

Table S1. Experimental setup

Catalysts [mg/L]	Hydrogen peroxide/chemical oxygen demand ratio [H ₂ O ₂ /COD]			
250/750 magnetite or hematite / Fe ⁰	1:1	2:1	4:1	8:1
500/500 magnetite or hematite / Fe ⁰	1:1	2:1	4:1	8:1
750/250 magnetite or hematite / Fe ⁰	1:1	2:1	4:1	8:1
1000 magnetite or hematite	1:1	2:1	4:1	8:1
1000 Fe ⁰	0.5:1	1:1	2:1	4:1

Table S2. Two-way analysis of variance without replications for UV/Fe₃O₄/Fe⁰ process, 250 mg/750 mg/L Fe₃O₄/Fe⁰ catalyst doses, 1:1 H₂O₂/COD mass ratio and 120min process time

Summary	Count	Sum	Mean	Variance		
Row 1	4	585.6	146.4	0		
Row 2	4	321.84	80.46	8.7966		
Row 3	4	307.92	76.98	2.647867		
Row 4	4	266.07	66.5175	93.53223		
Row 5	4	224.97	56.2425	322.4438		
Column 1	5	391.27	78.254	1774.921		
Column 2	5	412.6	82.52	1426.37		
Column 3	5	445.71	89.142	1039.767		
Column 4	5	456.82	91.364	966.3515		
VARIANCE ANALYSIS						
Source of variance	SS	df	MS	F	p-value	F-Test
Rows	20091.91	4	5022.977	81.70412	1.34E-08	3.259167
Columns	544.5299	3	181.51	2.952455	0.075549	3.490295
Error	737.7317	12	61.47764			
Total	21374.17	19				