سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
گواهی ثبت مقاله در سیویلیکا
CIVILICA.com

عنوان مقاله:
Mechanical Modeling of Carbon Nanotubes

محل انتشار:
سومین کنفرانس نانوساختارها (سال: 1388)

تعداد صفحات اصل مقاله: 4

نویسندگان:
M.M Zaeri - *Mechanical Engineering Department, Isfahan University of Technology, Isfahan ۸۴۱۵۶, Iran*

S Ziaei Rad - *Mechanical Engineering Department, Isfahan University of Technology, Isfahan ۸۴۱۵۶, Iran*

F Karimzadeh - *Materials Engineering Department, Isfahan University of Technology, Isfahan ۸۴۱۵۶, Iran*

خلاصه مقاله:
In this paper carbon nanotubes are modeled using a method called molecular structural mechanics. Then the mechanical model is utilized to find out the elastic properties of these nanostructures including elastic and shear moduli. Various types of carbon nanotubes having different chiralities, diameters, lengths and number of walls are investigated. The obtained results are in good agreement with those reported by other researchers.

کلمات کلیدی:
carbon nanotube; modeling; elastic properties; molecular structural mechanics; nanomechanics

لینک ثابت مقاله در پایگاه سیویلیکا:
https://civilica.com/doc/85199