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Spectroscopic factors in threshold nuclei JOSHUA WYLIE, National Superconducting Cyclotron Laboratory, MSU, SIMIN WANG, Facility for Rare Isotope Beams, MSU, XINGZE MAO, National Superconducting Cyclotron Laboratory, MSU, WITOLD NAZAREWICZ, Facility for Rare Isotope Beams, MSU —
Single-nucleon knockout cross sections have recently been studied experimentally in nuclei around the proton drip-line. The experimental data were interpreted in terms of shell-model and variational Monte Carlo spectroscopic factors (SFs); however, the strong suppression of experimental SFs was not confirmed by theory. To see whether this disagreement can be attributed to the particle continuum effects, in this work, we applied the Gamow Shell Model to investigate the SFs of ^{9}C and ^{9}Li for single-nucleon knockout reactions in which well-bound nucleons are removed. Our calculations yield SFs that are indeed strongly reduced due to continuum coupling.

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