

عنوان مقاله:

Analysis and Control of SEIR Epidemic Model via Sliding Mode Control

محل انتشار:

كنفرانس بين المللي پژوهش در علوم و تكنولوژي (سال: 1394)

تعداد صفحات اصل مقاله: 9

نویسندگان:

r Khalili Amirabadi - Department of Applied Mathematics, Faculty of Science, Payamenoor University, Mashhad, Iran

a Heydari - Department of Applied Mathematics, Faculty of Science, Payamenoor University, Mashhad, Iran

m.r Zarrabi - Department of Applied Mathematics, School of Mathematics and Computer Science, Damghan University, Damghan, Iran

خلاصه مقاله:

In this paper, we have decided to analyze SEIR epidemic model by piecewise control function dependent on threshold policy for diseases management strategy. In this study, Ec is determined as a critical value and based on this threshold have been defined and then the timing has been specified for triggering intervention measures, when the number of exposed individual exceeds a threshold level. The solution of this model finally approaches regular/sliding equilibrium point, and this result shows that outbreak is not possible

کلمات کلیدی: Sliding mode control, Threshold policy, SEIR epidemic model, outbreak

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/446952

