^{251}Es α decay 1979Ah03

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 125, 395 (2015)	31-Mar-2014

Parent: ^{251}Es: E=0.0; $J^\pi=3/2^-$; $T_{1/2}$=33 h *1*; Q(α)=6598 *3*; %α decay=0.5 *2*

^{251}Es-J^π,$T_{1/2}$: From Adopted Levels in ^{251}Es (2013Br09).

^{251}Es-Q(α): From 2012Wa38.

1979Ah03: ^{251}Es produced from decay of ^{251}Fm followed by mass separation. The α-particle spectrum was measured with the Argonne double focussing magnetic spectrometer (FWHM=5 keV) and Au-Si surface barrier detector (FWHM≈13.0 keV).

^{247}Bk Levels

E(level)	J^π
0.0†	$3/2^-$
31† *4*	$(5/2^-)$
42‡ *4*	$7/2^+$
72† *4*	$(7/2^-)$
84‡ *4*	$(9/2)^+$

† Band(A): 3/2[521] band member.

‡ Band(B): 7/2[633] band member.

α radiations

Eα†	E(level)	Iα‡@	HF#
6410 *3*	84	3.3 *6*	33 *15*
6422 *3*	72	3.0 *6*	42 *19*
6452 *3*	42	3.3 *7*	53 *24*
6462 *3*	31	9.4 *10*	21 *9*
6492 *3*	0.0	81.0 *16*	3.4 *14*

† From 1979Ah03. Uncertainties are from spectrometer calibration.

‡ Alpha intensities per 100 α decays, measured by 1979Ah03.

$r_0(^{247}Bk)$=1.4753 *83*, unweighted average of $r_0(^{246}Cm)$=1.4836 *5* and $r_0(^{248}Cf)$=1.4670 *8* (1998Ak04), is used in calculations of HF.

@ For absolute intensity per 100 decays, multiply by 0.005 *2*.

^{251}Es α decay 1979Ah03

Band(B): 7/2[633] band member

$(9/2)^+$ 84

Band(A): 3/2[521] band member

$(7/2^-)$ 72

$7/2^+$ 42

$(5/2^-)$ 31

$3/2^-$ 0.0

$^{247}_{97}Bk_{150}$