

عنوان مقاله:

A comparison of biosorptive capacity of loofa-sponge and immobilized Phanerochaete chrysosporium in biosorption of Pb (II) and Cd (II) from aqueous solution

محل انتشار:

ينجمين كنگره بين المللي مهندسي شيمي (سال: 1386)

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خلاصه مقاله:

Immobilized Phanerchaete chrysosporium was used to remove Pb (II) and Cd (II) from aqueous solution. The mean amount of loofa sponge-immobilized biomass of P.chrysosporium was obtained 419mgg -1 of dry loofa sponge. The biosorbent was used to remove Pb (II) and Cd (II) with contact time of 5 to 120 min. Biosorption equilibrium was obtained at 60 min for both metal ions with the maximum up take of 91 mgg -1 for Pb (II) and 63 mgg -1 for Cd (II) by immobilized Phanerochaete chrysosporium and 22 mgg -1 for Pb (II) and 16 mgg -1 for Cd (II) by loofa sponge. The biosorption capacity of immobilized Phanerochaete chrysosporium was about fourfold higher than loofa sponge in .both metal ions

كلمات كليدى:

Cadmium; Lead; Phanerochaete chrysosporium; Wastewater; Biosorption

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