

$^9\text{Be}(^{238}\text{U},\text{F}\gamma)$ 2014Si18

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

$E(^{238}\text{U})=345$ MeV/nucleon. Fragments separated with the BigRIPS in-flight separator and identified using the ΔE -ToF- $B\rho$ method. The selected fragments of ^{136}Sn were transported through ZeroDegree magnetic spectrometer and implanted in the WAS3ABi detector array consisting of eight double-sided silicon strip detectors for β and ion detection. Measured delayed $E\gamma$, $I\gamma$, $\gamma(t)$, fragment- γ and $\gamma\gamma$ -coincidences using 12 large volume Ge Cluster detectors from the EUROBALL spectrometer. Subset of results given in [2014JuZZ](#).

 ^{136}Sn Levels

E(level) [†]	J^π [‡]	$T_{1/2}$	Comments
0	0^+		
688 1	(2^+)		
1079 2	(4^+)		
1295 2	(6^+)	46 ns 7	configuration= $\nu f_{7/2}^2$ (2014Si18). $T_{1/2}$: from implant- $\gamma(t)$, summing $\gamma(t)$ for 688 γ , 391 γ and 216 γ (2014Si18).

[†] From $E\gamma$.

[‡] From shell-model predictions and systematics of even-even semi-magic nuclei ([2014Si18](#)).

 $\gamma(^{136}\text{Sn})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
216 1	95 29	1295	(6^+)	1079	(4^+)
391 1	111 20	1079	(4^+)	688	(2^+)
688 1	100 19	688	(2^+)	0	0^+

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Level Scheme

Intensities: Type not specified

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

