

## عنوان مقاله:

Some efficient Nordsieck integration methods for IVPs

## محل انتشار:

مجله ایرانی آنالیز عددی و بهینه سازی، دوره 8، شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 19

## نویسندگان:

n Barghi Oskouie - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

a abdi - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

g hojjati - Faculty of Mathematical Sciences, University of Tabriz, Tabriz, Iran

## خلاصه مقاله:

In this paper, in continuation of the construction of efficient numerical methods for stiff IVPs, we construct type two Nordsieck second derivative general linear methods with order  $p = s$ , where  $s$  is the number of internal stages, and stage order  $q = p$ . Implementation of the constructed methods with fixed and variable stepsize is discussed which verifies their efficiency.

## کلمات کلیدی:

Stiff differential equations; Nordsieck second derivative general linear methods; A— and L—stability; Variable stepsize implementation

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/803197>

