

Abstract

Laser controlled antiproton capturing process by three nuclei ^{11}Be , ^{19}F and ^{77}Kr have been studied theoretically by taking indirect laser-nuclear interaction into account. Charge particle antiproton driven by laser, being captured by nucleus due to electromagnetic and strong interactions between antiproton and nucleus. Using the time-dependent perturbation theory, the expression for capturing probability of antiproton has been derived, and its relationship with the laser parameters has been discussed.