

${}^1\text{H}({}^{25}\text{F},2\text{p})$ 2020Ta11

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia, Anagha Chakraborty		NDS 186, 2 (2022)	31-Mar-2022

Secondary beam of ${}^{25}\text{F}$, $E=277$ MeV/nucleon, was produced from ${}^9\text{Be}({}^{48}\text{Ca},X)$, $E=345$ MeV/nucleon, fragmentation reaction at RIKEN facility. The particle identification (PID) was performed by ΔE -TOF- $B\rho$ method. The intensity and purity of the ${}^{25}\text{F}$ beam were 1.69×10^4 and 42%, respectively. The secondary target was a 1-mm-thick C_{10}H_8 crystal. Measured reaction product ${}^{24}\text{O}$; deduced integrated σ , spectroscopic factors.

 ${}^{24}\text{O}$ Levels

E(level) [†]	S	Comments
0.0	0.36 13	E(level): -0.5 MeV 11 (2020Ta11). Width=4.8 MeV 13, $\sigma=53 \mu\text{b}$ 18.
6.5×10^3 14	0.65 25	E(level): 6.5 MeV 14 (2020Ta11). Width=6.3 MeV 9, $\sigma=81 \mu\text{b}$ 26.
12.7×10^3 6	3.43 14	E(level): 12.7 MeV 6 (2020Ta11). Width=7.6 MeV 6, $\sigma=81 \mu\text{b}$ 26.

[†] From mean excitation energy (2020Ta11), listed in comments. Peaks were fitted with a single Gaussian to obtain the mean excitation energy and the width. Mean excitation energy, not listed in the Adopted Levels except the g.s.