^{165}Re $\varepsilon+\beta^+$ decay (1.74 s) 1999Po09,2012Th13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 194,460 (2024)	31-Oct-2022

Parent: ^{165}Re: E=48 *26*; J^π=(11/2$^-$); $T_{1/2}$=1.74 s *6*; Q(ε)=8200 *30*; %ε+%β^+ decay=87 *1*

^{165}Re-E,$T_{1/2}$,J^π: $From ^{165}Re Adopted Levels. Adopted $T_{1/2}$ from 2012Th13.

^{165}Re-Q(ε): From 2021Wa16.

^{165}Re-%ε+%β^+ decay: From 100−%α, with %α=13 *1* (2012Th13). Other %α: 13 *3* (1981Ho10).

According to the α decay study of ^{177}Tl to ^{165}Re decay chain by 1999Po09, there are two activities in ^{165}Re: 1/2$^+$, $s_{1/2}$ ground state and 11/2$^-$, $h_{11/2}$ isomer at 48 keV *26*. The spin assignments and the energy separation are derived by 1999Po09 from systematics.