## $^{164}$Ta $\alpha$ decay:not observed

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | N. Nica | NDS 176, 1 (2021) | 1-May-2021 |

Parent: $^{164}$Ta: E=0.0; $J^{\pi}=(3^+)$; $T_{1/2}$=14.2 s *3*; Q($\alpha$)=4560 *60*; %$\alpha$ decay=?

Additional information 1.

1983Sc18 report a weak (0.016% *5*) 4625 *15* $\alpha$ transition, which they associate with the $\alpha$ decay of $^{164}$Ta. However, 1987ScZH and 1988MeZY assign this transition to the decay of $^{163}$Ta, which has a $T_{1/2}$ value (10.5 s *6*, according to 1987ScZH) that is close to that of $^{164}$Ta (13.6 s *2*, according to 1983Sc18). For the purposes of this evaluation, we thus do not consider $\alpha$ decay of $^{164}$Ta to have been established.