^{9}Be(^{14}Be,^{12}Li) 2013Ko03

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu	NP A968, 71 (2017)	1-Jan-2017

The neutron scattering length a_s>−4 fm was deduced from analysis of n+^{11}Li pairs produced at E(^{14}Be) = 53.6 MeV/nucleon (2013Ko03). In light of this finding, the authors reanalyzed the data of (2008Ak03) and concluded the results were influenced by ^{13}Li→^{11}Li+2n events that were not fully excluded from the data.

Using the new a_s>−4 fm scattering length, the data of (2010Ha04) were reanalysed; in this scenerio slightly lower values of E_{res}=210 keV *30* and 525 keV *25* are deduced for the resonances previously reported at E_{res}=250 and 555 keV. A more significant impact of this reanalysis includes the suggestion that only the two states at 210 and 525 keV should be accepted and that because of the broad width of the s-wave strength this group should not be considered the ground state.

^{12}Li Levels

E(level)	Comments
0?	%n=100 J^{π}: Interpreted as s-wave strength with a scattering length of >−4 fm.