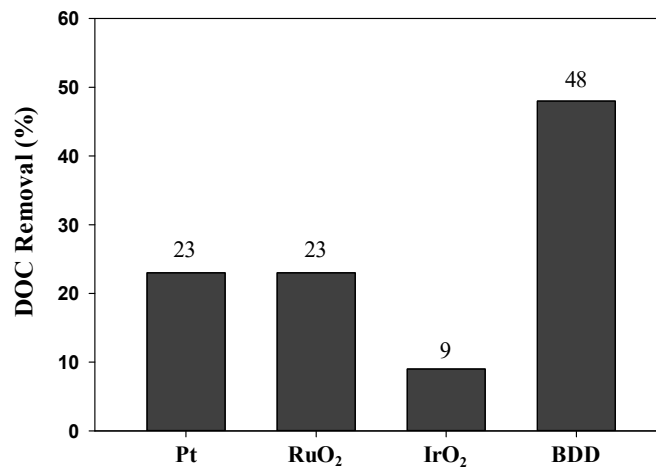
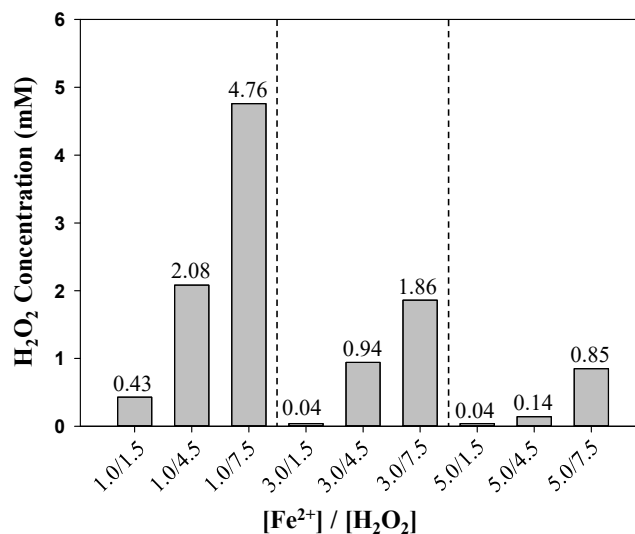




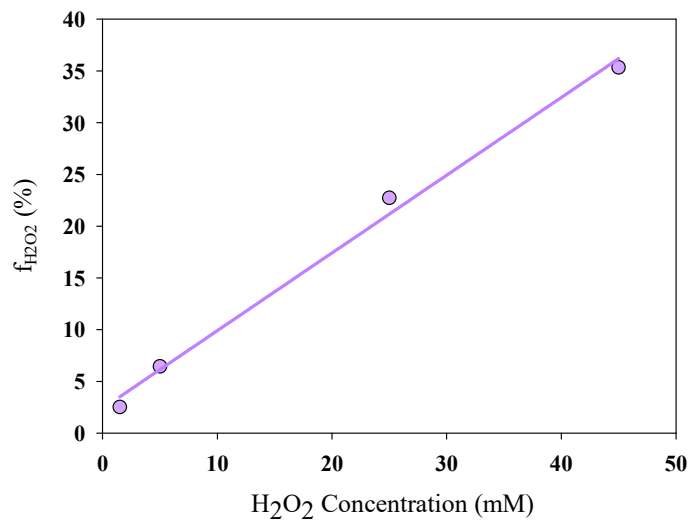
## Supplementary Materials



**Fig. S1.** DOC removal efficiency by anodic oxidation with four different anodes (pH<sub>0</sub>= 7.8, reaction time = 1 h, current density = 20 mA/cm<sup>2</sup>)



**Fig. S2.** Residual H<sub>2</sub>O<sub>2</sub> concentration after the conventional Fenton process (pH<sub>0</sub>=3.0, reaction time = 1 h, [Fe(II)] = 1.0, 3.0, 5.0 mM, [H<sub>2</sub>O<sub>2</sub>] = 1.5, 4.5, 7.5 mM)



**Fig. S3.** Fraction of UV absorption by H<sub>2</sub>O<sub>2</sub> in RO concentrate as a function of H<sub>2</sub>O<sub>2</sub> concentration in RO concentrate:  $f_{\text{H}_2\text{O}_2} (\%) = 100 \cdot (\text{Abs}_{\text{H}_2\text{O}_2+\text{RO}} - \text{Abs}_{\text{RO}}) / \text{Abs}_{\text{H}_2\text{O}_2+\text{RO}}$ , where  $f_{\text{H}_2\text{O}_2}$  is the fraction of UV absorption by H<sub>2</sub>O<sub>2</sub>, and  $\text{Abs}_{\text{H}_2\text{O}_2+\text{RO}}$  and  $\text{Abs}_{\text{RO}}$  are the UV absorbance of the RO concentrate and the RO concentrate with H<sub>2</sub>O<sub>2</sub>, respectively.