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Abstract

An activity-tunable biocatalyst for *Nannochloropsis* sp. cell-walls degradation was prepared by co-immobilization of cellulase and lysozyme on the surface of amino-functionalized magnetic nanoparticles (MNPs) employing glutaraldehyde. The competition between cellulase and lysozyme during immobilization was caused by the limited active sites of the MNPs. The maximum recovery of activities (cellulase: 78.9% and lysozyme: 69.6%) were achieved due to synergistic effects during dual-enzyme

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