Existence of solutions for impulsive fractional integrodifferential equations involving Gronwall's inequality in Banach spaces

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ABSTRACT.

In this paper, we study boundary value problems for impulsive fractional integrodifferential equations involving Caputo derivative in Banach spaces. A generalized singular type Gronwall inequality is given to obtain an important priori bounds. Some sufficient conditions for the existence solutions are established by virtue of fractional calculus and fixed point method under some mild conditions.

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