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عنوان مقاله:
The deformation effect on the fusion cross section of heavy-ion reactions

محل انتشار:
سومین کنفرانس بین المللی پژوهش در علوم و مهندسی (سال: 1396)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:
The fusion cross sections have studied using coupled-channels calculations. The deformation have included in the calculation. The results of these calculation show that the barrier height has the highest and its radius has the lowest value in the reaction with targets with positive octupole. This simple behavior of change in Coulomb barrier parameters is extracted in a linear method. Using the obtained interaction potentials, energy dependence of complete fusion cross-section also studied. It is observed thatdeformation and orientation degree of freedom decreases the calculated fusion crosssections. This leads to a better agreement with the experimental data.

کلمات کلیدی:
Double Folding Model; Fusion cross-section, Deformations

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