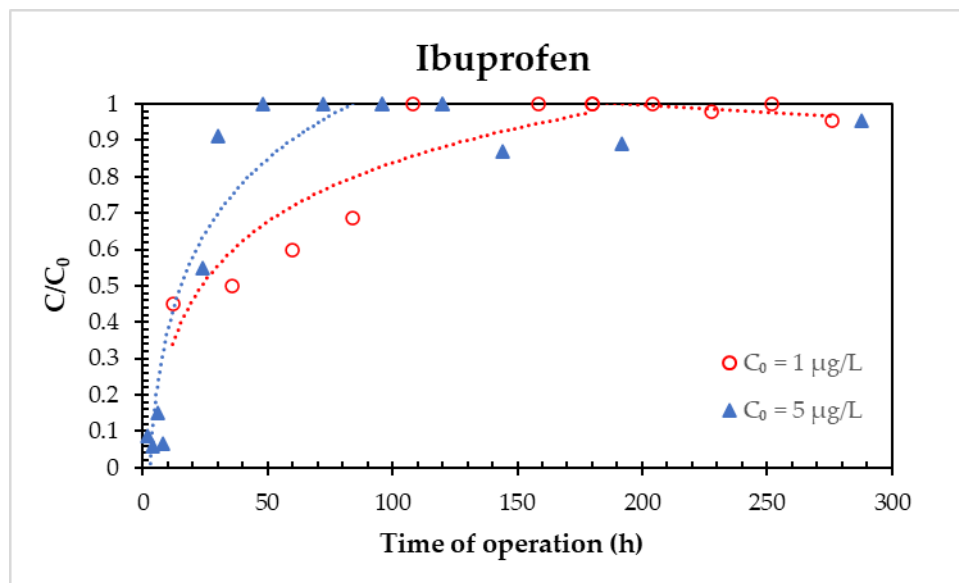
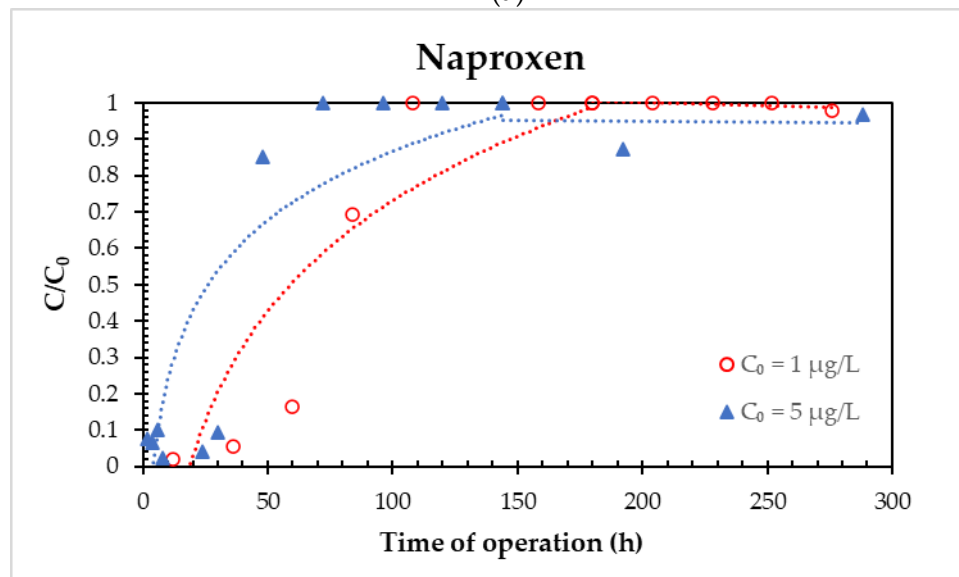


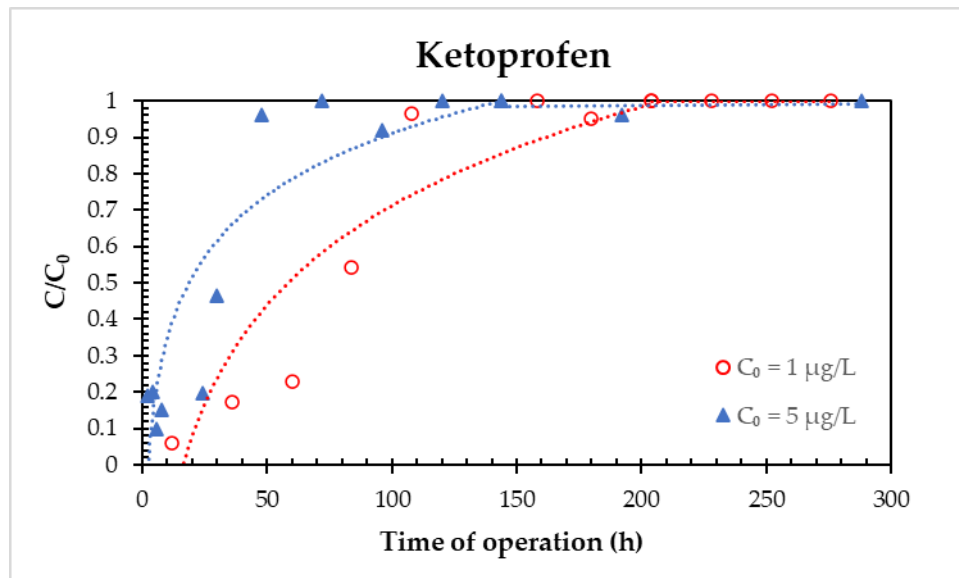
Supplementary Material



(a)

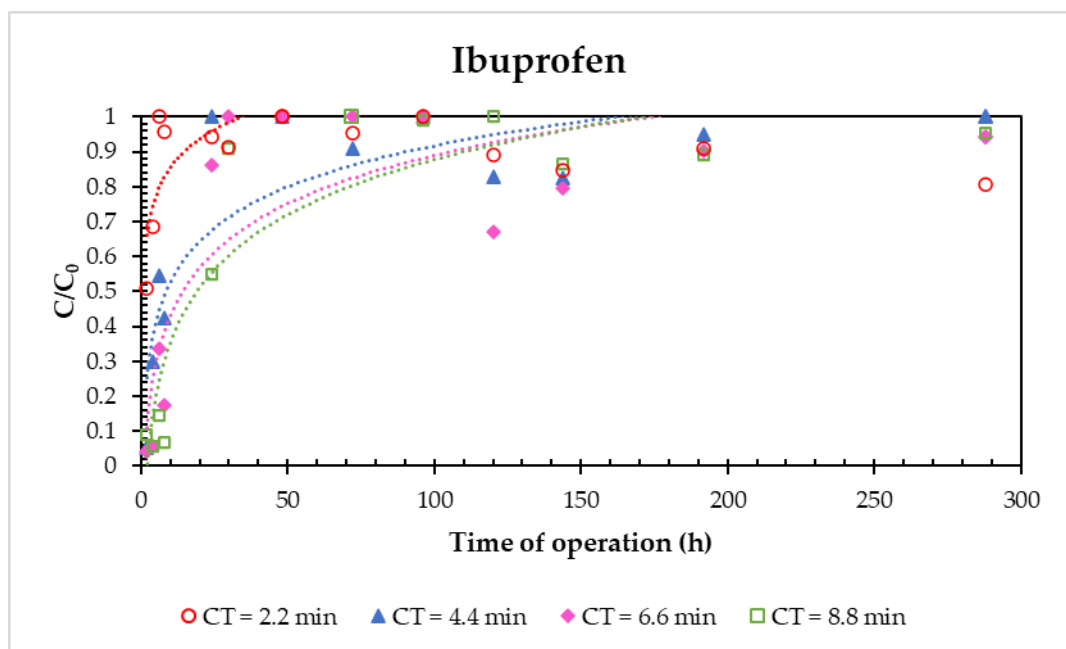


(b)

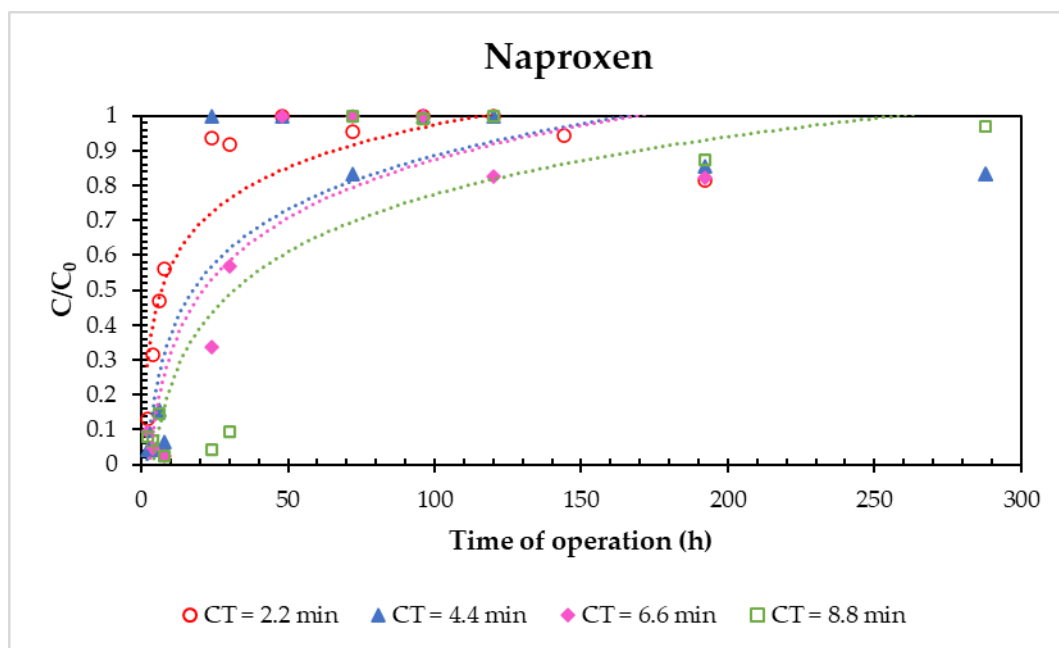


(c)

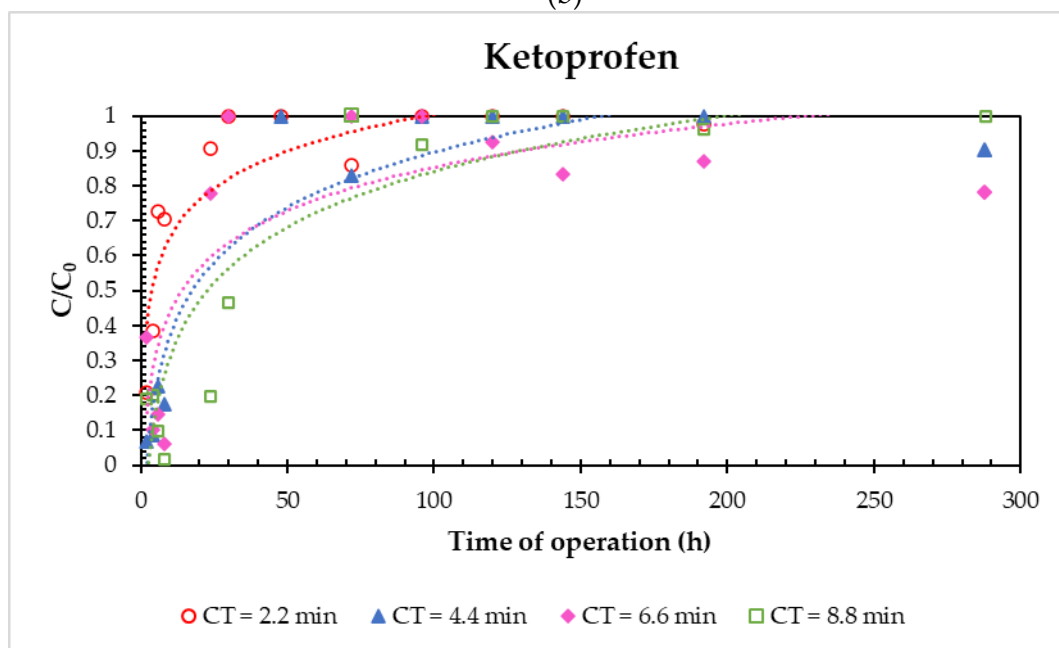
**Figure S1.** Effect of initial concentration on the removal efficiency of Ibuprofen (a), Naproxen (b) and Ketoprofen (c) ( $Q = 26 \text{ L/d}$ ,  $CT = 8.8 \text{ min}$ , no pH adjustment).



(a)

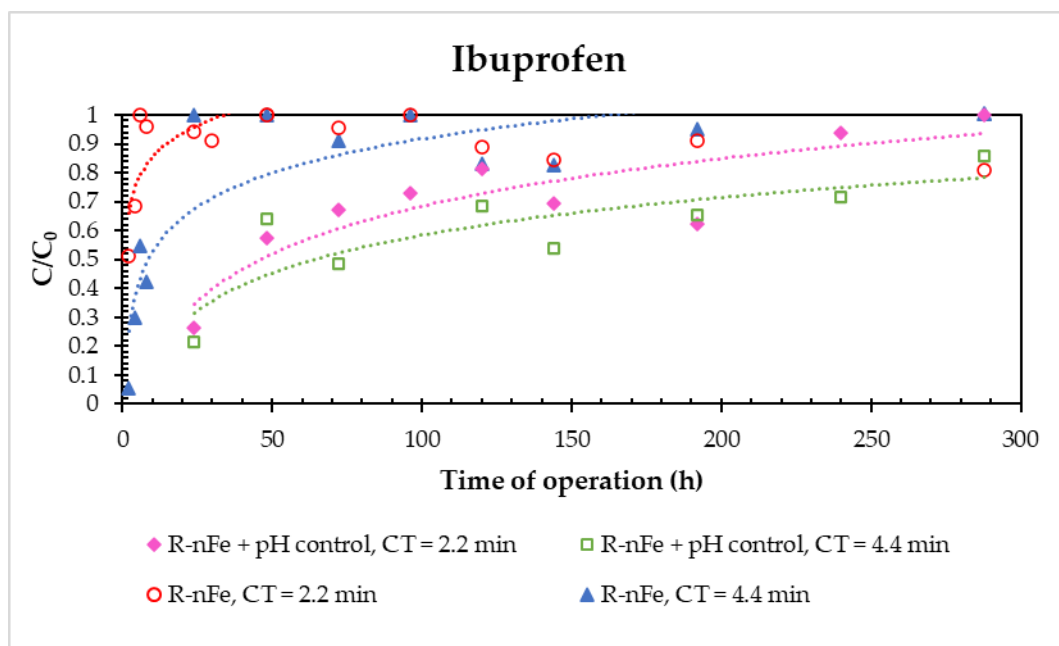


(b)

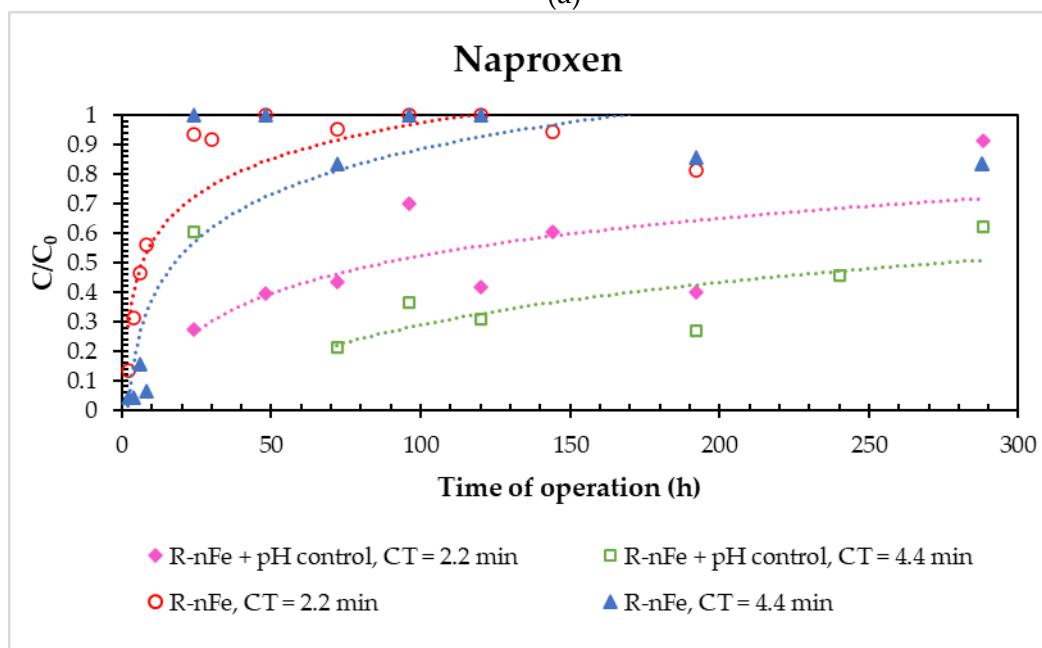


(c)

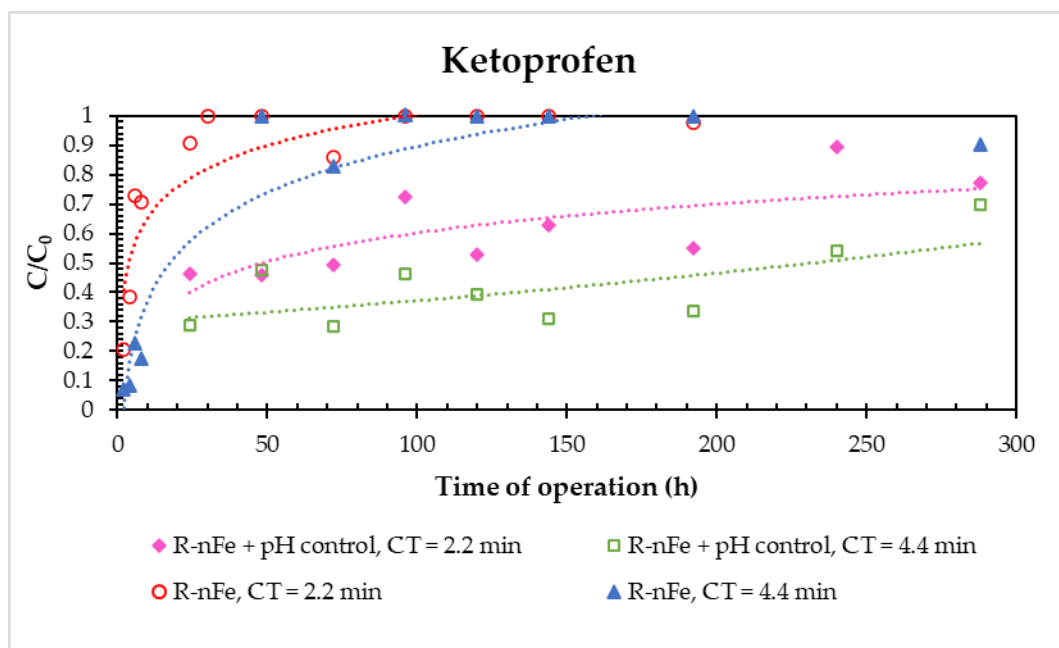
**Figure S2.** Effect of contact time on the removal efficiency of Ibuprofen (a), Naproxen (b) and Ketoprofen (c) ( $Q = 26$  L/d,  $C_0 = 5$   $\mu$ g/L, no pH adjustment).



(a)

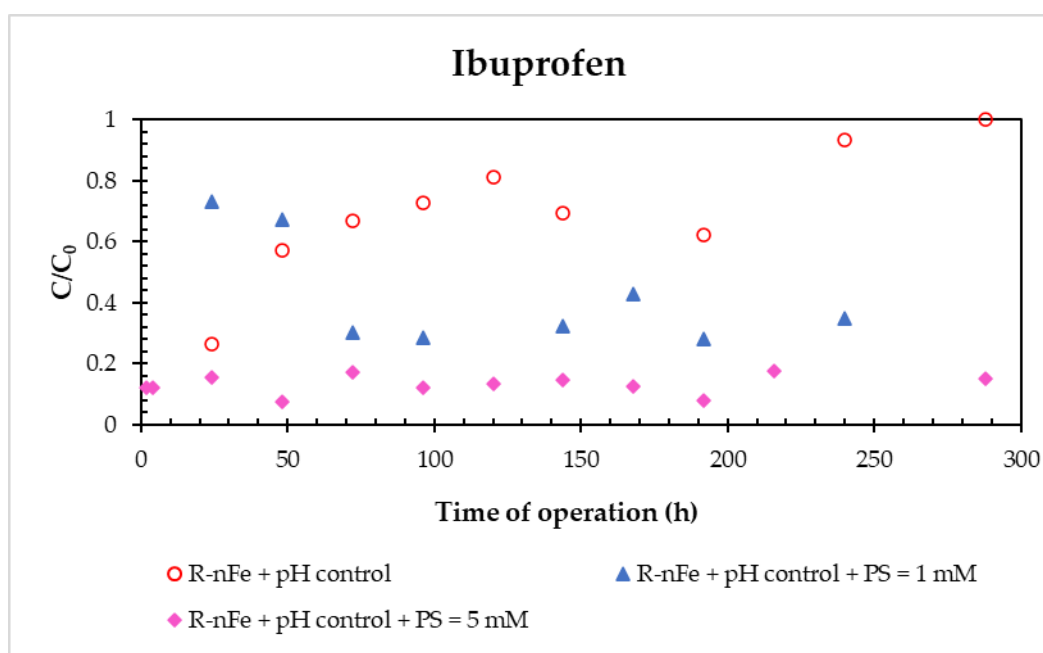


(b)

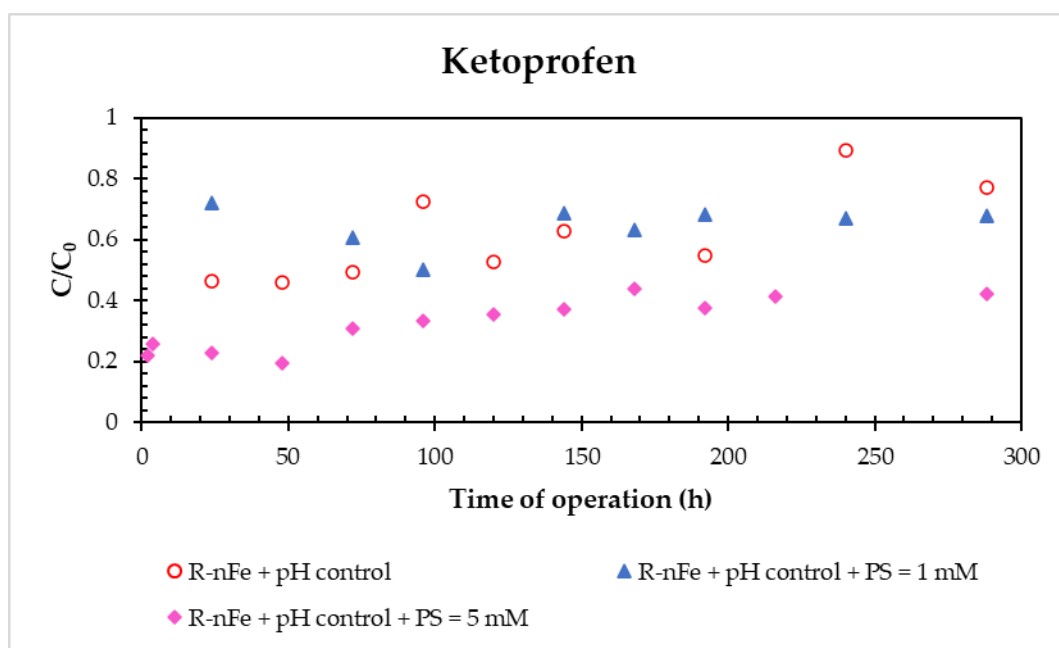
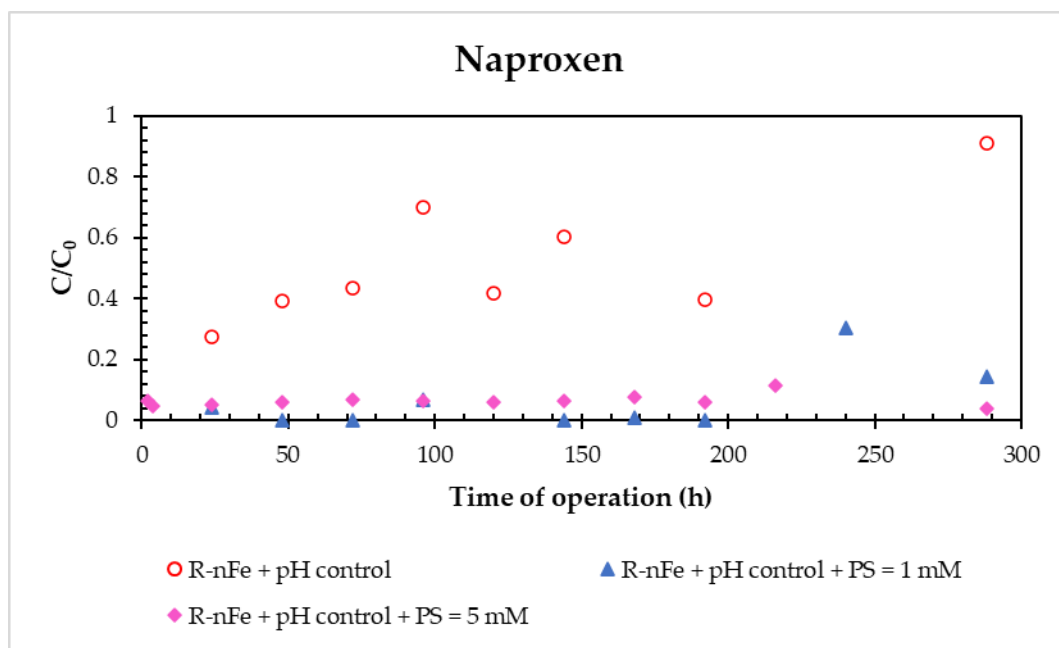


(c)

**Figure S3.** Effect of pH adjustment of the influent matrix to acidic values (approximately 3.5) and effect of contact time under acidic conditions on the removal efficiency of Ibuprofen (a), Naproxen (b) and Ketoprofen (c) ( $Q = 26$  L/d,  $C_0 = 5$   $\mu$ g/L).



(a)



**Figure S4.** Effect of persulfate dose at controlled pH of the influent matrix to 3.5 on the removal efficiency of Ibuprofen (a), Naproxen (b) and Ketoprofen (c) (Qwastewater = 26 L/d, Qpersulfate solution = 1.2 L/d, C<sub>0</sub> = 5 µg/L).