

Exclusive J/ψ photoproduction on nucleon and nuclei

We investigate J/ψ meson photoproduction on the nucleon and (d, ^4He , ^{16}O , ^{40}Ca) targets within a dynamical model approach. Within the multiple scattering theory, the calculations have been performed by including the impulse amplitude and the final J/ψ -nucleus scattering amplitude. The impulse term for the deuteron target can be calculated using the wavefunctions generated from the realistic NN potentials. The FSI amplitude is calculated using the first-order optical potentials constructed from the J/ψ - N potentials. We compare our results with the recent GlueX and Hall C data from the JLab.

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