

The active transport of ions of rare-earth elements, alkali metals, Al(III), and Mg(II) with new lipophilic N, N - bis[(dihexylphosphoryl)methyl] octylamine

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Abstract

The Active Transport of Ions of Rare-Earth Elements, Alkali Metals, Al(III) and Mg(II) with N,N-Bis[(dihexylphosphoryl)methyl]octylamine was studied. It is found that with the selected reagent the flow of ions Sr(II) and Nd(III) is several times higher than the flow of ions Al(III) and Mg(II). Also, the mixtures of bis(aminophosphoryl) reagent and mono-/dithiophosphoric acids show evidence for synergistic effects with high selectivity when used for the extraction of Li(I). © 2013 Copyright Taylor and Francis Group, LLC.

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Keywords

Active transport, aminophosphine oxide, rare earth