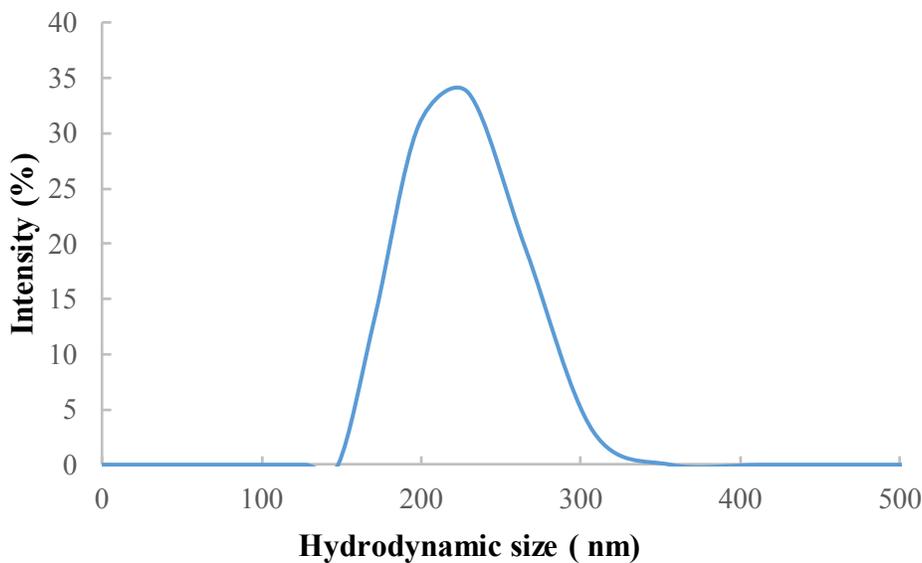
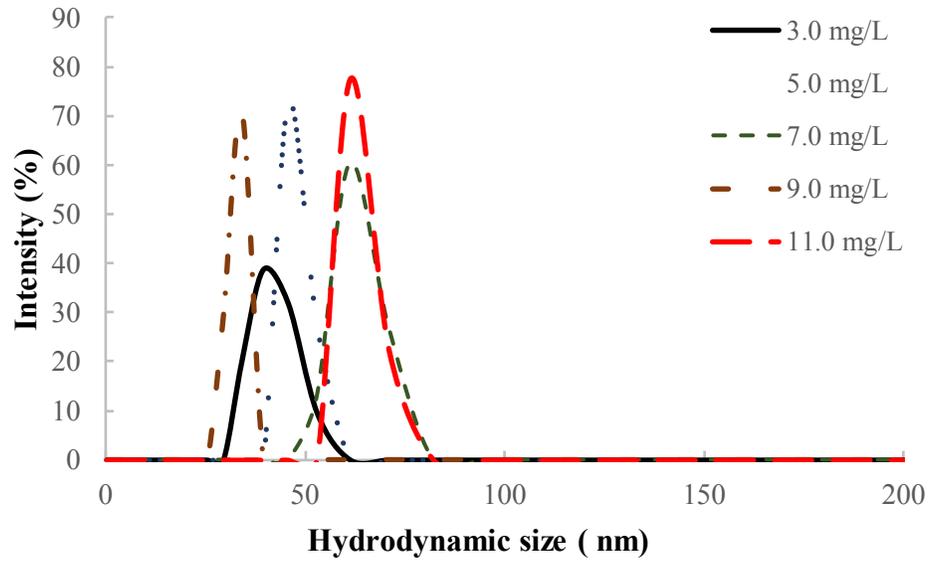


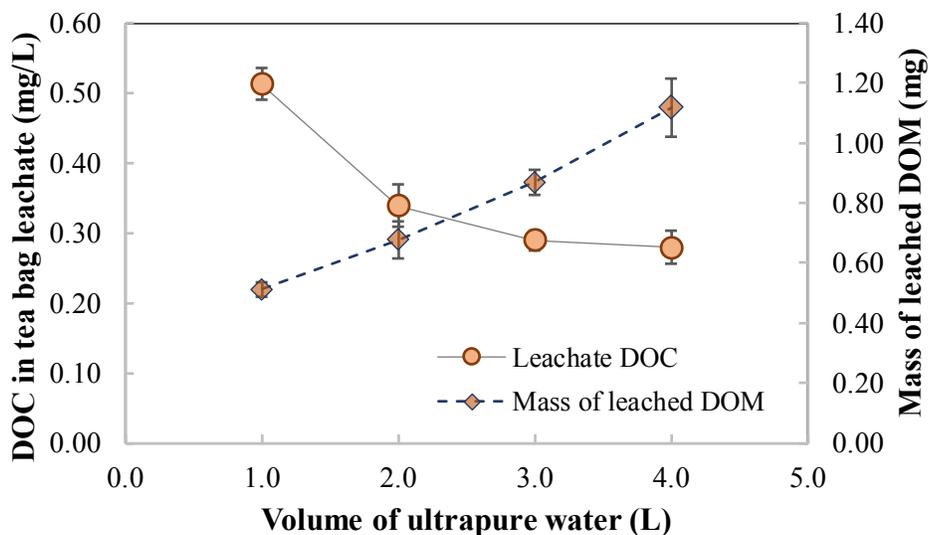
### Supplementary Information



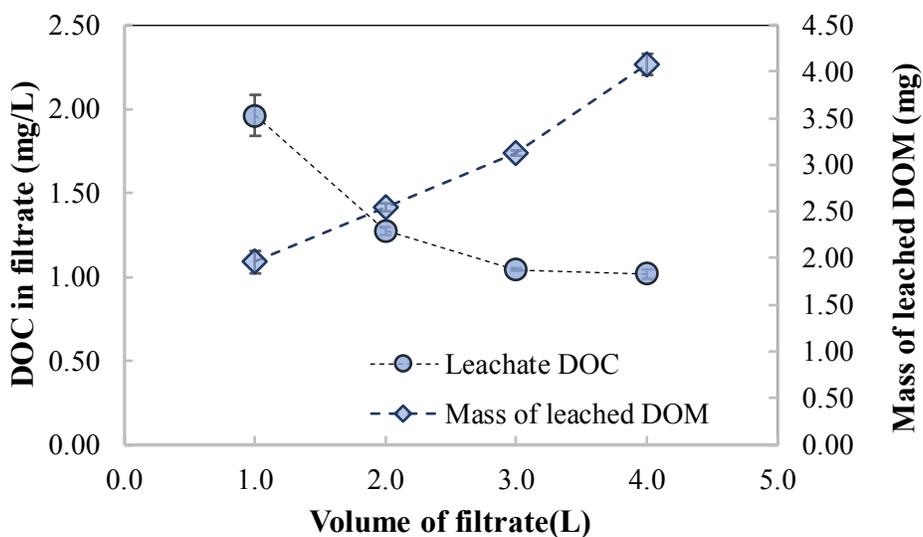
**Figure SI-1** Particle size distribution after filtration for ferrate(VI) treatment alone (Fe(VI) = 5.0 mg/L; initial water quality, turbidity = 3.03 NTU , pH = 7.85, alkalinity = 32 mg/L as CaCO<sub>3</sub>, UV<sub>254</sub> abs. = 0.123 cm<sup>-1</sup>, and DOC = 5.23 mg/L)



**Figure SI-2** Particle size distribution after filtration for the combined Fe(VI) and Fe(III) treatment at different overall Fe doses (Fe(VI):Fe(III) = 1:2, overall Fe doses = 3.0, 5.0, 7.0 9.0,, and 11.0 mg/L; initial water quality, turbidity = 3.03 NTU , pH = 7.85, alkalinity = 32 mg/L as CaCO<sub>3</sub>, UV<sub>254</sub> abs. = 0.123 cm<sup>-1</sup>, and DOC = 5.23 mg/L)



**Figure SI-3** DOC in tea bag leachate and total mass of leached DOM vs. initial water volume (1 tea bag was kept in a specific volume of Milli-Q<sup>®</sup> ultrapure water for 1 min)



**Figure SI-4** Filtrate DOC and total mass of leached DOM vs. filtrate volume for filtration of ultrapure water using coffee filters (Milli-Q<sup>®</sup> ultrapure water passed through a funnel with five overlapped pieces of coffee filter paper)