Supporting Information

Figure S1. The original spectrum of the lamp (the pink line) get from Beijing Changtuo Lighting Corporation.

Figure S2. XPS spectra of pure TiO2 and 0.18Pt-TiO2.
Figure S3. UV-VIS diffuse reflectance absorption spectra of pure TiO_2 and 0.18Pt-TiO_2.
Figure S4. ESI spectra of A) 2,6-dichlorohydroquinone (DCHQ) and B) 2,6-dichloro-3-hydroxy-1,4-benzoquinone (DCHB).
Figure S5. UV-VIS absorbance of TCP after 1 hour photoreaction in the presence of 0.18Pt-TiO₂. The absorbance peak around 524 nm indicates the formation of 2,6-dichloro-3-hydroxy-1,4-benzoquinone (DCHB).

Figure S6. ESR determination of TEMP-¹⁰₂ adducts in aqueous solution under 355 nm laser irradiation in the presence of 0.18Pt-TiO₂ and NaN₃.