^{248}Cm SF decay 1995Rz01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 110, 507 (2009)	1-Oct-2008

Parent: ^{248}Cm: E=0.0; $J^\pi=0^+$; $T_{1/2}=3.40\times10^5$ y *4*; %SF decay=?

Measured triple γ-ray and x-ray-γ coin using the EUROGAM-1 array of 45 Compton-suppressed germanium detectors and 5 low-energy photon spectrometers (LEPS). Gating on x-rays was used to identify the chemical element, and on γ rays from niobium complementary fission fragments, to identify actual γ rays in ^{145}Cs.

^{145}Cs Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0†	$3/2^+$	0.587 s *5*	J^π,$T_{1/2}$: From Adopted Levels. μ=0.95 *15*, deduced from experimental γ-ray branching ratios.
88.7†			
203.8†			
359.4†			
550.8†			
742.8‡			
1068.1‡			
1510.8‡			

† Band(A): 3/2[422].
‡ Band(B): Band Sequence.

$\gamma(^{145}Cs)$

E_γ	E_i(level)	E_f	J^π_f	Mult.	Comments
88.7	88.7	0.0	$3/2^+$		
115.1	203.8	88.7			
155.6	359.4	203.8			
191.4	550.8	359.4			
192.0	742.8	550.8			
203.8	203.8	0.0	$3/2^+$	(E2)	Mult.: From systematics in ^{141}Cs and ^{143}Cs.
270.7	359.4	88.7			
325.3	1068.1	742.8			
442.7	1510.8	1068.1			

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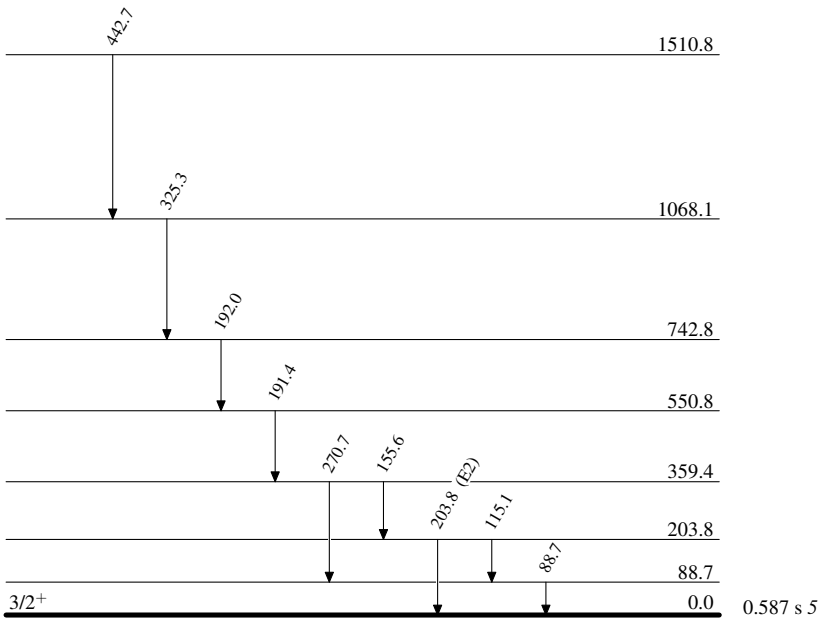
Level Scheme



$^{145}_{55}Cs_{90}$

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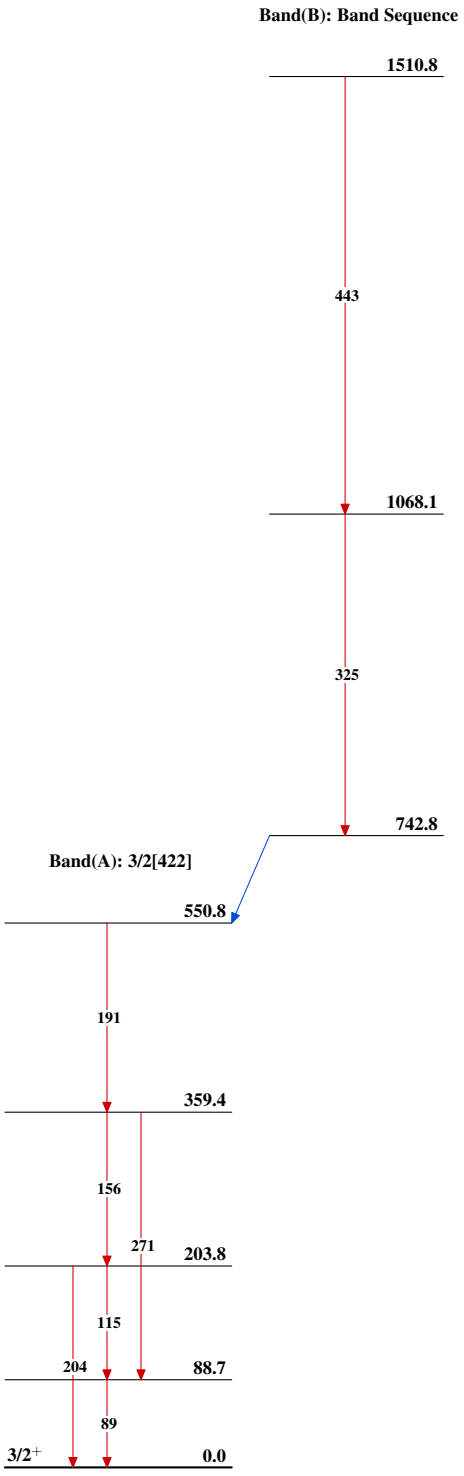

$^{145}_{55}Cs_{90}$