

عنوان مقاله:

DFT study on the adsorption of Leucine and Isoleucine aliphatic amino acids on Pd doped single-walled carbon nanotube

محل انتشار:

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خلاصه مقاله:

The function of proteins in cellular conditions depends on the chemical and physical characteristics of noncovalent interactions of amino acids. Carbon nanotubes (CNTs) illustrate promising analytical applications due to their extraordinary mechanical, electrical, thermal and chemical properties [1]. The adsorption of amino acids on CNTs would result in the perturbation in their electronic structure and change the conductance of CNTs. Transition metal doped single-walled carbon nanotubes (SWCNT) could enhance their application in molecular electronics such as sensors [2]. In this study, the adsorption of two aliphatic amino acids on Pd/SWCNT was investigated via different initial stable configurations.

کلمات کلیدی:

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