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# On the photoproduction of X(3872): insights from open-charm coupled-channel mechanism

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Hidden-charm exotic hadrons such as X(3872) can be produced through the exclusive X(3872) photoproduction. The vector meson dominance model has been commonly employed in estimating the cross sections of such processes. However, the coupled-channel production mechanism through open-charm meson-baryon intermediate states may play a crucial role. To assess the significance of such contributions, we estimate the cross section assuming the coupled-channel mechanism. For energies near the threshold, the total cross section is predicted to be of tens of nanobarns, which can be measured at future experimental facilities. Furthermore, the open-charm coupled-channel mechanism leads to a distinct line shape of the total cross section that can be utilized to reveal the production dynamics.

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