Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information for

A Ferrocenyl Pyridine-based Ru(II) Arene Complex Capable of Generating ·OH and $^1O_2$ along with Photoinduced Ligand Dissociation

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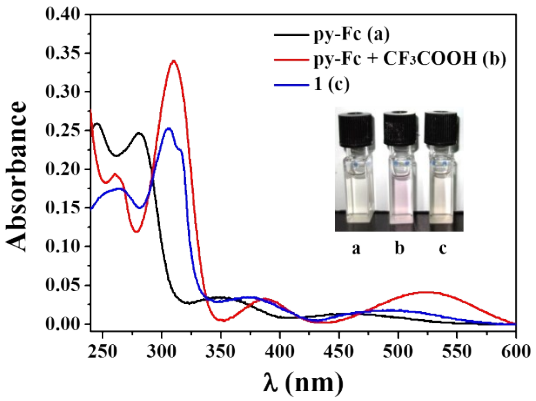

Figure S1. UV-Vis absorption spectra of py-Fc (a), py-Fc + CF_3COOH (b), and **1** (c) (10 μM) in CH_3OH.

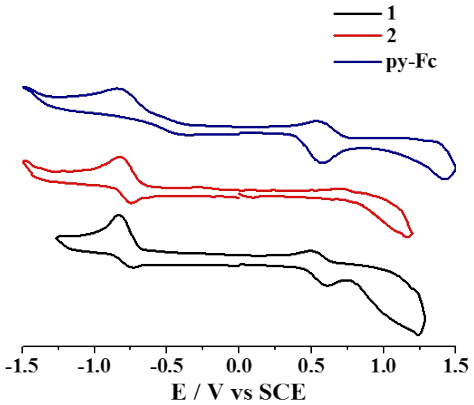

Figure S2. Cyclic voltammograms of **1, 2,** and py-Fc in CH_3OH (0.1 M Bu_4NPF_6, scan rate 50 mV s^{-1}).

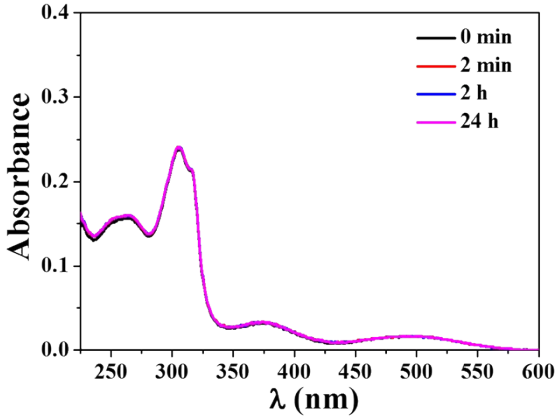

Figure S3. UV-Vis absorption spectra of **1** (10 μM) in CH_3OH standing in the dark for 24 h.

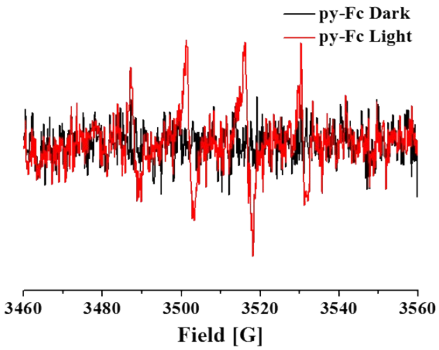

Figure S4. EPR signals of py-Fc (1 mM) and DMPO (50 mM) in air-saturated PBS/CH_3CN (1:1) in the dark and upon irradiation (> 400 nm) for 2 min.

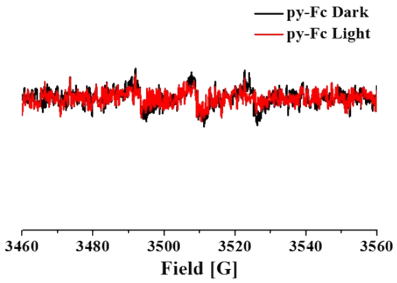

Figure S5. EPR signals of py-Fc (1 mM) and TEMP (50 mM) in air-saturated CH_3CN in the dark or upon irradiation (> 400 nm) for 2 min.

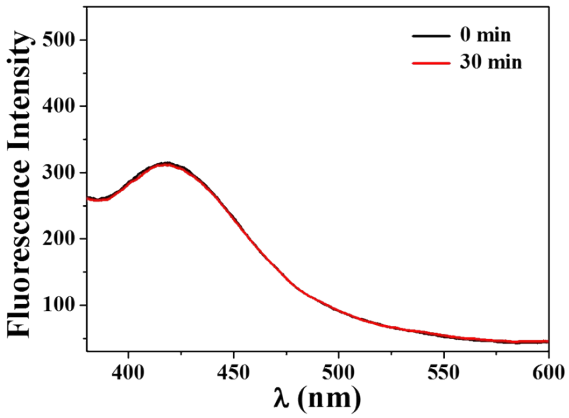

Figure S6. Fluorescence intensity changes of an aqueous solution containing 1 mM TA, 2 mM NaOH, 100 μM **1** and 50 mM KI before and after irradiation at 470 nm (LED light source) for 30 min.

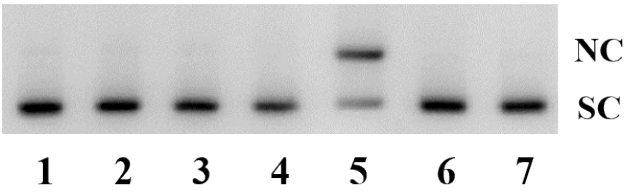

Figure S7. Agarose gel electrophoresis pattern of supercoiled pUC19 plasmid DNA (40 μg/mL) in air-saturated PBS (pH = 7.4, 5 mM) under different conditions. Lane 1, DNA + **2**; Lane 2, DNA + **2** + hv; Lane 3, DNA alone; Lane 4, DNA + **1**; Lane 5, DNA + **1** + hv; Lane 6, DNA + py-Fc; Lane 7, DNA + py-Fc + hv. hv denotes an irradiation (> 400 nm) for 15 min. SC and NC represent supercoiled circular and nicked circular forms, respectively. The concentrations of **1**, **2** and py-Fc are 100 μM.