

$^2\text{H}(^{12}\text{Be},\text{p})$ [1995Ko10,1995Ko27](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

[1995Ko10,1995Ko27,1995KoZK](#): $^2\text{H}(^{12}\text{Be},\text{p})$ $E=55$ MeV/nucleon. A beam of ^{12}Be ions was produced at the RIKEN/RIPS facility and impinged on a CD_2 target. The recoil proton spectrum was measured and analyzed to determine the excitation spectrum, as a function of energy above the $^{12}\text{Be}+\text{n}$ threshold. Four peaks were observed at $E_{\text{rel}}(^{12}\text{Be}+\text{n}) \approx 2, 5, 7, 10$ MeV. Resolution is rather poor.

See theoretical analysis in ([2018Ma05](#)).

 ^{13}Be Levels

$E(\text{level})^{\ddagger}$	$E'(\text{MeV})^{\dagger}$
1.6×10^3	≈ 2.0
4.6×10^3	≈ 5.0
6.6×10^3	≈ 7.0
9.6×10^3	≈ 10.0

† E' is a relative excitation energy scale with $E'=0$ at the neutron separation energy. We use this scale because most articles report level energies with respect to the $\text{n}+^{12}\text{Be}_{\text{g.s.}}$ center of mass energy.

‡ The ground state is taken as $E_{\text{c.m.}}(\text{n}+^{12}\text{Be}_{\text{g.s.}})=0.45$ MeV I ; see Adopted Levels.