

Supplementary Materials: SrTiO₃ Nanocube-Doped Polyaniline Nanocomposites with Enhanced Photocatalytic Degradation of Methylene Blue under Visible Light

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Table S1. Yield and % PANI loading in various nanocomposites.

Catalyst	Amount of SrTiO ₃ (g)	Yield (g)	% PANI loading
PANI	–	3.512	–
P-Sr250	0.250	3.6846	92.2
P-Sr500	0.500	3.6701	85.1
P-Sr750	0.750	3.6370	77.5

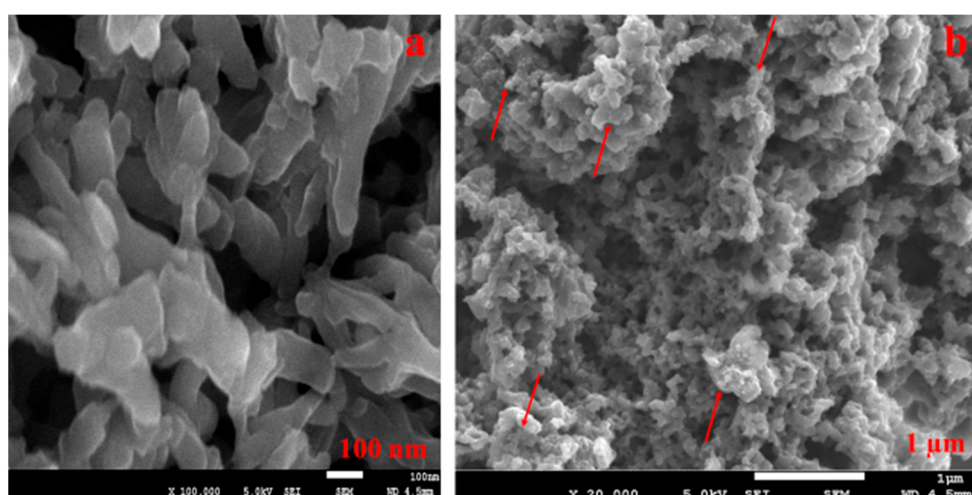


Figure S1. FESEM images of (a) PANI homopolymer and (b) P-Sr750 (Arrows represent the granular nanocomposite).

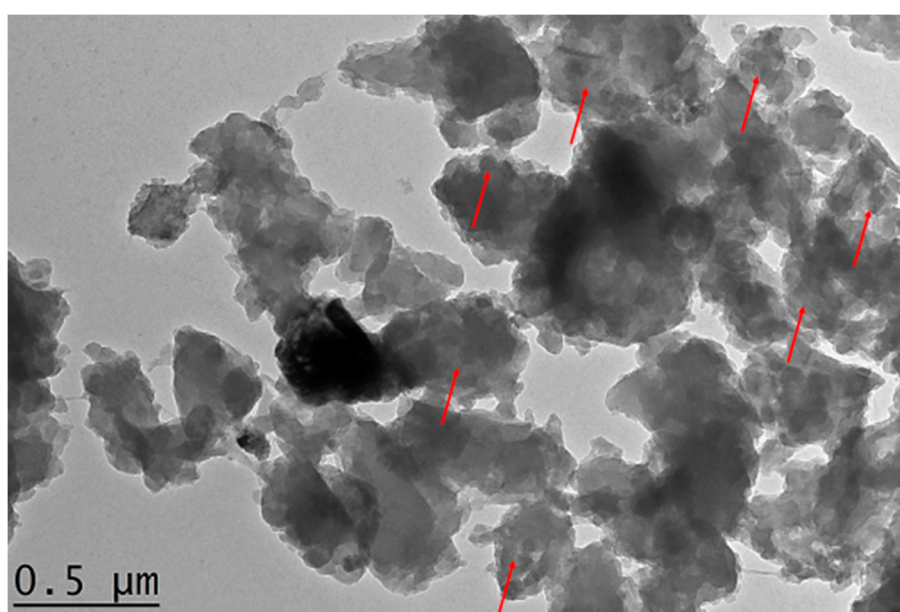


Figure S2. TEM image of P-Sr500 (Arrows specify the presence of SrTiO₃ nanocubes in polymer matrix).

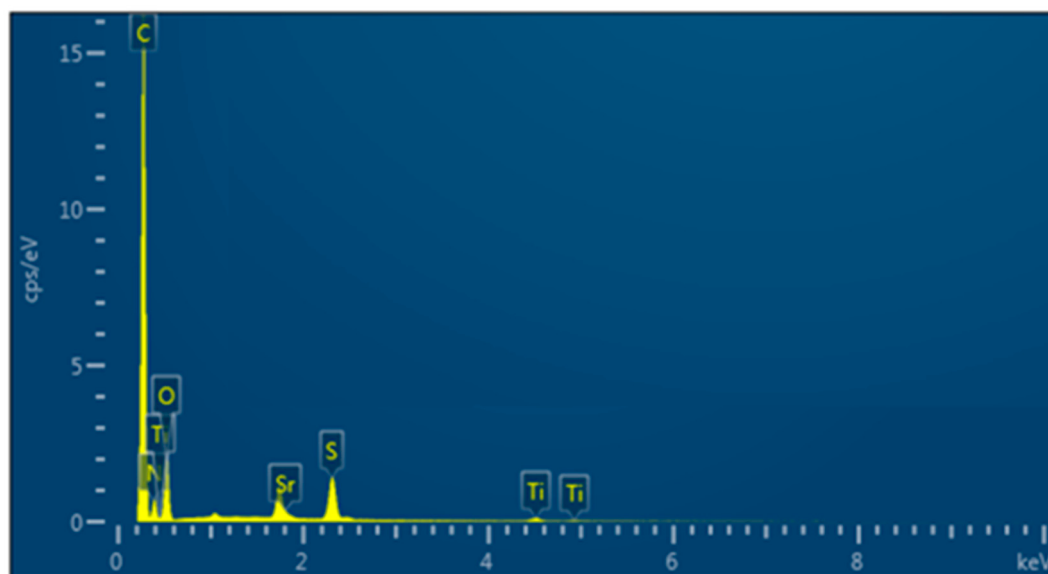


Figure S3. EDX spectrum of P-Sr500 nanocomposite.

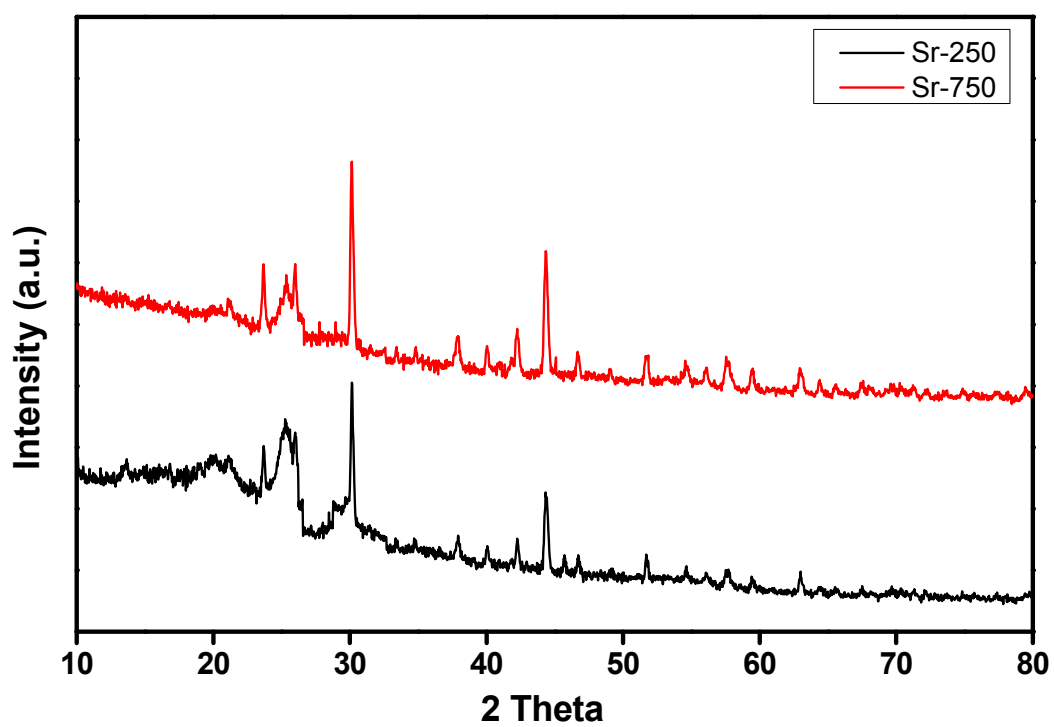


Figure S4. XRD patterns of P-Sr250 and P-Sr750.

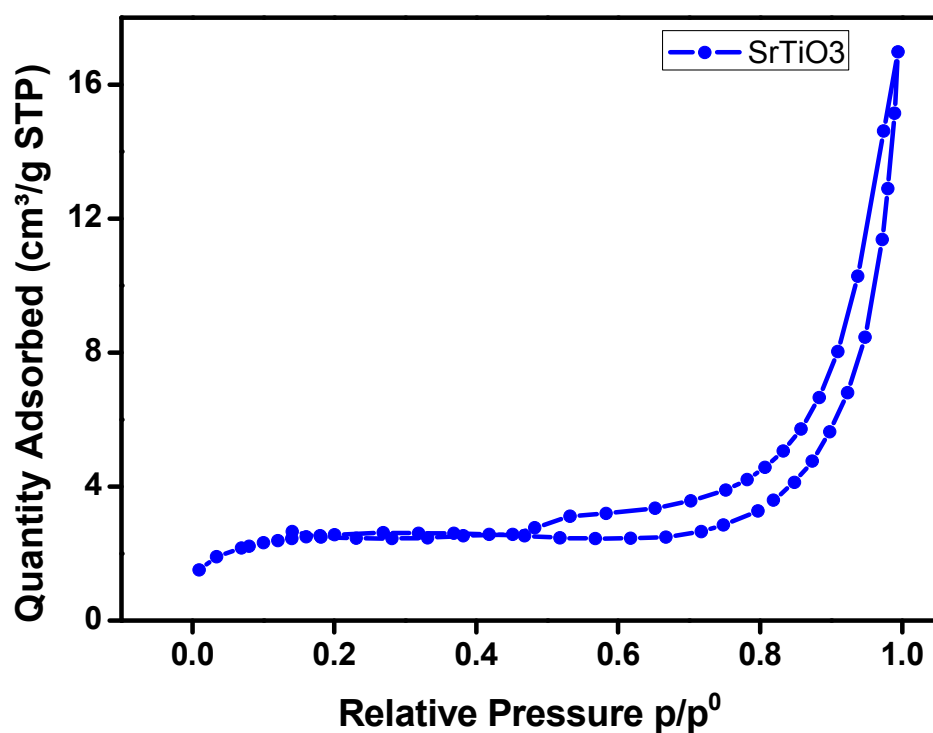


Figure S5. Nitrogen adsorption-desorption isotherms (BET) of SrTiO₃ nanocomposite.

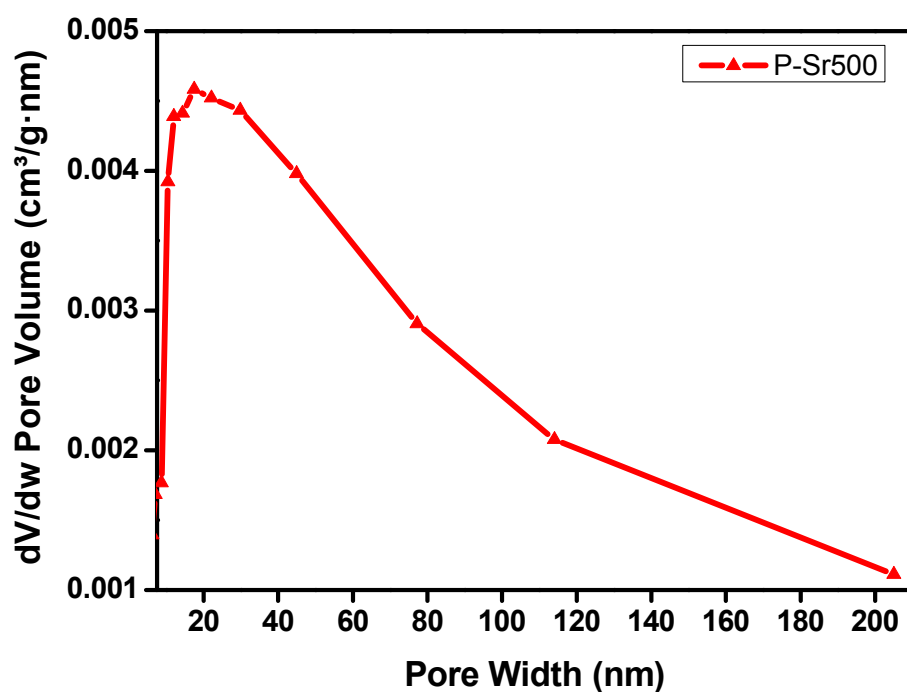


Figure S6. BJH pore-size distribution of P-Sr500 nanocomposite.

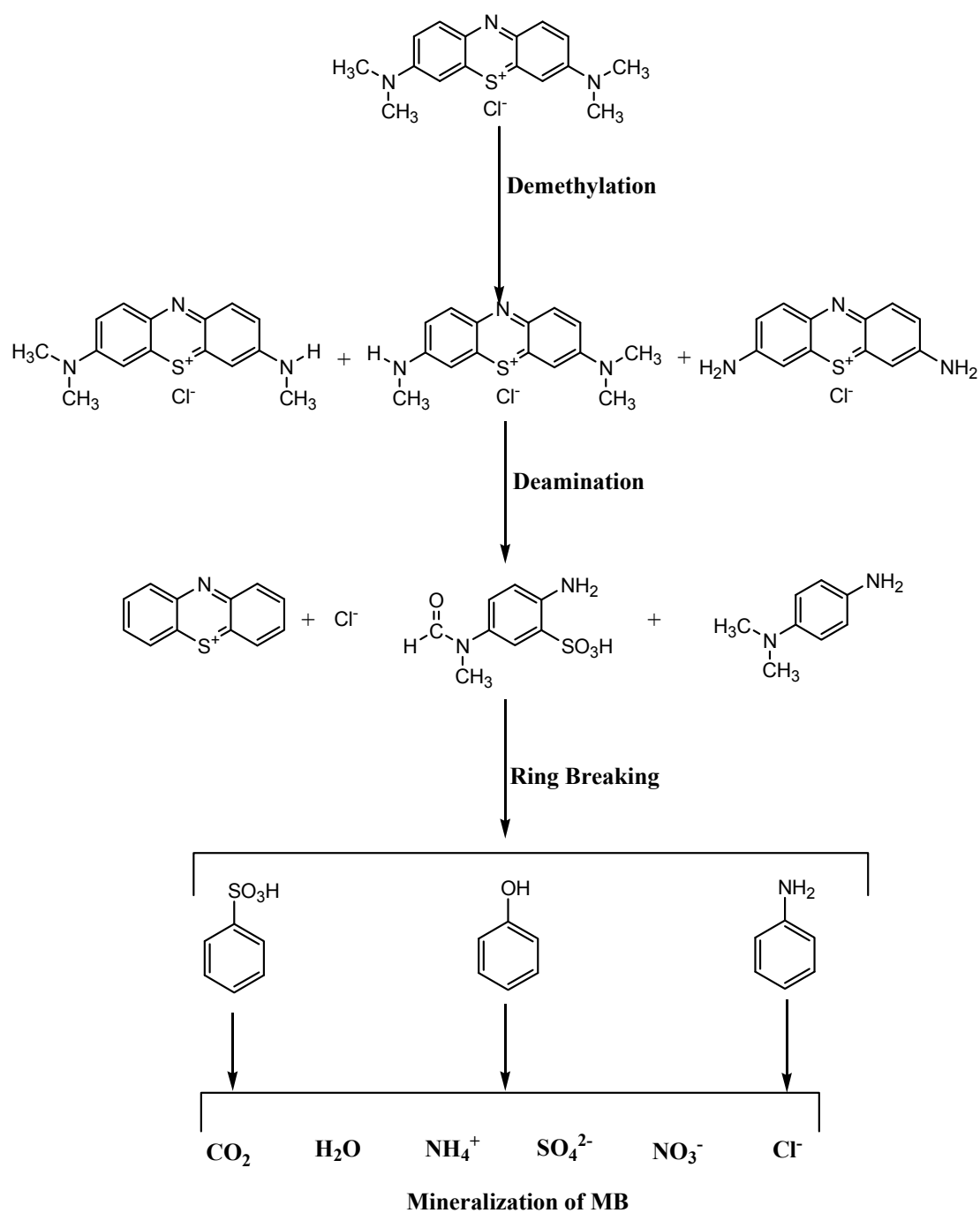


Figure S7. Proposed mechanism for the photocatalytic degradation of MB under UV irradiation.



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