

$^{12}\text{C}(^{12}\text{Be}, ^{13}\text{B})$

2008Ch28

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

2008Ch28: $^{12}\text{C}(^{12}\text{Be}, ^9\text{Li}+\alpha)$ E=50 MeV/nucleon. A beam of ^{12}Be ions from the NSCL/A1900 impinged on a ^{12}C target placed at the S800 spectrometer target position that was surrounded by 16 position sensitive $\Delta\text{E-E}$ telescopes from the HiRA array. The array covered $\theta=2.7^\circ\text{--}24.8^\circ$. A kinematic reconstruction of the $^9\text{Li}+\alpha$ relative energy spectrum indicated a state at $E(^9\text{Li}+\alpha)\approx 2.8$ MeV. After correcting for the experimental resolution, $\Gamma\leq 320$ keV is deduced.

^{13}B Levels

E(level)	Γ (keV)	Comments
13.6×10^3 I	≤ 320 keV	E(level): determined from $\alpha+^9\text{Li}$ correlations using $S_\alpha=10.82$ MeV.