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cases	authors	A. Ardjouni A. Djoudi	authors	A. Ardjouni A. Djoudi		
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	id	id7703244393954780233	id	id-7486091728476523865	le	
	abstract	In this paper, we use a modiï¬cation of Krasnoselskii's ï¬xed point theorem introduced by Burton (see [6] Theorem 3) to establish new results on the existence and positivity of solutions for the totally nonlinear neutral periodic differential equation of the form We invert this equation to construct a sum of a completely continuous map and a large contraction which is suitable for the application of a modiï¬cation of Krasnoselskii's theorem.		We study the existence of periodic solutions of the second order nonlinear neutral differential equation with variable delay $x\hat{a}\mathcal{E}^2\hat{a}\mathcal{E}^2$ (t) + p (t) $x\hat{a}\mathcal{E}^2$ (t) + q (t)h (x (t)) = c (t) $x\hat{a}\mathcal{E}^2$ (t \hat{a}^* $\hat{I}_{,,}$ (t)) + f (t, x (t \hat{a}^* $\hat{I}_{,,}$ (t))). We invert the given equation to obtain an integral, but equivalent, equation from which we define a fixed point mapping written as a sum of a large contraction and a compact map. We show that such maps fit very nicely into the framework of Krasnoselskii-Burton $\hat{a}\mathcal{E}^{TM}$ s fixed point theorem so that the existence of periodic solutions is conclued.		
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