Supplementary Material

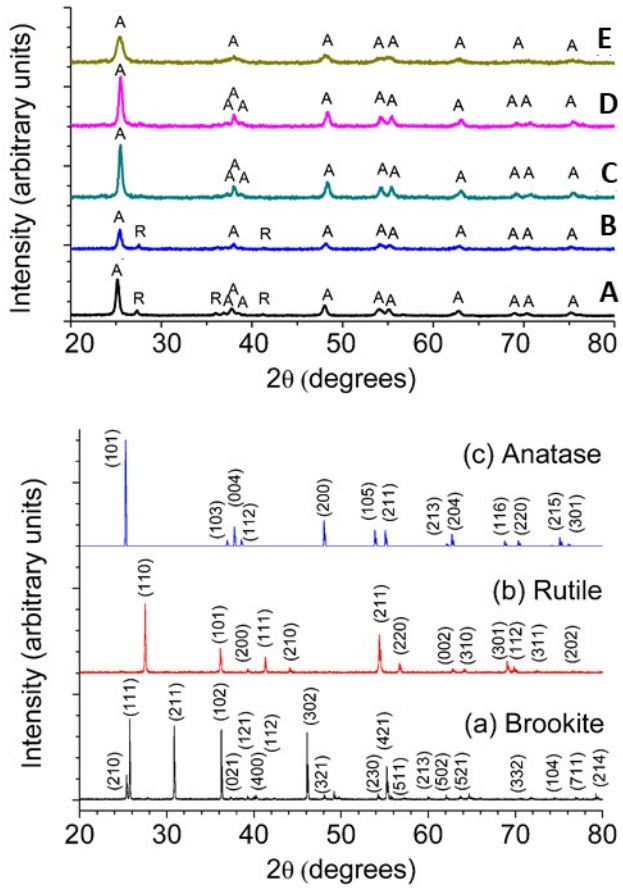

Figure S1 X-ray diffraction patterns of (A) P25, (B) P25-Ag, (C) Anatase, (D) Anatase-N, and (E) Anatase-B

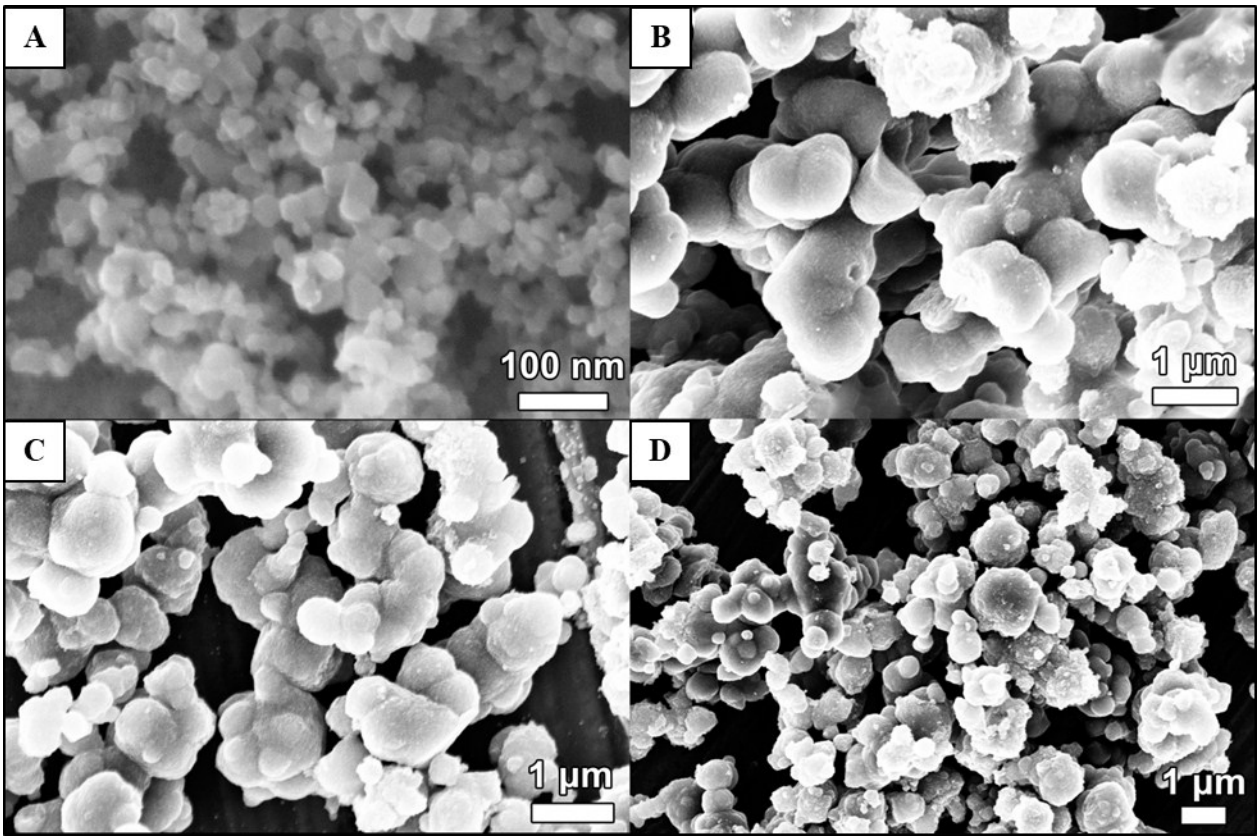

Figure S2 Scanning electron microscope images of (A) P25-Ag, (B) lab-synthesized anatase, (C) anatase-N, and (D) anatase-B

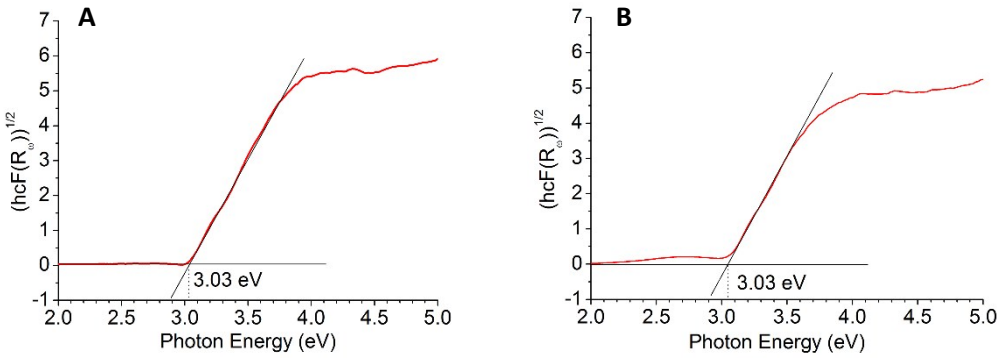

Figure S3 Diffuse reflectance spectra of (A) P25 and (B) P25-Ag

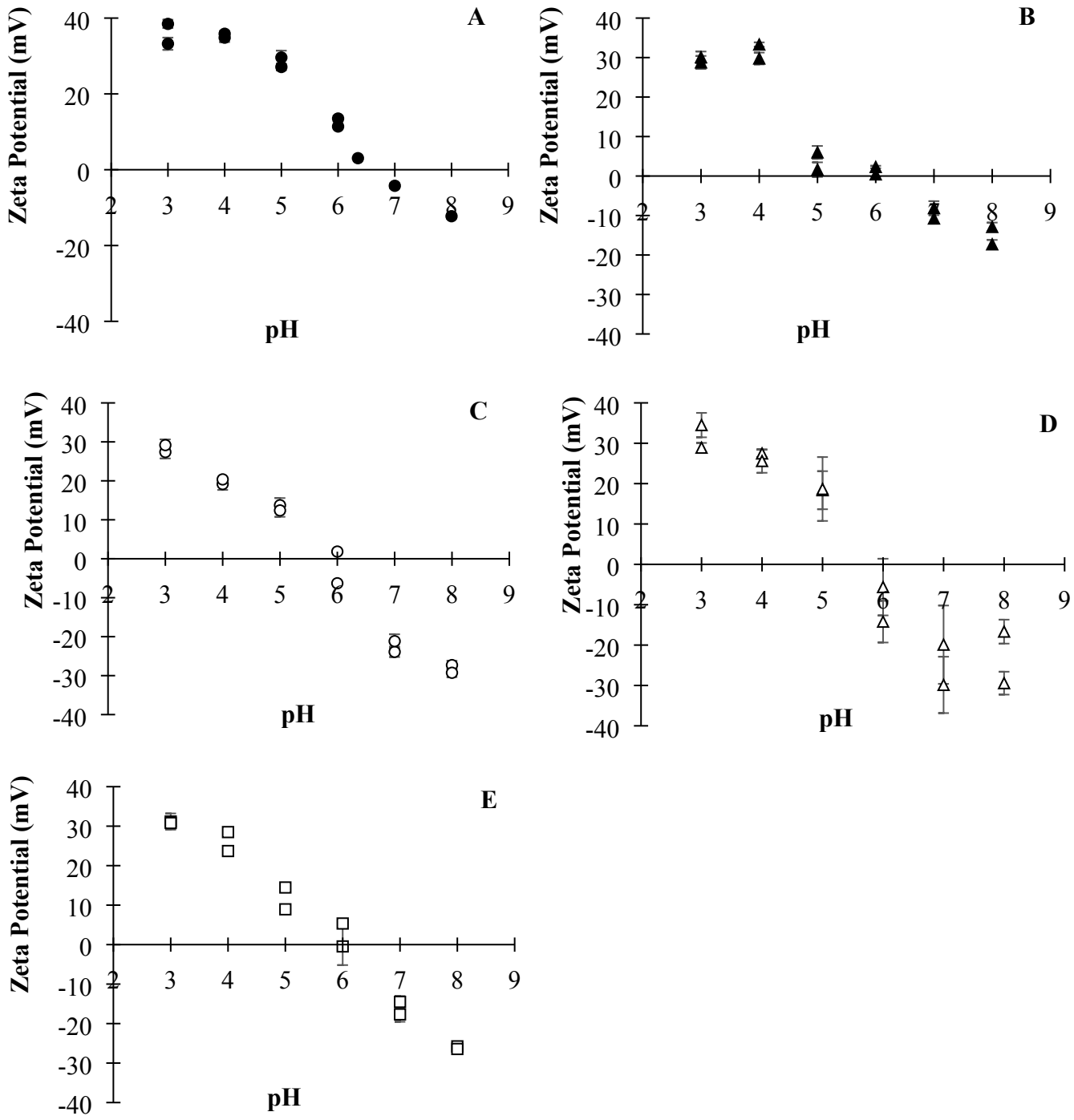

Figure S4 Zeta potential of 0.1 g/L suspensions of P25 (A), P25-Ag (B), anatase (C), anatase-N (D), and anatase-B (E) measured at various pH values. The point at which the zeta potential of the suspension crosses zero corresponds to the isoelectric point of the nanomaterial.

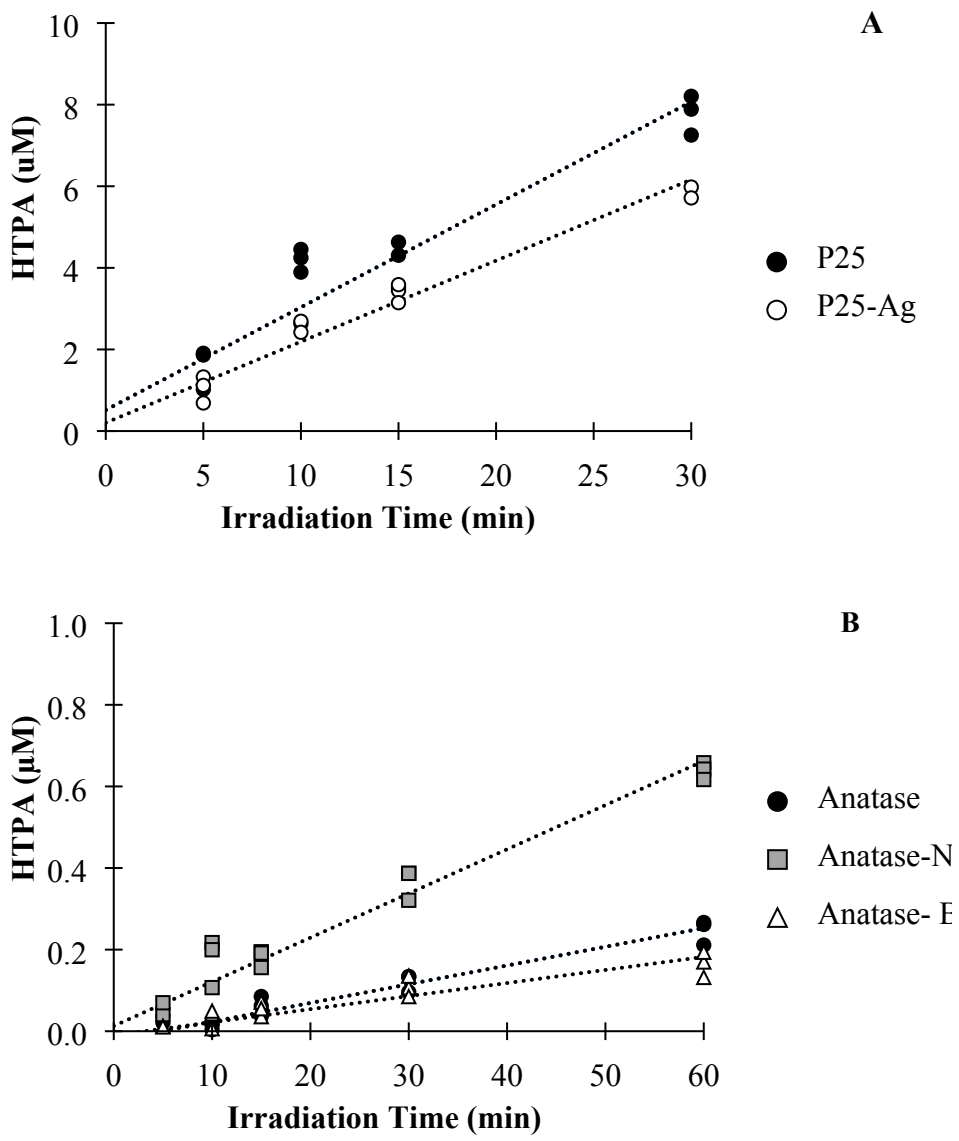

Figure S5 Production of hydroxyl radicals by P25 and P25-Ag (A) or anatase, anatase-N, and anatase-B (B) upon irradiation with simulated solar light (n = 3)

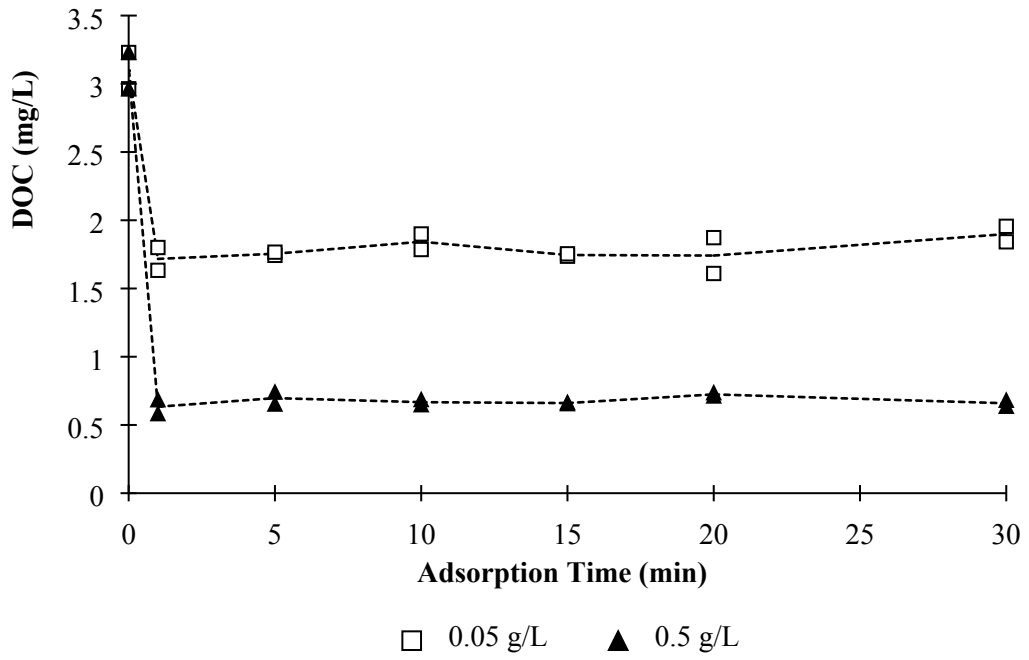

Figure S6 DOC adsorption from synthetic river water by P25 nanoparticles in absence of irradiation

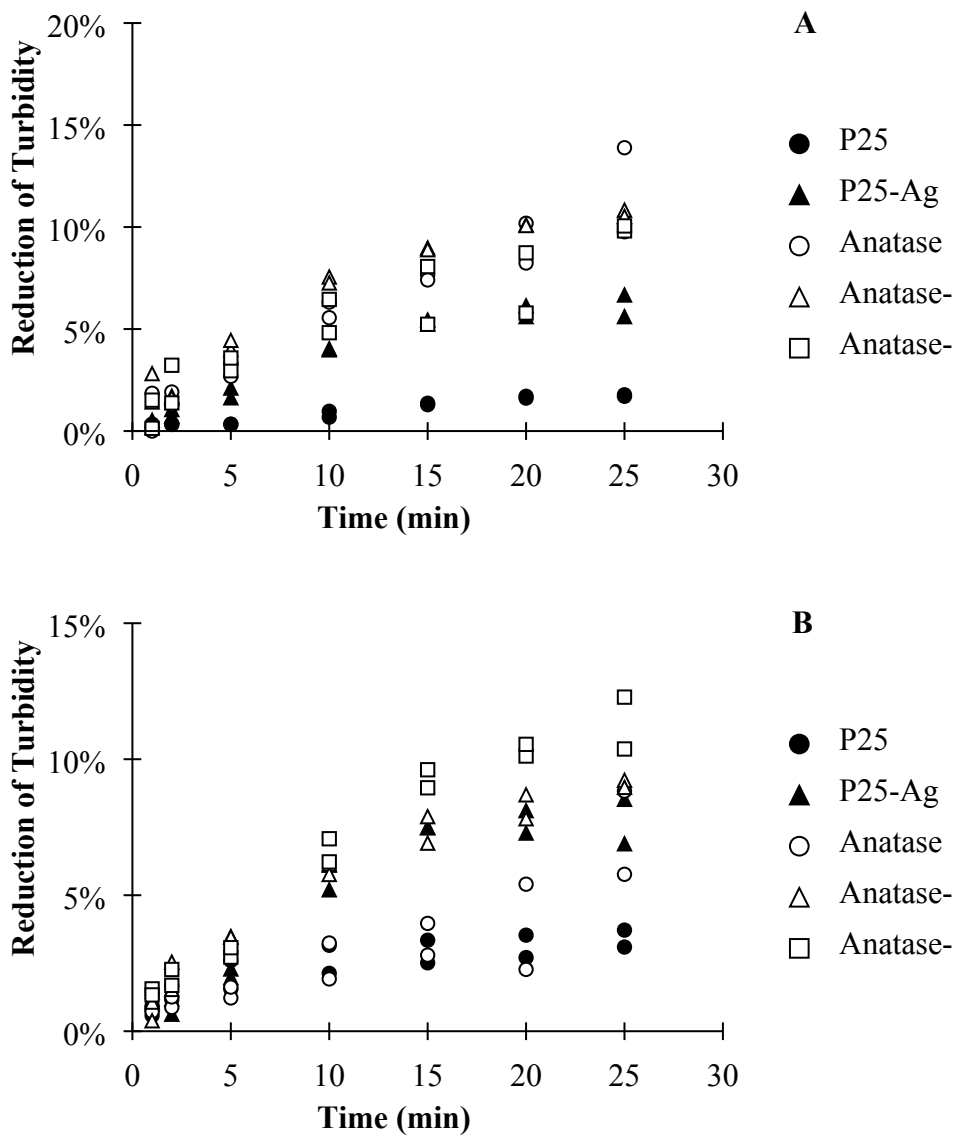

Figure S7 Percent reduction in turbidity of nanomaterial suspensions in (A) synthetic river water and (B) Otonabee River water over the course of thirty minutes