

Table S1 The obtained parameters for the adsorption kinetics, isotherms, and thermodynamics of the IC sorption on the BiOI nanoparticles.

Adsorption rate order						
	PSFO			PSSO		
qe exp. (mg g ⁻¹)	qe cal. (mg g ⁻¹)	R ²	k ₁ (min ⁻¹)	qe cal. (mg g ⁻¹)	R ²	k ₂ (g mg ⁻¹ min ⁻¹)
38.400	46.282	0.948	0.053	4.348	0.873	1.553
Adsorption rate control mechanism						
Intra particle diffusion model				Liquid film diffusion model		
k _{ip} (mg g ⁻¹ min ^{-1/2})	R ²	Ci (mg g ⁻¹)	K _{LF} (min ⁻¹)		R ²	
4.367	0.965	0.533	0.053		0.948	
Adsorption isotherms						
Langmuir			Freundlich			
R ²	K _L	q _m	R ²	K _f	1/n	
0.943	120.165	0.040	0.878	0.182	1.125	
Thermodynamic parameters						
Fed conc. (mg L ⁻¹)	ΔH° (kJmol ⁻¹)	ΔS° (kJmol ⁻¹)	ΔG° (kJmol ⁻¹) 298 K	ΔG° (kJmol ⁻¹) 308 K	ΔG° (kJmol ⁻¹) 318 K	
10	-33.477	-0.105	-2.283	-1.237	-0.190	
25	-80.596	-0.263	-2.253	0.375	3.004	
50	-115.170	-0.372	-4.436	-0.720	2.996	
100	-104.915	-0.343	-2.716	0.713	4.143	