional All-TiO_2 Bragg Stacks Based on Blocking Layer-Assisted Spin Coating

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Table S1. Characteristics of the low- and high-refractive-index films prepared using optimized spin coating conditions[a] before and after calcination[b].

	Low refractive index Discoidal TiO_2		**High refractive index** Spherical TiO_2	
	Before	After	Before	After
Thickness (nm)	95.0 ± 2.3	89.2 ± 4.6	77.4 ± 1.2	66.3 ± 2.9
Refractive index	1.50 ± 0.01	1.44 ± 0.01	1.92 ± 0.01	1.95 ± 0.01

[a] Spin coating at 4000rpm for 1 min at ambient lab conditions.

[b] Calcination at 500 °C for 2 h.

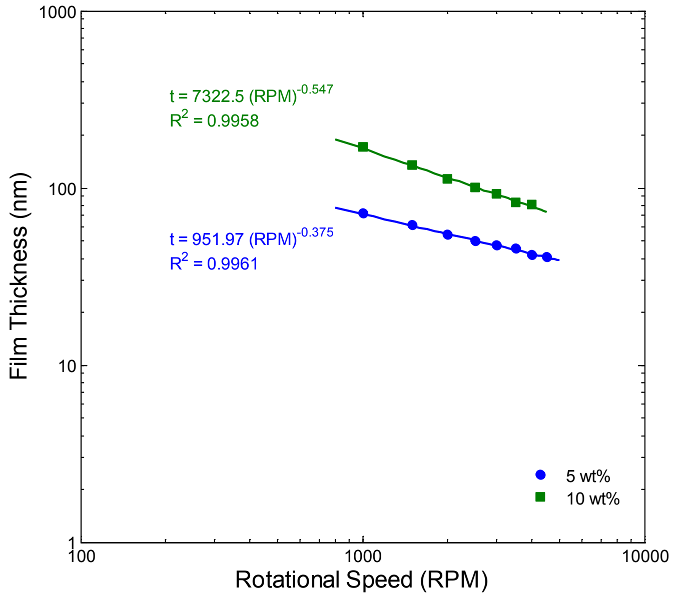

Figure S1. Effect of the rotational speed of spin coating on the thickness of spherical TiO_2 nanoparticle films on glass slides.

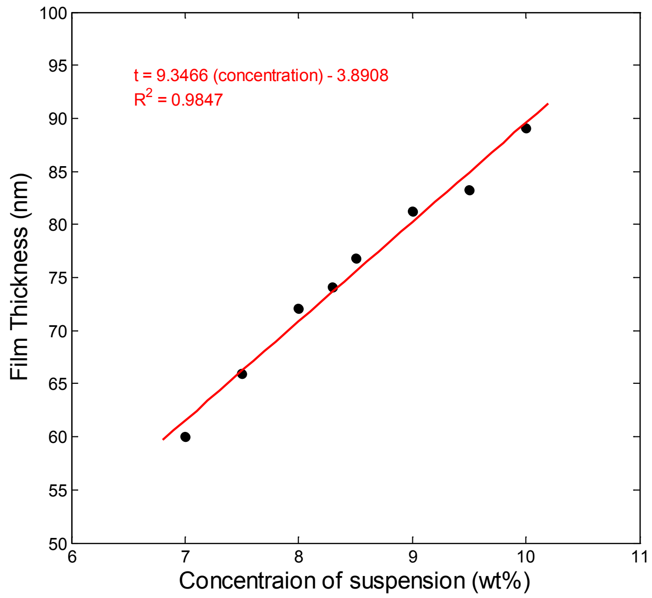

Figure S2. Effect of nanoparticle concentration on the thickness of spherical TiO_2 nanoparticle films on glass slides at a rotational speed of 4000rpm.

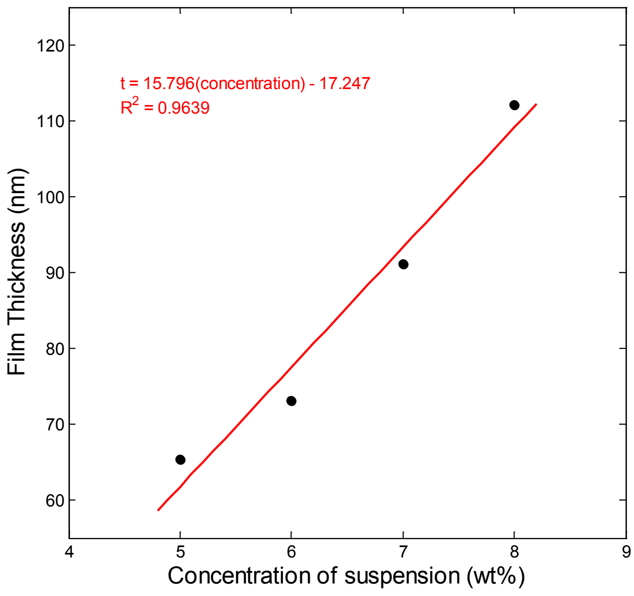

Figure S3. Effect of nanoparticle concentration on the thickness of discoidal TiO_2 nanoparticle films on glass slides at a rotational speed of 4000rpm.

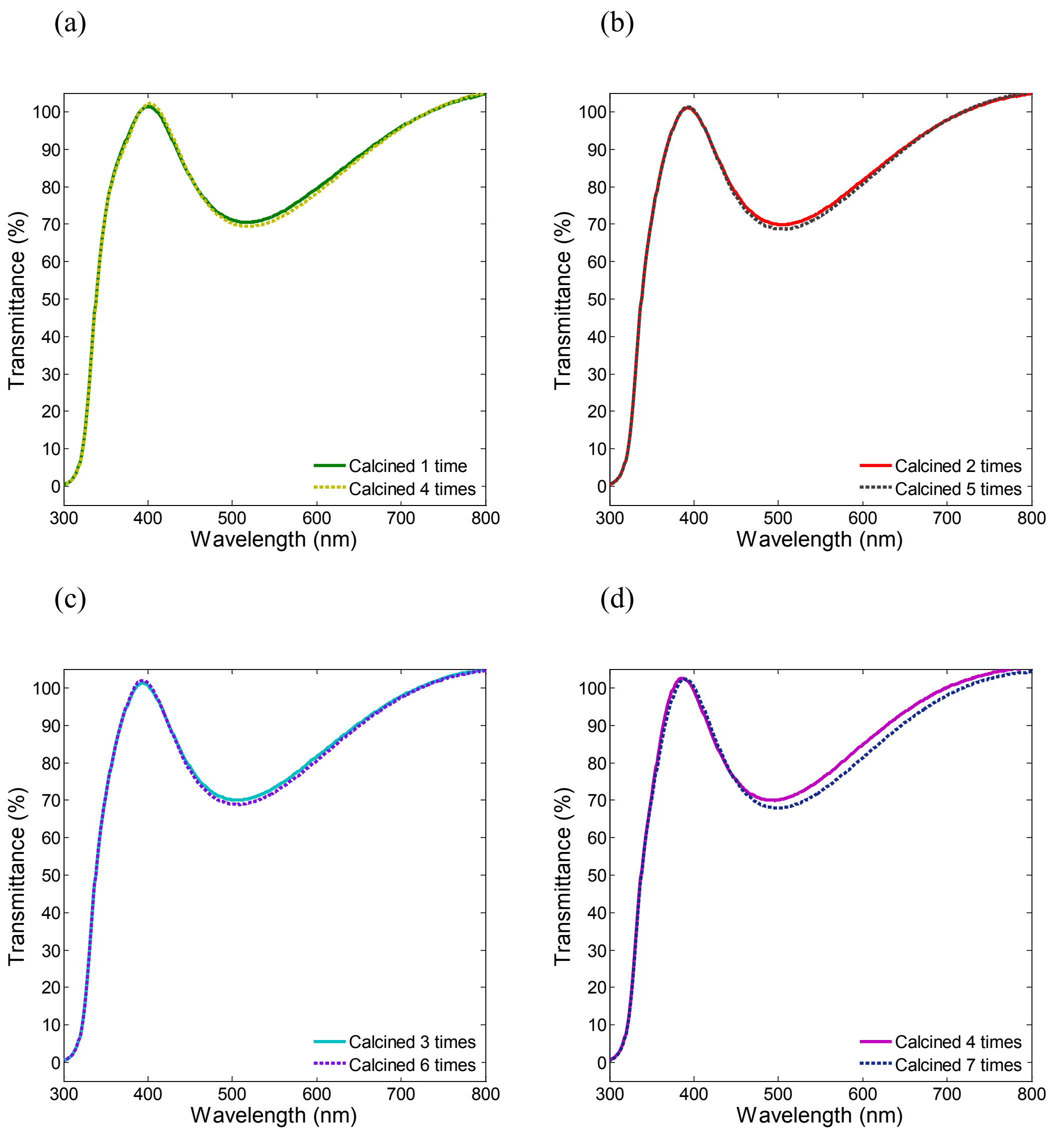

Figure S4. Effect of the total number of calcination processes on the transmittance spectra of 3-layer Bragg stacks on glass slides measured at normal incidence.

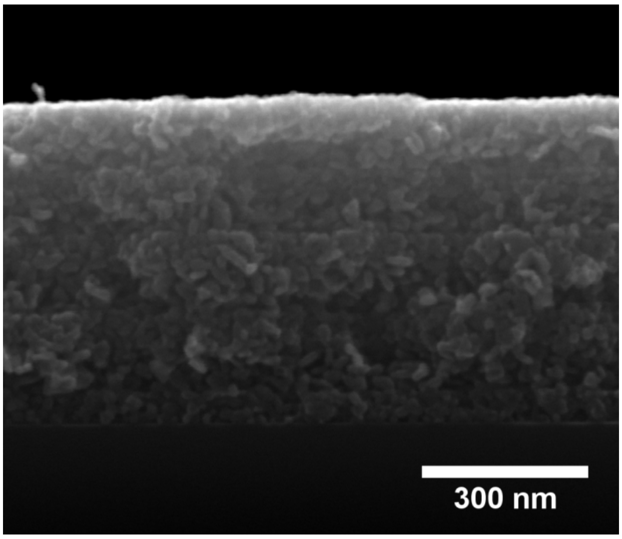

Figure S5. Cross sectional scanning electron microscopy (SEM) image of a 9-layer all-TiO_2 BS manufactured using the blocking-layer assisted spin coating method.