

عنوان مقاله:

Optimal Synchronization Of Chaotic Behaviour Of The Duffing Oscillator Using State-Dependent Riccati Equation

محل انتشار:

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خلاصه مقاله:

This paper presents the synchronization of chaotic phenomena of the Duffing oscillator using state-dependent Riccati equation (SDRE) method. The optimal control problems are solved by the SDRE control. This method requires controllable and observable system. This method can be applied to other chaotic systems presented that the controllability and observability conditions are satisfied. The results show that the SDRE method of control can effectively reduce the error dynamics of chaos synchronization of the Duffing oscillator.

کلمات کلیدی:

chaotic phenomena, state-dependent Riccati equation, chaos synchronization, controllability, observability, Duffing oscillator

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