

## عنوان مقاله:

Synchronization of two Non-Identical 4-D Chaotic Systems Using Active Second Order Sliding Mode Control

## محل انتشار:

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## خلاصه مقاله:

In This paper an active second order sliding mode controller for synchronization two non-identical 4-D Lorenz–Stenflo (LS) and a new four-dimensional chaotic system (Qi) in the presence of uncertainties is proposed. Because of existence extreme nonlinearity behaviour and chattering problem we design active second order sliding mode controller to solve this problems. The designed controller ensures that the state variables of the controlled chaotic slave LS and Qi systems globally synchronizes with the state variables of the master systems respectively. It is also shown that two non-identical 4-D systems globally synchronize with LS system under the active second order sliding mode control. Numerical simulations are presented in this paper to evaluate the analysis and effectiveness of the controller.

## کلمات کلیدی:

second order sliding mode control; synchronization; nonlinear control; non-identical chaotic systems

## لینک ثابت مقاله در پایگاه سیویلیکا:

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