

Abstract Submitted
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Photoproduction of medium-mass hypernuclei with Λ -rotation coupling TOSHIO MOTOBA, Osaka Electro-communication University, ATSUSHI UMEYA, Nippon Institute of Technology — Recently hypernuclei beyond p-shell region attract particular interests, because the $(e, e'K^+)$ reaction will provide Λ single-particle behavior with good energy resolution and also because they offer new opportunity of understanding coupling features between a Λ hyperon with nuclear collective motion such as rotation. Based on the preceding study for photoproduction of $\Lambda^{28}\text{Al}$, $\Lambda^{40}\text{K}$, and $\Lambda^{52}\text{V}$, here we additionally choose two typical examples, $\Lambda^{27}\text{Mg}$ and $\Lambda^{59}\text{Co}$, in which each nuclear core shows clear ground rotational spectrum, and several energy levels are predicted to have sizable production cross sections in $(e, e'K^+)$ experiments to be done at Jefferson Lab. Major calculated results and discussions will be presented.

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