

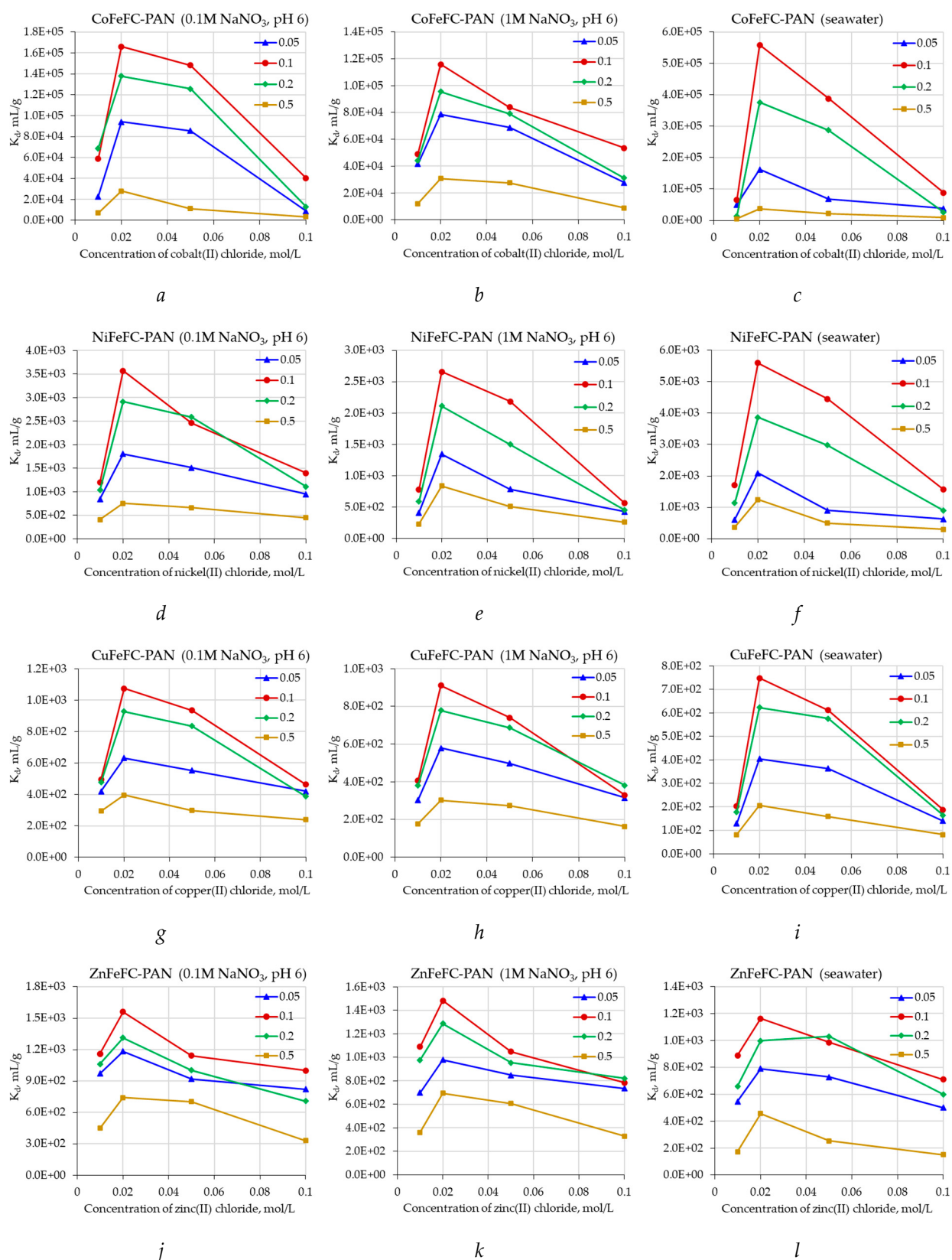
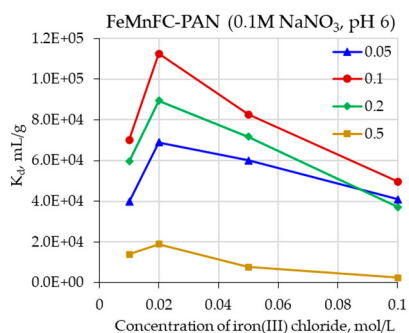
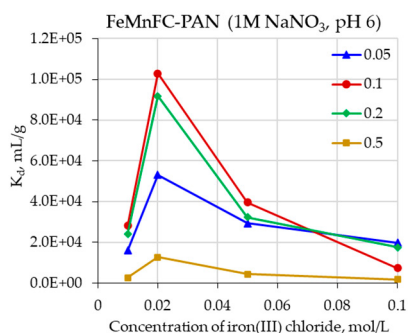


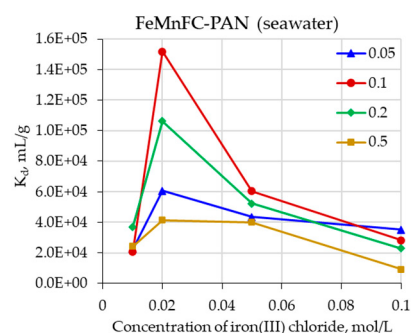
Figure S1. Dependence of cesium distribution coefficients upon sorption from 0.1 (a, d, g, j) and 1 mol/L (b, e, h, k) solutions of sodium nitrate with pH 6 and seawater (c, f, i, l) on the concentration of potassium ferrocyanide (0.05 (▲), 0.1 (●), 0.2 (◆), 0.5 (■)) and the concentration of the transition metal salt used in the preparation of sorbents: (a–c) – CoFeFC-PAN, (d–f) – NiFeFC-PAN, (g–i) – CuFeFC-PAN, (j–l) – ZnFeFC-PAN.



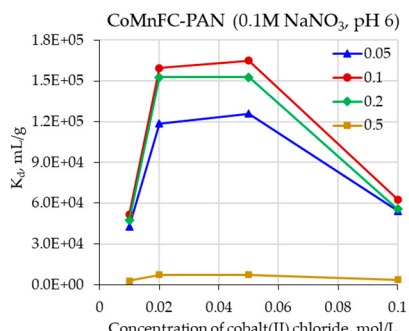
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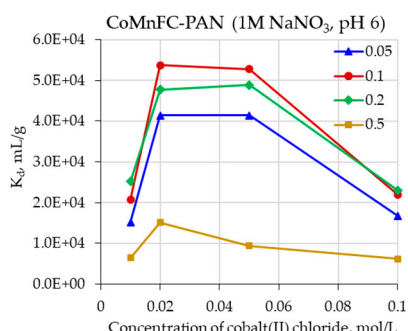
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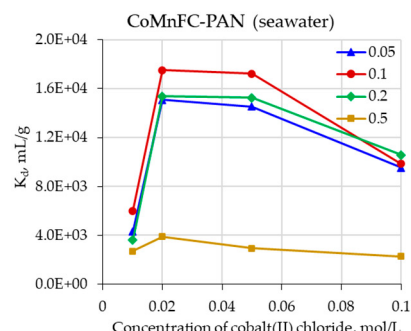
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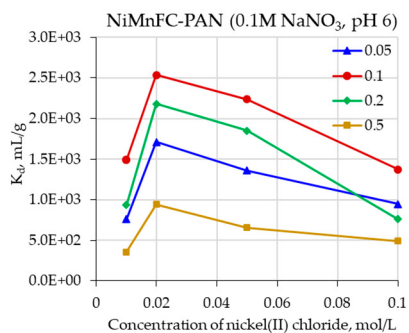
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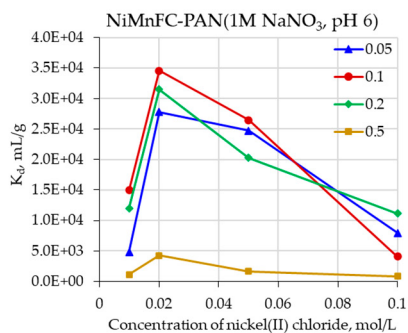
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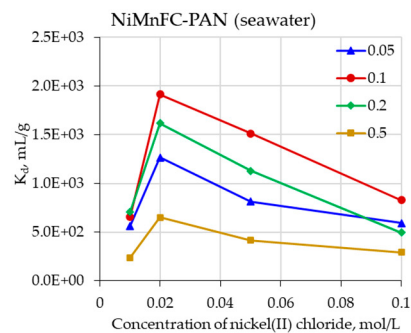
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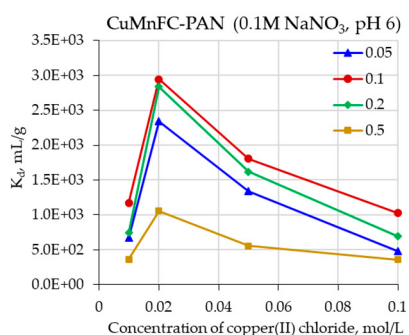
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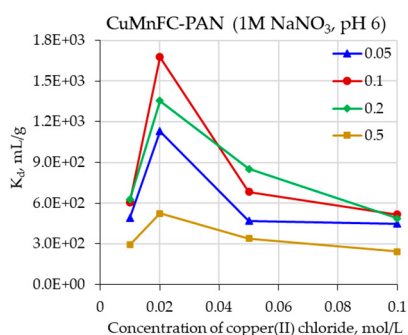
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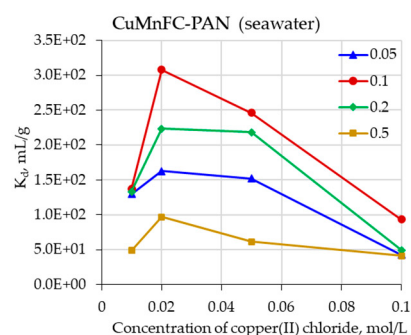
i



j



k



l

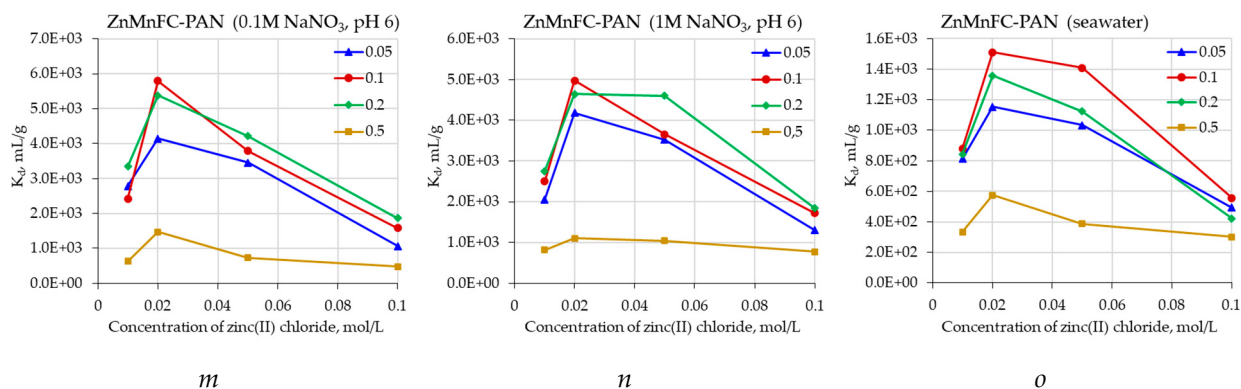


Figure S2. Dependence of cesium distribution coefficients upon sorption from 0.1 (a, d, g, j, m) and 1 mol/L (b, e, h, k, n) solutions of sodium nitrate with pH 6 and seawater (c, f, i, l, o) on the concentration of potassium ferrocyanide (0.05 (▲), 0.1 (●), 0.2 (◆), 0.5(■)) and the concentration of the transition metal salt used in the preparation of sorbents: (a–c) – FeMnFC-PAN, (d–f) – CoMnFC-PAN, (g–i) – NiMnFC-PAN, (j–l) – CuMnFC-PAN, (m–o) – ZnMnFC-PAN.

Table S1. Cesium distribution coefficients during sorption from a 0.1 mol/l sodium nitrate solution with pH 6 and seawater depending on synthesis temperatures at the first and second stages of the synthesis of several sorbents.

Sorbent	t_1 , °C	t_2 , °C					
		0.1 mol/L NaNO ₃ , pH 6			Seawater		
		25	50	80	25	50	80
CoFeFC-PAN	25	$(1.7 \pm 0.2) \times 10^5$	$(1.6 \pm 0.3) \times 10^5$	$(1.8 \pm 0.4) \times 10^5$	$(5.6 \pm 0.5) \times 10^5$	$(5.8 \pm 0.5) \times 10^5$	$(5.7 \pm 0.6) \times 10^5$
	50	$(1.8 \pm 0.3) \times 10^5$	$(1.9 \pm 0.3) \times 10^5$	$(1.7 \pm 0.2) \times 10^5$	$(5.3 \pm 0.6) \times 10^5$	$(5.4 \pm 0.6) \times 10^5$	$(5.5 \pm 0.7) \times 10^5$
	80	$(1.6 \pm 0.2) \times 10^5$	$(1.8 \pm 0.2) \times 10^5$	$(1.7 \pm 0.3) \times 10^5$	$(5.4 \pm 0.6) \times 10^5$	$(5.6 \pm 0.7) \times 10^5$	$(5.8 \pm 0.6) \times 10^5$
NiFeFC-PAN	25	$(3.6 \pm 0.3) \times 10^3$	$(3.8 \pm 0.6) \times 10^3$	$(3.6 \pm 0.4) \times 10^3$	$(5.5 \pm 0.4) \times 10^3$	$(5.7 \pm 0.5) \times 10^3$	$(5.6 \pm 0.6) \times 10^3$
	50	$(3.4 \pm 0.4) \times 10^3$	$(3.5 \pm 0.5) \times 10^3$	$(3.5 \pm 0.3) \times 10^3$	$(5.2 \pm 0.7) \times 10^3$	$(5.5 \pm 0.6) \times 10^3$	$(5.8 \pm 0.8) \times 10^3$
	80	$(3.4 \pm 0.6) \times 10^3$	$(3.6 \pm 0.5) \times 10^3$	$(3.7 \pm 0.6) \times 10^3$	$(5.4 \pm 0.5) \times 10^3$	$(5.3 \pm 0.8) \times 10^3$	$(5.4 \pm 0.4) \times 10^3$
FeMnFC-PAN	25	$(1.1 \pm 0.2) \times 10^5$	$(1.3 \pm 0.2) \times 10^5$	$(1.3 \pm 0.3) \times 10^5$	$(1.5 \pm 0.2) \times 10^5$	$(1.5 \pm 0.3) \times 10^5$	$(1.4 \pm 0.2) \times 10^5$
	50	$(1.2 \pm 0.3) \times 10^5$	$(1.0 \pm 0.2) \times 10^5$	$(1.2 \pm 0.2) \times 10^5$	$(1.4 \pm 0.3) \times 10^5$	$(1.7 \pm 0.3) \times 10^5$	$(1.6 \pm 0.1) \times 10^5$
	80	$(1.2 \pm 0.1) \times 10^5$	$(1.1 \pm 0.1) \times 10^5$	$(0.9 \pm 0.3) \times 10^5$	$(1.6 \pm 0.3) \times 10^5$	$(1.4 \pm 0.2) \times 10^5$	$(1.7 \pm 0.3) \times 10^5$
CoMnFC-PAN	25	$(1.6 \pm 0.1) \times 10^5$	$(1.5 \pm 0.2) \times 10^5$	$(1.7 \pm 0.2) \times 10^5$	$(1.8 \pm 0.2) \times 10^4$	$(1.7 \pm 0.2) \times 10^4$	$(1.7 \pm 0.1) \times 10^4$
	50	$(1.7 \pm 0.2) \times 10^5$	$(1.7 \pm 0.3) \times 10^5$	$(1.6 \pm 0.1) \times 10^5$	$(1.8 \pm 0.3) \times 10^4$	$(1.7 \pm 0.1) \times 10^4$	$(1.8 \pm 0.3) \times 10^4$
	80	$(1.6 \pm 0.2) \times 10^5$	$(1.5 \pm 0.3) \times 10^5$	$(1.7 \pm 0.3) \times 10^5$	$(1.6 \pm 0.3) \times 10^4$	$(1.6 \pm 0.2) \times 10^4$	$(1.7 \pm 0.2) \times 10^4$
NiMnFC-PAN	25	$(2.5 \pm 0.3) \times 10^3$	$(2.5 \pm 0.4) \times 10^3$	$(2.3 \pm 0.3) \times 10^3$	$(1.9 \pm 0.2) \times 10^3$	$(1.8 \pm 0.3) \times 10^3$	$(1.8 \pm 0.3) \times 10^3$
	50	$(2.6 \pm 0.4) \times 10^3$	$(2.4 \pm 0.2) \times 10^3$	$(2.4 \pm 0.2) \times 10^3$	$(2.0 \pm 0.4) \times 10^3$	$(1.9 \pm 0.1) \times 10^3$	$(1.9 \pm 0.2) \times 10^3$
	80	$(2.4 \pm 0.2) \times 10^3$	$(2.3 \pm 0.3) \times 10^3$	$(2.5 \pm 0.2) \times 10^3$	$(1.9 \pm 0.1) \times 10^3$	$(2.1 \pm 0.3) \times 10^3$	$(2.0 \pm 0.3) \times 10^3$