cases	doc_1	doc_2	decision	id
			NOT DUPLICATES	530

doc_1

authors	• A. Ardjouni • A. Djoudi
title	EXISTENCE OF POSITIVE PERIODIC SOLUTIONS FOR TWO KINDS OF NONLINEAR NEUTRAL DIFFERENTIAL EQUATIONS WITH VARIABLE DELAY
publication_date	None
source	SupportedSources.SEMANTIC_SCHOLAR
journal	
volume	
doi	
urls	• https://www.semanticscholar.org/paper/f668ff71ee7ddcdfff55efc899a6f8cf31766976
id	id-6912237984354180230
abstract	In this article we study the existence for of positive periodic solutions for kinds of nonlinear neutral differential equations with variable delay. The main tool employed here is the Krasnoselskii's hybrid fixed point theorem dealing with a sum of two mappings, one is a contraction and the other is completely continuous. The results obtained here generalize the work of Luo, Wang and Shen (13).
versions	

doc_2

authors	• A. Ardjouni • A. Djoudi
title	Existence of periodic solutions for first-order totally nonlinear neutral differential equations with variable delay
publication_date	None
source	SupportedSources.SEMANTIC_SCHOLAR
journal	
volume	55
doi	
urls	• https://www.semanticscholar.org/paper/f24270bd490a57d872c945f1ac076f75dd2a366c
id	id-3454279600008381480
abstract	We use a modification of Krasnoselskii's fixed point theorem due to Burton (see [Liapunov functionals, fixed points and stability by Krasnoselskii's theorem, Nonlinear Stud. 9 (2002), 181--190], Theorem 3) to show that the totally nonlinear neutral differential equation with variable delay \begin{equation*} x'(t) = -a(t)h (x(t)) + c(t)x'(t-g(t))Q' (x(t-g(t))) + G (t,x(t),x(t-g(t))), \end{equation*} has a periodic solution. We invert this equation to construct a fixed point mapping expressed as a sum of two mappings such that one is compact and the other is a large contraction. We show that the mapping fits very nicely for applying the modification of Krasnoselskii's theorem so that periodic solutions exist.
versions	