## عنوان مقاله:

Numerical solution of a Structure Based Model of NO Diffusion in the Nervous System

## محل انتشار:

اولین کنفرانس ملی ریاضیات صنعتی (سال: 1393)

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## نویسندگان:

Parivash Shams derakhsh - *Department of Mathematics, Faculty of Mathematics Sciences, University of Guilan, Rasht, Iran*

Pavisa shams derakhsh - *Department of Mathematics, Faculty of Economics & Mathematics& Statistics, Allameh Tabataba'i University, Tehran, Iran*

## خلاصه مقاله:

In this paper, the mathematical model of transmission of nitric oxide (NO) as a novel kind of neurotransmitter in the nervous system is investigated. Diffusion of NO in the nervous system is modeled as an diffusion equation. Series solution based on Adomian decomposition method is developed for solving our interest two dimensional diffusion equation with respect to appropriate initial and boundary conditions. The results of a numerical experiment are given, and the accuracy are discussed and compared

## کلمات کلیدی:

Nitric oxide, mathematical model, Diffusion equation, Adomian decomposition method