

¹⁶⁸Os α decay (2.1 s) 1996Pa01,1995Hi02,1982En03

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

Parent: ¹⁶⁸Os: E=0.0; J ^{π} =0⁺; T_{1/2}=2.1 s I; Q(α)=5815.6 27; % α decay=43 4

¹⁶⁸Os-T_{1/2}: From ¹⁶⁸Os Adopted Levels (2010Ba27).

¹⁶⁸Os-Q(α): From 2017Wa10.

¹⁶⁸Os-% α decay: From % α =43 4 (from ¹⁶⁸Os Adopted Levels, 2010Ba27) based on measured values of 49% 3 (1982En03) and 40% 3 (1996Pa01).

¹⁶⁴W Levels

E(level)	J ^{π}
0.0	0 ⁺

α radiations

E α	E(level)	I α [‡]	HF [†]	Comments
5676 4	0.0	97 3	1.0	E α : recommended by 1991Ry01. E α =5674 8 (1995Hi02) does not change the recommended E α . Other E α =5662 8 (1984Sc06), 5680 3 (1982De11, earlier value from this group was 5660 10 in 1978Ca11 and 1977Ca23), 5660 10 (1978Sc26). I α : only one α group was observed. Intensity of an unobserved 5383 α to 2 ⁺ state at 332 is estimated to be less than 6% of α decay by requiring its hindrance factor to be greater than 1.0. Thus I α (5676 α)=97 3 per 100 α decays is assigned and used in computation of the r ₀ parameter.

[†] r₀(¹⁶⁴W)=1.563 11 is deduced from Hf(5676 α)=1.0.

[‡] For absolute intensity per 100 decays, multiply by 0.43 4.