

Supporting Information:

The ion exchange capacity of polyaniline-Sn(IV)iodophosphate nanocomposite calculated for different alkali and alkaline earth metal ions using standard column method shows the following results

Table : Ion exchange capacity of PANI-SnIP nanocomposite for different alkali and alkaline earth metal ions.

Exchanging ions	pH of the metal solutions	Salt used	Ionic radii (Å)	Hydrated ionic radii (Å)	Ion exchange capacity (meq/g)
Li ⁺	6.80	LiNO ₃	0.68	3.40	0.76
Na ⁺	6.80	NaNO ₃	0.97	2.76	1.20
K ⁺	6.70	KNO ₃	1.33	2.32	1.48
Mg ²⁺	6.30	Mg(NO ₃) ₂	0.78	7.00	1.32
Ca ²⁺	6.20	Ca(NO ₃) ₂	1.06	6.30	1.50
Sr ²⁺	6.60	Sr(NO ₃) ₂	1.27	6.10	1.58
Ba ²⁺	5.90	Ba(NO ₃) ₂	1.43	5.90	1.72