

## عنوان مقاله:

Design and Fabrication of a New Robot Finger

## محل انتشار:

کنفرانس دو سالانه بین المللی مکانیک جامدات تجربی (سال: 1396)

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## خلاصه مقاله:

Dexterous robotic hands are not very popular in production lines. Complexity in mechanism and operation makes such hands less appealing for conventional industrial applications. In this paper, a structurally simple robotic finger with 3 degrees of freedom, named Yasin is designed and fabricated. Compared to other similar designs, the new mechanism is less complicated to build and maintain, and is better suited for control purposes in low cost applications. Numbers of driving motors, which are located in the forearm, are just a few for better similarity with human hands, in terms of number of axes and their relative motions. On other hand, lengths of the tendons are not fixed for different movements. Instead the overall length of the cables used for induction of force from one finger to another is fixed. The general structure of the proposed mechanism is explained and elaborated.

## کلمات کلیدی:

Dexterous robot hands, low cost humanoid robotic finger, under-actuated joints, flexible tendons

## لینک ثابت مقاله در پایگاه سیویلیکا:

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