

## عنوان مقاله:

Electron densities Changing effect on Optical Conductivity in Four-Layer Graphene System with Compose bi-bi-bi-bi

## محل انتشار:

کنفرانس ملی نوآوریهای علوم مهندسی برق (سال: 1396)

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## خلاصه مقاله:

We have studied four-layer graphene system's optical conductivity by changing the electron densities in different layers. In this study we've chosen all the layers to be bi-layer graphene. Separation between layers by a dielectric material, selected to be about ten nanometers. The carriers densities in each layer can be tuned by changing gate voltage. In order to obtain reliable theoretical and numerical results of optical conductivity, we have used a MATLAB program to collect data. Using dielectric and electron density-density correlation tensors, the imaginary part of dielectric function for bi-bi-bi-bi graphene system is calculated, and optical conductivities are plotted as a function of photon energies in fixed broadening width, and different electron densities. The results show considerable affect of changing electron densities in different layers, on longitudinal optical conductivity

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/732186>

