

^{252}Cf SF decay [1997Ha64](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 145, 25 (2017)	1-Jul-2017

Parent: ^{252}Cf : $E=0.0$; $J^\pi=0^+$; $T_{1/2}=2.645$ y δ ; %SF decay=?

Others: [2005Hw06](#), [2004Hw02](#).

Measured γ - γ - γ and x - γ - γ coincidences from a ^{252}Cf spontaneous fission source using GAMMASPHERE, an array of 72 Germanium detectors.

 ^{99}Zr Levels

E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger
0.0	(1/2 ⁺)	613.7	(3/2 ⁻)	821.1	(11/2 ⁻)	1801.2	(19/2 ⁻)
121.8	(3/2 ⁺)	657.4		849.9	(5/2 ⁺)	2516	(23/2 ⁻)
252.2	(7/2 ⁺)	667.6	(5/2 ⁻)	1236.2	(15/2 ⁻)	3359.5	(27/2 ⁻)
575.2	(3/2 ⁺)	678.5	(7/2 ⁻)	1587.9	(3/2 ⁺ ,5/2 ⁺)	4320	(31/2 ⁻)

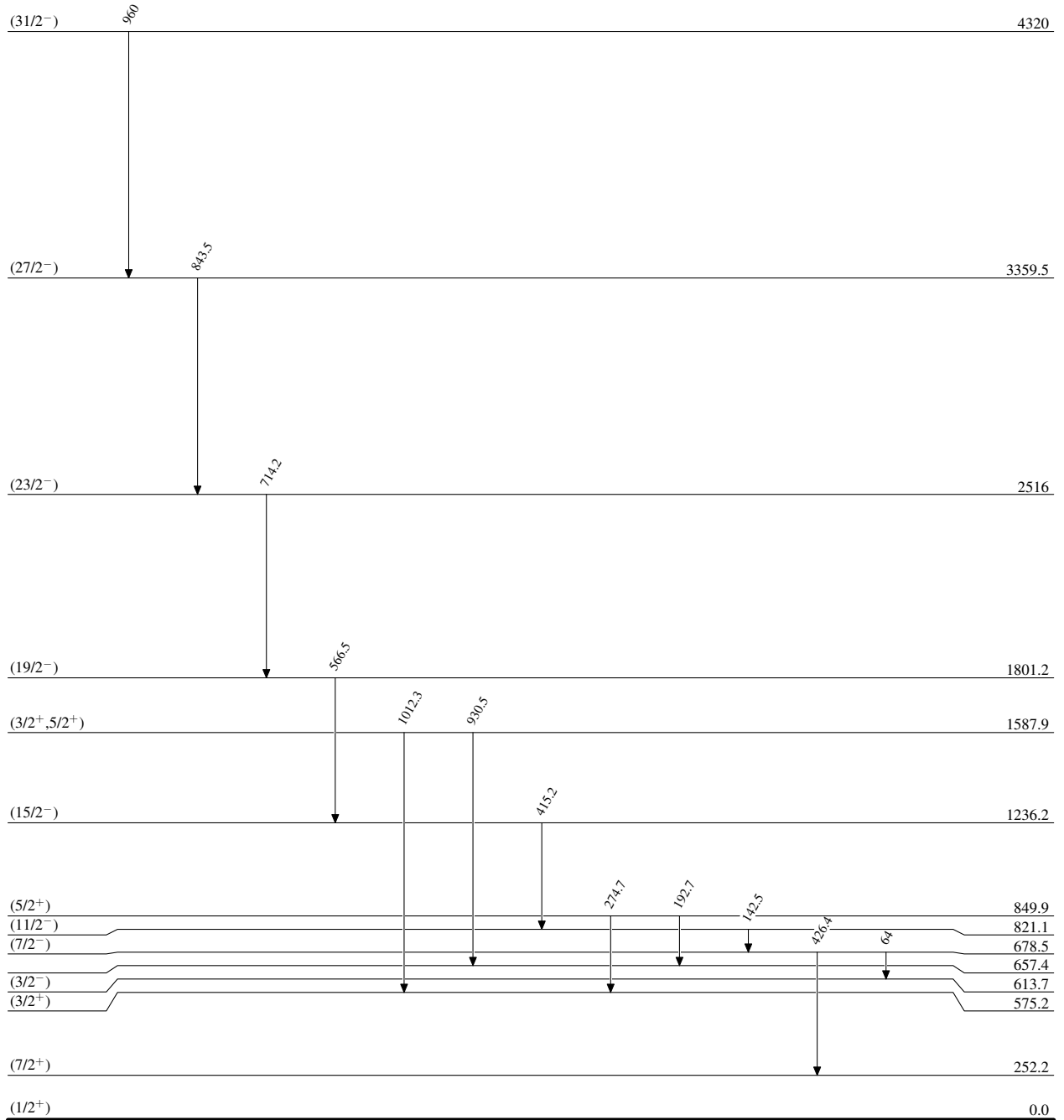
† From Adopted Levels.

 $\gamma(^{99}\text{Zr})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
53	667.6	(5/2 ⁻)	613.7	(3/2 ⁻)	453.4	575.2	(3/2 ⁺)	121.8	(3/2 ⁺)
64	678.5	(7/2 ⁻)	613.7	(3/2 ⁻)	535.5	657.4		121.8	(3/2 ⁺)
121.8	121.8	(3/2 ⁺)	0.0	(1/2 ⁺)	566.5	1801.2	(19/2 ⁻)	1236.2	(15/2 ⁻)
130.4	252.2	(7/2 ⁺)	121.8	(3/2 ⁺)	575.2	575.2	(3/2 ⁺)	0.0	(1/2 ⁺)
142.5	821.1	(11/2 ⁻)	678.5	(7/2 ⁻)	613.7	613.7	(3/2 ⁻)	0.0	(1/2 ⁺)
192.7	849.9	(5/2 ⁺)	657.4		714.2	2516	(23/2 ⁻)	1801.2	(19/2 ⁻)
274.7	849.9	(5/2 ⁺)	575.2	(3/2 ⁺)	843.5	3359.5	(27/2 ⁻)	2516	(23/2 ⁻)
415	667.6	(5/2 ⁻)	252.2	(7/2 ⁺)	930.5	1587.9	(3/2 ⁺ ,5/2 ⁺)	657.4	
415.2	1236.2	(15/2 ⁻)	821.1	(11/2 ⁻)	960	4320	(31/2 ⁻)	3359.5	(27/2 ⁻)
426.4	678.5	(7/2 ⁻)	252.2	(7/2 ⁺)	1012.3	1587.9	(3/2 ⁺ ,5/2 ⁺)	575.2	(3/2 ⁺)

^{252}Cf SF decay 1997Ha64

Level Scheme



$^{99}_{40}\text{Zr}_{59}$

${}^{252}\text{Cf}$ SF decay ${}^{1997}\text{Ha64}$

Level Scheme (continued)

