

Supplementary Materials: Study on the Photocatalytic and Antibacterial Properties of TiO₂ Nanoparticles-Coated Cotton Fabrics

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Table S1. Comparison of published data with our research.

Materials	Photocatalytic Efficiency	Antibacterial Properties		Reference
		<i>S. aureus</i>	<i>E. coli</i>	
TiO ₂ /cotton	/	86%	86%	[1]
TiO ₂ /SiO ₂ /cotton	/		36%	[2]
TiO ₂ /cotton	/		85.8%	[3]
TiO ₂ /cotton	/	73.5%	75.15%	[4]
TiO ₂ /cotton	/	26.14%	9.55%	[5]
TiO ₂ /chitosan/cotton	/	7.9 mm	7.75 mm	[6]
TiO ₂ /MB	95%			[7]
TiO ₂ /MB	90%			[8]
TiO ₂ /MB	pH 7: 85%			[9]
TiO ₂ /cotton/tea stain	K/S: 0	99.9%	99.9%	[10]
TiO ₂ /cotton/amino	>92%	99.9%	99.9%	our paper

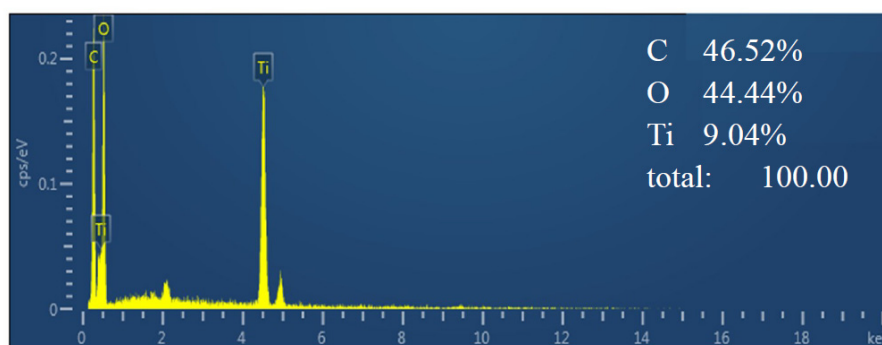


Figure S1. EDS analyze of amino-capped TiO₂ NPs on cotton fabric.

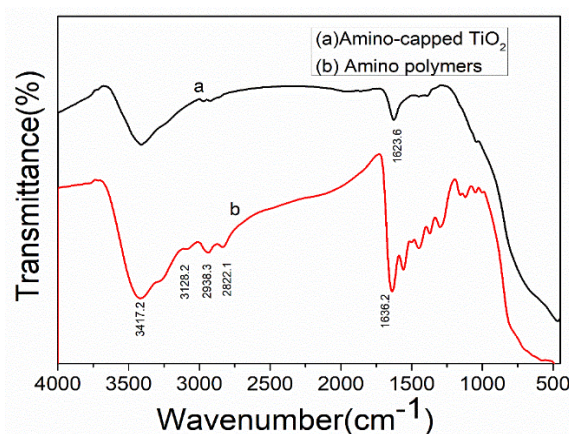


Figure S2. FTIR spectra of (a) amino-capped TiO₂, (b) amino polymers.

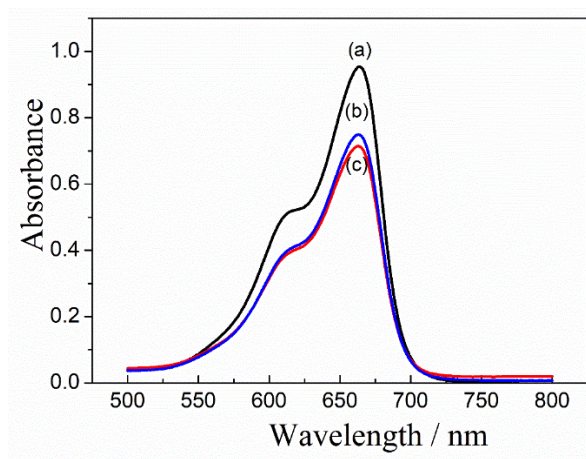


Figure S3. Absorbance of methylene blue (a) absorbance of methylene blue by impregnation of amino treated fabric (b) and TiO₂ NPs coated fabric (c) without UV-light in 7 h.

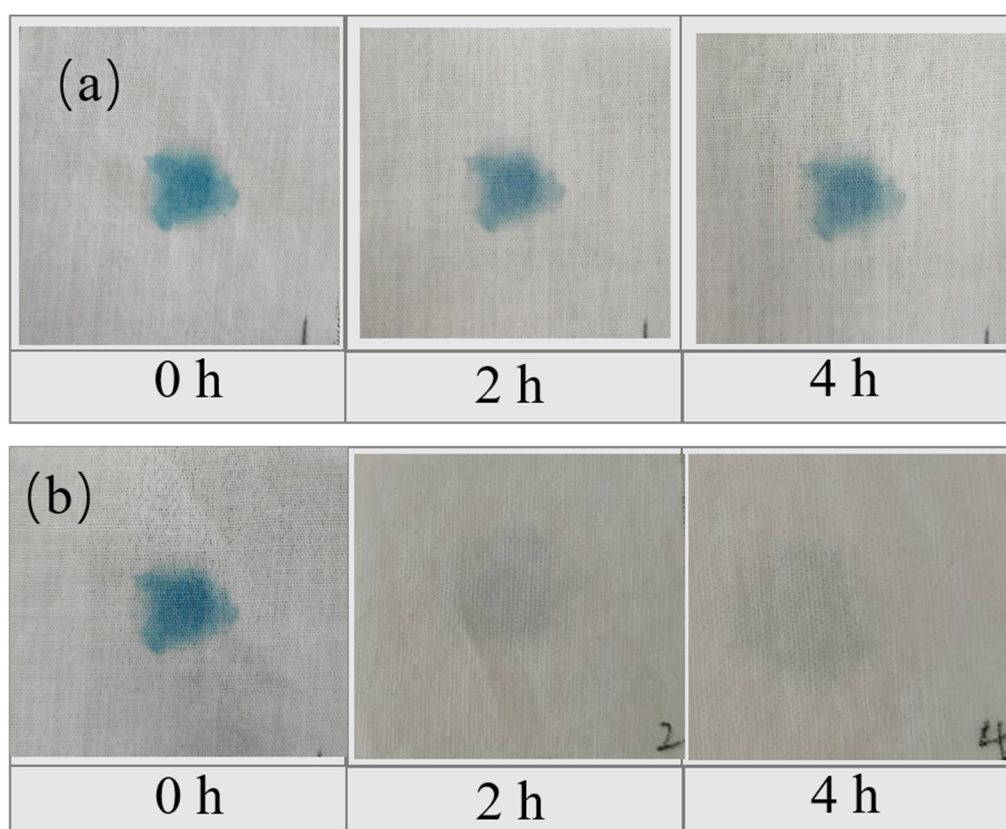


Figure S4. Self-cleaning properties of (a) cotton fabric (b) TiO₂ NPs-coated cotton fabric with UV light.

Reference

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