^{18}Na p decay 2008Mu13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, G. C. Sheu	ENSDF	16-Jan-2018

Parent: ^{18}Na: E=0; $J^{\pi}=1^{-}$; $T_{1/2}=1.3\times10^{-21}$ s *4*; Q(p)=1469 *8*; %p decay=100.0

^{18}Na-Q(p): from (2017Wa10).

^{18}Na-$T_{1/2}$: from (2017Au03).

^{18}Na-%p decay: presumably 100% proton decay to ^{17}Ne.

2008Mu13: XUNDL dataset compiled by McMaster, 2008.

The sequential two-proton radioactive decay of ^{19}Mg that populates $^{17}Ne_{g.s.}$, via levels in ^{18}Na, was studied at the GSI/FRS facility. The ^{19}Mg was produced using the ^{9}Be(^{20}Mg,^{19}Mg) one-neutron removal reaction. An analysis of the ^{17}Ne+p+p kinematics revealed involvement of sequential proton decay via ^{18}Na states and direct decay to ^{17}Ne+2p. The reconstruction of $^{17}Ne_{g.s.}$ and 2p residuals was analyzed to obtain information on ^{18}Na states. See related work in (2009Mu17,2010Mu12,2012Mu05).

^{17}Ne Levels

E(level)
0