

Abstract Submitted
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Evaluation of resonances above the proton threshold in ^{26}Si ¹ K.A. CHIPPS, Oak Ridge National Laboratory — ^{26}Al remains an intriguing target for observational gamma-ray astronomy, thanks to its characteristic decay. The $^{25}\text{Al}(p,\gamma)^{26}\text{Si}$ reaction is the crucial link in a sequence that bypasses the production of the observable $^{26}\text{Al}^{g.s.}$ in favor of the isomeric state, and as such has been the focus of many studies. Considerable confusion in this regard has arisen from the use of outdated excitation energies and masses in reaction studies and rate evaluations. Recalibration of existing data from the literature has resulted in updated excitation and resonance energies, but open questions remain, particularly with regard to spin assignments and partial widths/resonance strengths. A discussion of the levels just above the proton threshold in ^{26}Si relevant to the astrophysical $^{25}\text{Al}(p,\gamma)^{26}\text{Si}$ reaction rate will be presented.

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