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Some existence results for fractional integro-differential equations with nonlinear conditions

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Abstract

This paper studies some existence and uniqueness results in a Banach space for a fractional integro-differential equation with nonlinear condition $(t) = f(t, x(t)) + \int_0^t k(t, s, x(s)) ds$, $t \in [0, T]$, $0 < q < 1$, $x(0) = x_0 - g(x)$. The contraction mapping principle and Krasnoselskii's fixed point theorem are employed to establish the results. © Dynamic Publishers, Inc.

Author Keywords

Contraction principle; Fractional integro-differential equations; Krasnoselskii's fixed point theorem.

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