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Mechanism study of intracellular zinc oxide nanocomposites formation

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Graphical abstract



Abstract

This work present a study of the zinc oxide nanocomposites intracellular synthesis by lactic acid bacteria. The kinetic processes on the ZnO biocolloids interface are described as well. The kinetic data showed that the process of ZnO NPs formation is expressed with an initial rapid stage and after that the system undergoes to the equilibrium with the efficiency of the process of about 85 ± 1.59 %. The biosynthesis has been studied by a number of the instrumental methods such as the spectroscopy approach (ultraviolet-visible and Fourier

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