



SUPPLEMENTARY MATERIAL TO

Cost-effective method of simultaneous removal of copper and phosphate on environmentally friendly nanomaterial

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Table S-I. DSD experimental design layout

Run	Metal concentration	Ion concentration	pH	nZVI concentration
1	9	9	10	9
2	1	1	2	9
3	1	5	10	16
4	9	5	2	2
5	5	1	2	16
6	5	9	10	2
7	1	9	6	16
8	9	1	6	2
9	9	9	2	16
10	1	1	10	2
11	9	1	10	16
12	1	9	2	2
13	5	5	6	9
14	9	9	10	9
15	1	1	2	9
16	1	5	10	16
17	9	5	2	2
18	5	1	2	16
19	5	9	10	2
20	1	9	6	16
21	9	1	6	2
22	9	9	2	16
23	1	1	10	2
24	9	1	10	16

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25	1	9	2	2
26	5	5	6	9
27	5	5	6	9
28	5	5	6	9

Table S-II. Process efficiency (%) in copper and phosphate removal

Proba	Copper	Phosphate
1	86,87	76,10
2	76,16	74,60
3	97,05	62,70
4	62,23	78,77
5	36,11	84,40
6	91,43	83,18
7	98,64	92,80
8	93,25	69,56
9	86,73	77,16
10	75,99	73,60
11	2,25	88,61
12	98,57	85,90
13	86,30	80,26
14	89,68	73,73
15	80,87	81,10
16	96,79	54,70
17	68,24	77,44
18	39,33	83,60
19	91,15	84,18
20	98,77	88,80
21	93,74	68,86
22	89,04	78,29
23	86,87	68,60
24	7,72	89,01
25	98,98	91,50
26	87,94	79,76
27	89,34	80,44
28	88,67	80,26

Table S-III. ANOVA and "Lack of fit" test (copper and phosphate)

Source	^a DF	^b SS	^c MS	F - parametar	Verovatnoća > F
<i>Copper</i>					
Model	7	15844,545	2263,510	17,364	<0,0001*
Error	20	2607,083	130,350		
C. Total	27	18451,628			
<i>Phosphate</i>					
Model	8	1322,7549	165,344	4,414	0,0038*
Error	19	711,7533	37,461		
C. Total	27	2034,5083			

^aDegrees of freedom; ^bThe sum of square; ^cVariance (mean of square)