

The uptake of Cr(III) in the presence of Mn(II) during growth of Arthrobacter species. / E. Gelagutashvili, A. Rcheulishvili. / Nano Studies. – 2015. – # 11. – pp. 207-210. – eng.

The uptake of Cr(III) by Arthrobacter species (Arthrobacter globiformis 151B and Arthrobacter oxidans 61) were studied without and in the presence of Mn(II) ions during growth of Arthrobacter species using simultaneous application dialysis and atomic absorption analysis. It was shown, that when added Cr(III) concentration is increased, the interaction of Cr(III) with Arthrobacter species are increased too and approximately it is equal to 10^{13} atom Cr per Arthrobacter species. It was shown, that biosorption characteristics did not change in the presence of Mn(II) ions during growth of Arthrobacter species. This means, that Mn(II) did not significantly affect the biosorption of Cr(III) ion-Arthrobacter species, i.e. Mn(II) essentially did not displace Cr(III) from bacteria. Fig. 2, Tab. 1, Ref. 12.

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