^{168}Re α decay (4.4 s) 1992Me10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen[#]	NDS 147, 1 (2018)	30-Nov-2017

Parent: ^{168}Re: E=0.0; $J^\pi=(7^+)$; $T_{1/2}$=4.4 s *1*; Q(α)=5063 *13*; %α decay≈0.005

^{168}Re-J^π,$T_{1/2}$: From ^{168}Re Adopted Levels (2010Ba27).

^{168}Re-Q(α): From 2017Wa10.

^{168}Re-%α decay: deduced from Iα/Iγ(199.3γ in ^{168}W) and ε decay scheme for ^{168}Re (1992Me10).

Sources from ^{141}Pr(^{32}S,5n), E(^{32}S)≈178-190 MeV, helium-jet transport; monoisotopic targets; measured excitation functions, Eα, Eγ, simultaneous Iα, Iγ, $\alpha\gamma$ coin, (α)(K x ray) coin.

Isomers in ^{168}Re proposed (1984Sc06) on the basis of two observed α groups have not been confirmed by 1992Me10.

^{164}Ta Levels

E(level)	J^π
0.0	(3^+)
111.8	

α radiations

Eα	E(level)	Comments
4833 *13*	111.8	Eα: α groups (assigned earlier to ^{168}Re α decay) with very different energies (4894 and 5250 by 1984Sc06; 5140 by 1978Sc26; 5260 by 1978Ca11) have been reassigned by 1992Me10 to ^{167}Re α decay and α decay of W nuclides.

γ(^{164}Ta)

Eγ	E$_i$(level)	E$_f$	J^π_f
111.8	111.8	0.0	(3^+)

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Decay Scheme