

On Impulsive Control for Synchronization and Its Application to Matsumoto-Chua-Kobayashi (MCK) Circuit

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Abstract: The issue of impulsive control theory for synchronization of the MCK circuit is developed. We propose an impulsive control scheme for the complete synchronization of the MCK circuit including chaotic systems. A sufficient condition for the impulsive control is derived, with an easily calculated maximum impulsive interval. The proposed impulsive control scheme is applied to the MCK circuit and the simulation result demonstrates the effectiveness of the method.

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Key words: chaos, impulsive control, MCK circuit

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