

## عنوان مقاله:

Discussion Field-Effect Nano Transistor with Graphene Armchair

## محل انتشار:

دومین کنفرانس بین المللی علوم و مهندسی (سال: 1394)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

The purpose of this paper is to use software package ATK-SE package, in combination with virtual Nano-Lab (VNL), which can be used to investigate a Nano-scale transistor. For the transistor structure we will use a graphene junction device, where ATK is used to investigate theproperties of a similar system. The effect of various parameters on the structure of graphene Nano-ribbon checked. It consists of 3 regions andforms a metal-semiconductor-metal junction. By applying a gate potential to the central region, the system can function as a field effecttransistor, which is able to calculate properties, Transmission spectrum, Temperature dependent conductance, Conductance and Current asfunction of gate potential and temperature. So in this paper, the device design and simulation parameters are .associated with improvedperformance

**کلمات کلیدی:** Armchair-Graphene-Transistor-Nano

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