

## عنوان مقاله:

Isogeometric Topology Optimization by Using Optimality Criteria and Implicit Function

## محل انتشار:

مجله بهینه سازی در مهندسی عمران، دوره 4، شماره 2 (سال: 1393)

تعداد صفحات اصل مقاله: 13

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## خلاصه مقاله:

A new method for structural topology optimization is introduced which employs the Isogeometric Analysis (IA) method. In this approach, an implicit function is constructed over the whole domain by Non-Uniform Rational B-Spline (NURBS) basis functions which are also used for creating the geometry and the surface of solution of the elasticity problem. Inspiration of the level set method zero level of the function describes the boundary of the structure. An optimality criterion is derived to improve the implicit function towards the optimum boundaries. The last section of this paper is devoted to some numerical examples in order to demonstrate the performance of the method as well as the concluding remarks.

## کلمات کلیدی:

isogeometrical analysis, topology optimization, optimality criteria

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1831504>

