

New insights into self-modification of mesoporous titania nanoparticles for enhanced photoactivity: Effect of microwave power density on formation of oxygen vacancies and Ti³⁺ defects

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Supplementary Data

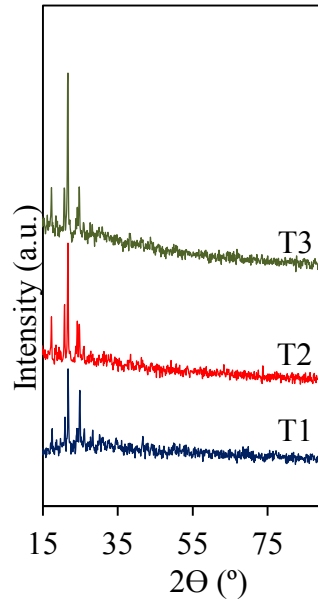


Fig. S1. XRD diffractograms of TiO₂ prepared under various microwave power densities before calcination.

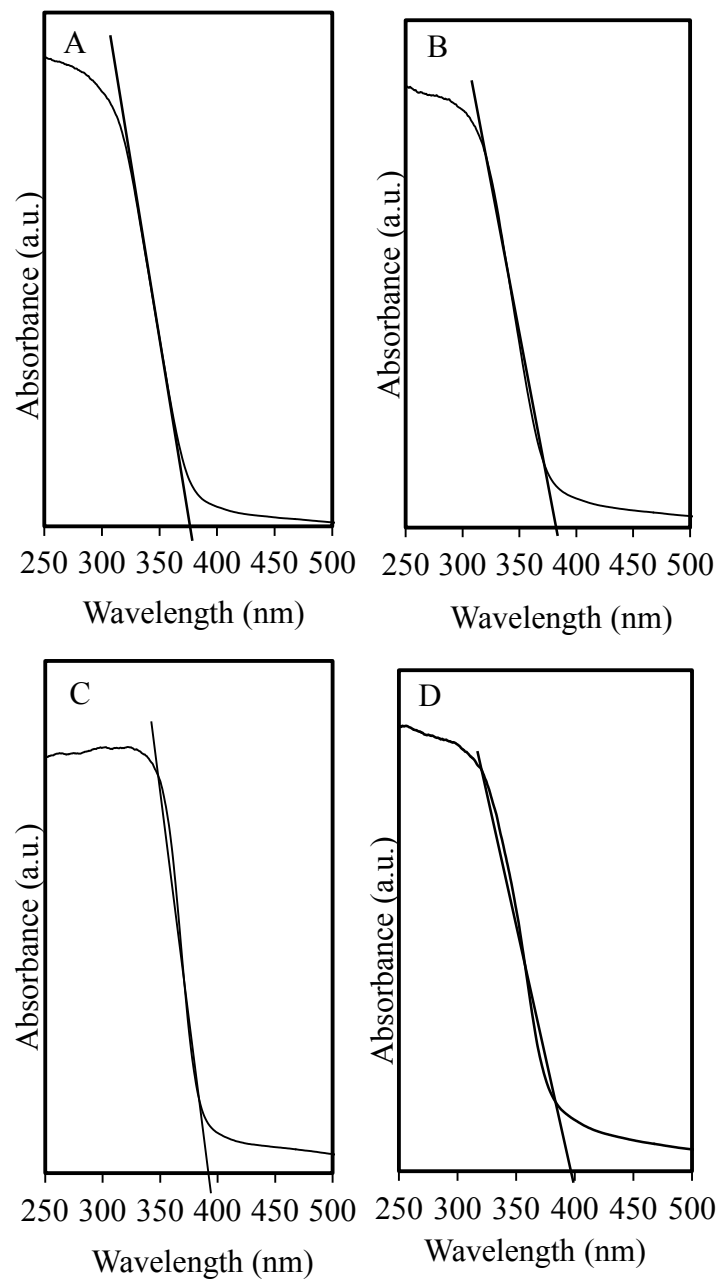


Fig. S2. UV-vis spectra of (A) TC, (B) T1, (C) T3 and (D) T3.

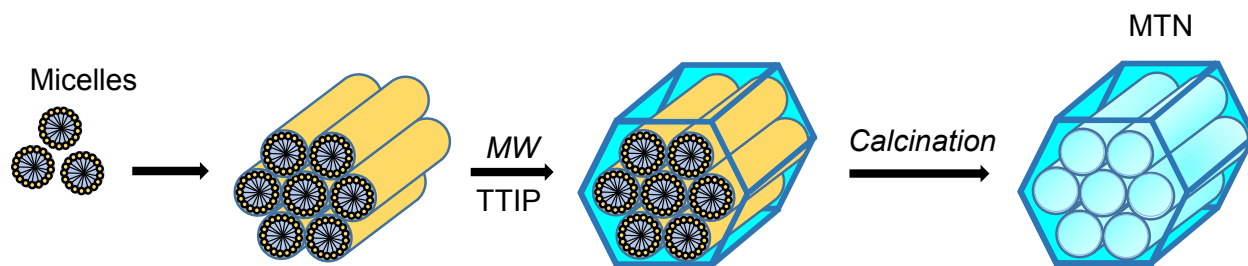


Fig. S3. Synthesis of Mesoporous Titanium Nanoparticles (MTN).

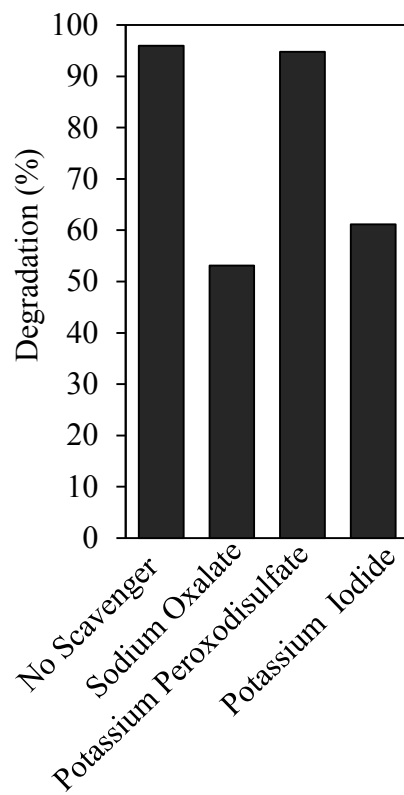


Fig. S4. Photodegradation efficiencies of 2-CP in the presence of hole scavenger, electron scavenger and $\bullet\text{OH}$ scavenger using T3.

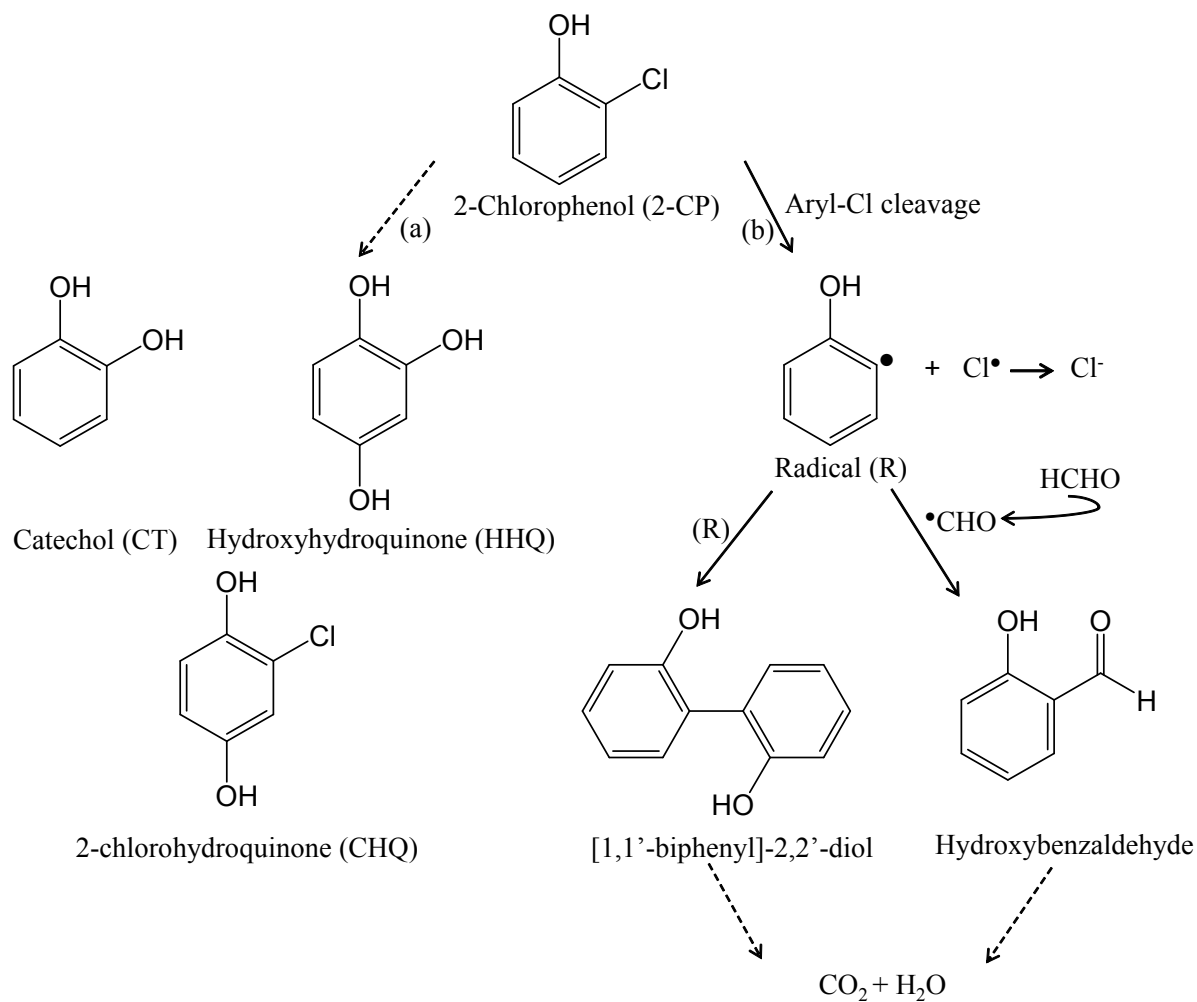


Fig. S5. Proposed mechanism of total mineralization of 2-CP using MTN.