

**Table S1.** Redox potentials of Zn TPP and 1b-3b in CH<sub>2</sub>Cl<sub>2</sub>.<sup>a</sup>

Porphyrin	Potential (V vs. SCE) <sup>b</sup>				
	E <sub>1/2</sub> <sup>ox</sup> (2)	E <sub>1/2</sub> <sup>ox</sup> (1)	E <sub>1/2</sub> <sup>red</sup> (1)	E <sub>1/2</sub> <sup>red</sup> (2)	ΔE <sub>1/2</sub> (1)
Zn(TPP)	1.12	0.80	-1.40	-1.84	2.20
Zn(TPP(CF <sub>3</sub> ) <sub>4</sub> ) (1b)	1.24	0.92	-0.58	-0.81	1.50
Zn(TPPBr <sub>4</sub> ) (2b)	1.10	0.93	-1.08	-1.30	2.01
Zn(TPP(CH <sub>3</sub> ) <sub>4</sub> ) (3b)	0.83	0.71	-1.50	-	2.21

<sup>a</sup> Experimental conditions: [porphyrin]: 1 mM; [TBAPF<sub>6</sub>]: 0.1 M; scan rate: 0.05 V/s; reference electrode: Ag wire. Potentials were determined by the internal standard of ferrocene/ferrocenium redox couple (0.46 V vs. SCE, CH<sub>2</sub>Cl<sub>2</sub>).

<sup>b</sup> E<sub>1/2</sub><sup>ox</sup> (n) and E<sub>1/2</sub><sup>red</sup> (n) are n th oxidation and reduction potential respectively. ΔE<sub>1/2</sub>(1)= E<sub>1/2</sub><sup>ox</sup> (1)- E<sub>1/2</sub><sup>red</sup> (1); HOMO-LUMO gap.