k-Generalized Ψ-Hilfer differential equations in Banach spaces

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April 3, 2021

Abstract

In this paper, we prove some existence and Ulam-Hyers-Rassias stability results for a class of initial value problem for implicit nonlinear fractional differential equations and generalized Ψ-Hilfer fractional derivative in Banach spaces. The results are based on fixed point theorems of Darbo and Monch associated with the technique of measure of noncompactness. Illustrative examples are the subject of the last section.

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