^{26}O 2n decay (4.5 ps) 2013Ko10,2013Ca18

History

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

Parent: ^{26}O: E=0.0; $J^{\pi}=0^{+}$; $T_{1/2}$=4.5 ps *+32−34*; Q(2n)=18 *5*; %2n decay=100.0

^{26}O-E: Ground state of ^{26}O is unbound towards particle emission.

^{26}O-$T_{1/2}$: From 2013Ko10. Other: ≤3.95 ns (from τ=≤5.7 ns (2013Ca18)).

^{26}O-Q(2n): From 2021Wa16. Other: 150 *+50−150* measured by 2012Lu07.

^{26}O-%2n decay: %2n=100 assumed.

2013Ko10 (also 2013Th04, 2012Lu07): ^{26}O produced in ^{9}Be(^{27}F,p) reaction at E=82 MeV/nucleon. Measured E(n), I(n), fragment-n coincidence, half-life.

2013Ca18: ^{26}O produced in one-proton knockout reaction on ^{27}F beam on hydrogen (CH_2) target. ^{27}F beam produced in fragmentation of 490 MeV/nucleon ^{40}Ar beam on ^{9}Be target at GSI using R3B-LAND setup. Measured fragment, one-neutron and two-neutron correlated events; deduced decay energy, resonance energy, width and lifetime of ^{24}O+n+n system.

Additional information 1.

Other: 1999Dl01: ^{26}O not observed, suggesting its unbound nature.

^{24}O Levels

E(level)	J^{π}
0.0	0^{+}