

Figure S1. Remaining dye content in solutions after 3 h visible light irradiation. Inset: absorption spectra of the photodegraded dye solutions ($\lambda > 420$ nm, 300 W).

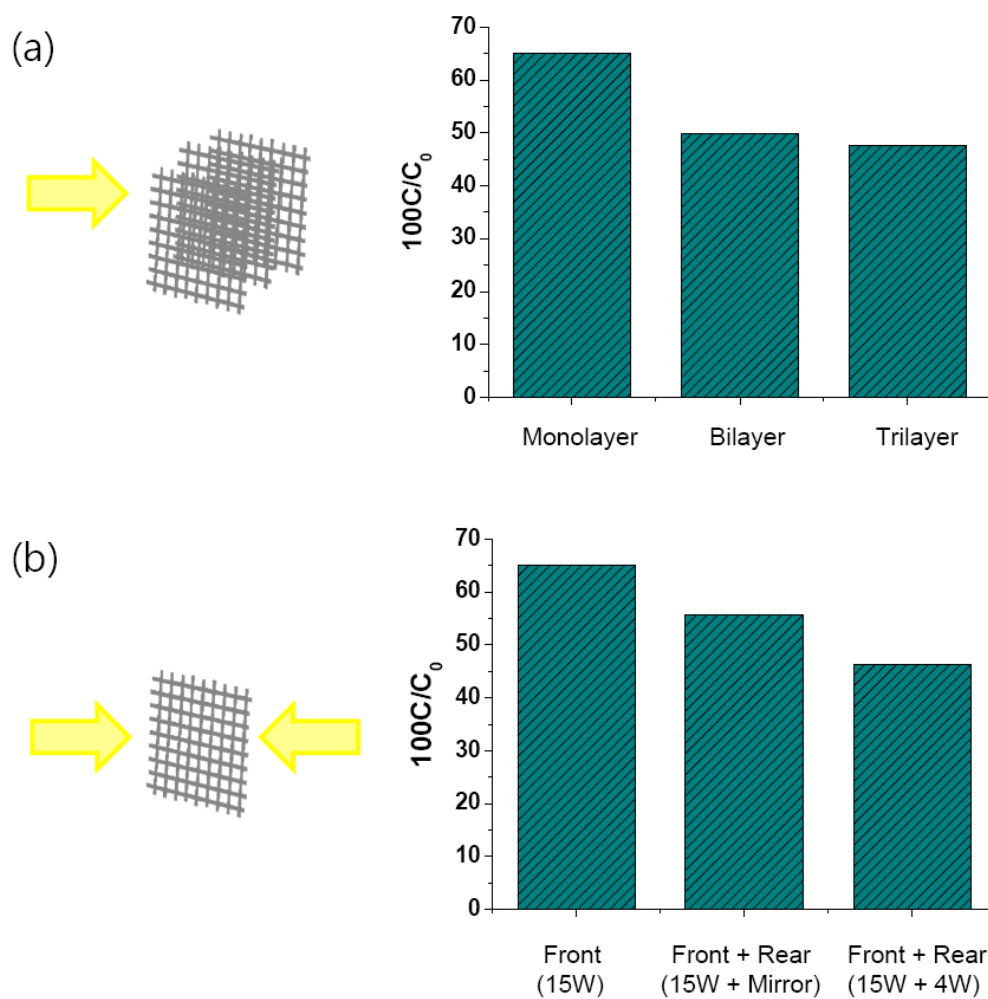


Figure S2. (a) Multilayer effects. The dye content remaining in solution after 2 h irradiation, for different numbers of layers (15 W, 312 nm). (b) Dual light source effects: dye content remaining in solution after 2 h irradiation using dual light sources.

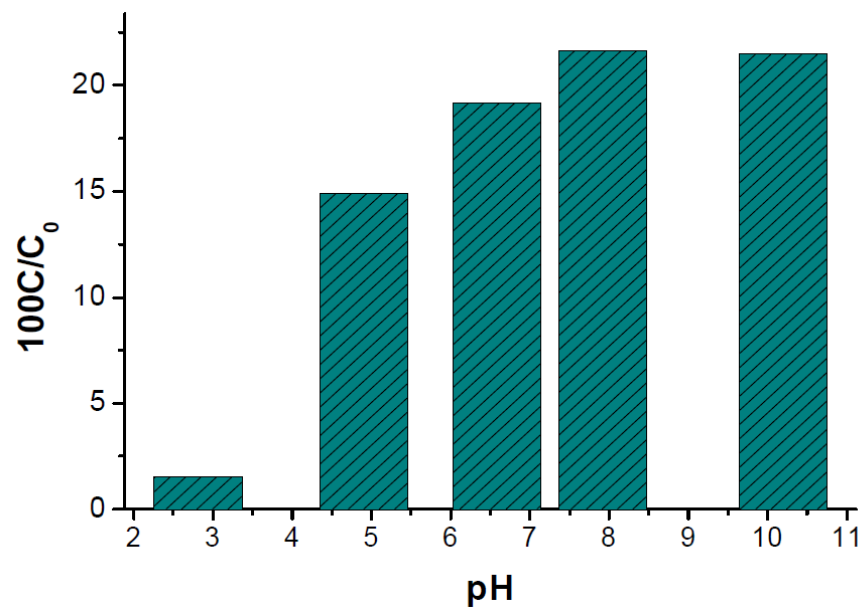


Figure S3. Effects of initial solution pH on the degradation of AO7 under 90 min Xenon lamp irradiation.

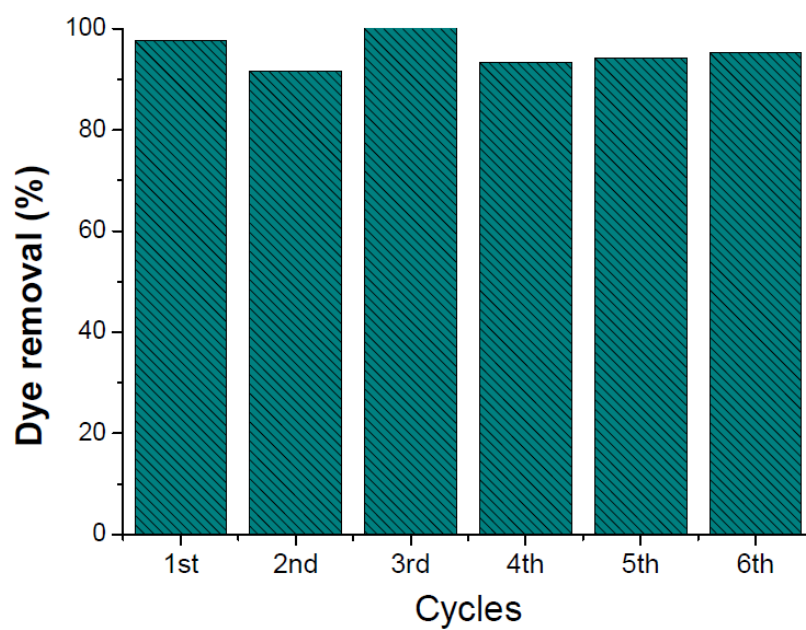


Figure S4. Regenerative photodecomposition (%) of AO7 (1.0×10^{-5} M, pH 6.5) in solution after 90 min irradiation (300 W Xenon lamp), after repeated reaction cycles.