Monotone iterative method for ψ-Caputo fractional differential equations with nonlinear boundary conditions

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Abstract

In this research article, by the utilize of the well-known monotone iterative technique along with the technique of upper and lower solutions, we investigate the existence of extremal solutions for a new category of nonlinear fractional differential equations involving a novel Caputo version so-called }${\footnotesize \psi }$% {\footnotesize –Caputo fractional derivative with nonlinear boundary conditions. As an application of this work, two pertinent examples are offered to highlight our theoretical results.

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