

عنوان مقاله:

Design of methyldopa structure and calculation of its properties by quantum mechanic

محل انتشار:

اولین کنفرانس ملی کاربرد نانوتکنولوژی در صنایع نفت و پتروشیمی (سال: 1391)

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خلاصه مقاله:

Methyldopa(MTD), α -methyl-3,4-methyl-dihydroxyphenylalanine, is an antihypertensive agent. The structure was optimized at the DFT and MP2 levels of theory. We performed nonempirical quantum mechanical calculations at the BLYP and B3LYP/3-21G, 6-31G, and 6-31G levels of theory in the gas phase and different solvents (water, ethanol, methanol) at temperature of 298.15 K. Finally, we employed the density functional theory (DFT) to calculate nuclear magnetic resonance spectra and infrared spectra.

کلمات کلیدی:

Density functional theory (DFT), Methyldopa (MTD), Quantum mechanical

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