

عنوان مقاله:

An Efficient Method to Solve the Mathematical Model of HIV Infection for CD4+ T-Cells

محل انتشار:

مجله بین المللی مدل سازی و محاسبات ریاضی، دوره 9، شماره 4 (سال: 1398)

تعداد صفحات اصل مقاله: 15

نویسندگان:

Samad Noeiaghdam - *Baikal School of BRICS, Irkutsk National Research Technical University, Irkutsk, Russian Federation; South Ural State University, Lenin prospect ۷۶, Chelyabinsk, ۴۵۴۰۸۰*

Emran Khoshrouye Ghiasi - *Young Researchers and Elite Club, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

خلاصه مقاله:

In this paper, the mathematical model of HIV infection for CD4+ T-cells is illustrated. The homotopy analysis method and the Laplace transformations are combined for solving this model. Also, the convergence theorem is proved to demonstrate the abilities of presented method for solving non-linear mathematical models. The numerical results for $N=5, 10$ are presented. Several hbar-curves are plotted to show the convergence regions of solutions. The plots of residual error functions indicate the precision of presented method.

کلمات کلیدی:

Homotopy Analysis Method, Laplace transformations, Mathematical model of HIV infection, CD4+ T-cells

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