

عنوان مقاله:

Modeling and Simulation of Nano Structures with Using Molecular Dynamics

محل انتشار:

مجله بین المللی طراحی پیشرفته و تکنولوژی ساخت, دوره 2, شماره 3 (سال: 1388)

تعداد صفحات اصل مقاله: 11

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خلاصه مقاله:

According to recent achievements in Nano technology we can see its effects in different engineering fields. In Nano manufacture process the first essential step is modeling coordinately in order to make it available different software are developing for this propose. In this paper Nano modeling for two papers is developed first understanding structure in Nano and micro size and second simulations of molecular movements in Nano size. In this paper fundamental concepts of both methods are discussed and MATLAB based software is developed for this purpose. In first step cubic and cylindrical shapes are modeled by the software then some simulations in which temperature's effect modeled are presented. In second part a YD model based on molecular dynamics is presented wit using this model we can find effects of force on AFM cantilever's tip which has a great important in different Nano manufacture areas

كلمات كليدى:

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