

$^{238}\text{U}(\alpha, \text{F}\gamma)$ 2004Wu08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 109, 2501 (2008)	1-Apr-2008

Measured $E\gamma$, $I\gamma$, $\gamma\gamma$, (fission fragment) γ coin using a 4π segmented heavy-ion detector array CHICO in coin with γ rays detected with Gammasphere array.

 ^{96}Sr Levels

E(level) [#]	J^π [@]	E(level) [#]	J^π [@]	E(level) [#]	J^π [@]	E(level) [#]	J^π [@]
0.0 [†]	0 ⁺	1975.1 [‡] 9	4 ⁺	3125.3 [‡] 15	8 ⁺	6516 [‡] 3	16 ⁺
815.1 [†] 8	2 ⁺	2120.3 12		3328.1 [†] 13		7523 [‡] 3	18 ⁺
1506.2 8	2 ⁺	2466.3 [‡] 11	6 ⁺	3887.3 [‡] 18	10 ⁺		
1627.1 11	2 ⁺	2481.5 12		4722.3 [‡] 21	12 ⁺		
1792.7 [†] 11	4 ⁺	2785.9 [†] 13		5594.3 [‡] 23	14 ⁺		

[†] Band(A): γ -sequence based on g.s..

[‡] Band(B): Band based on 4⁺ 1975 level.

[#] From least-squares fit to $E\gamma$.

[@] As given by 2004Wu08, based on $\gamma(\theta)$, band patterns.

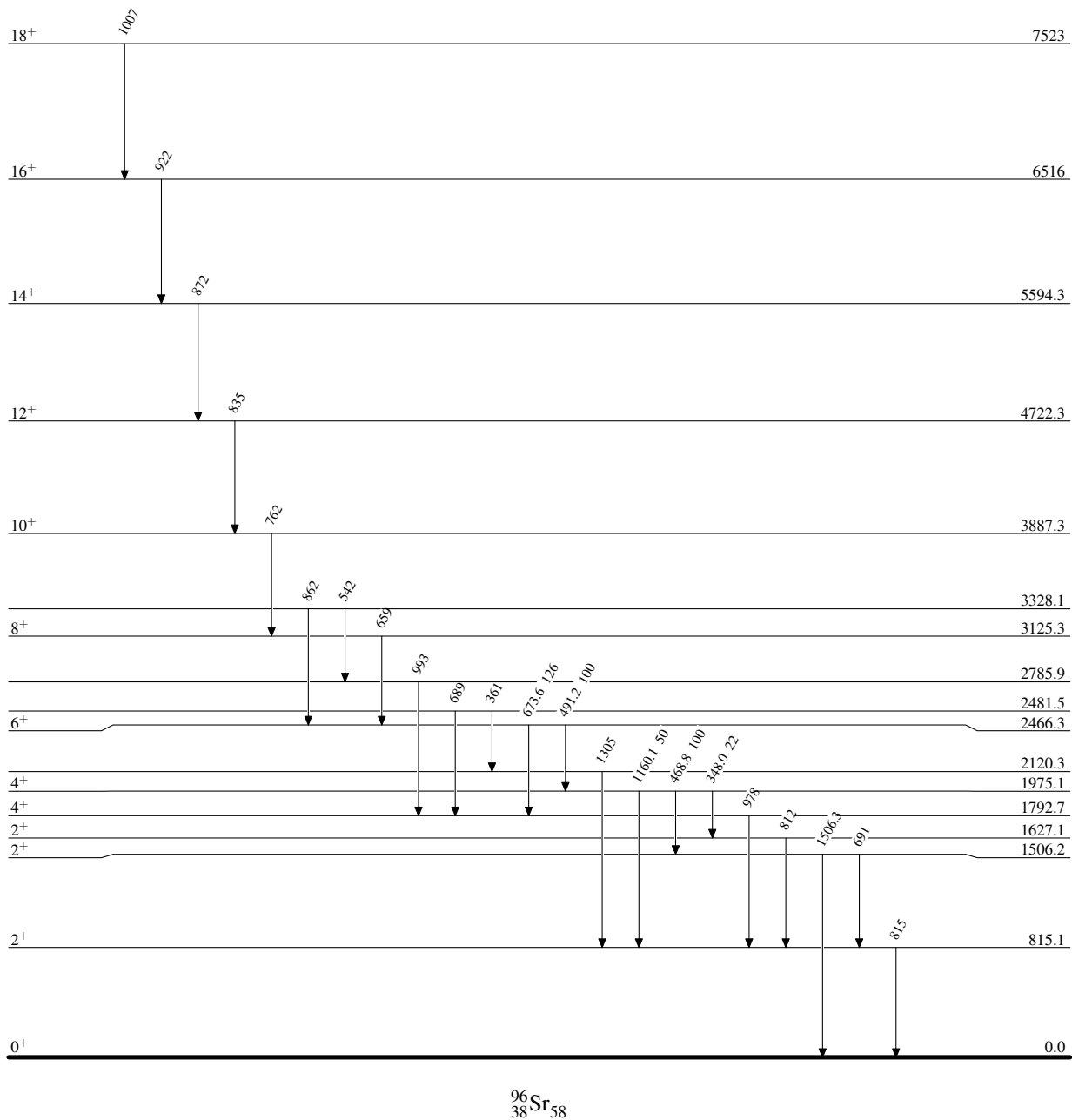
 $\gamma(^{96}\text{Sr})$

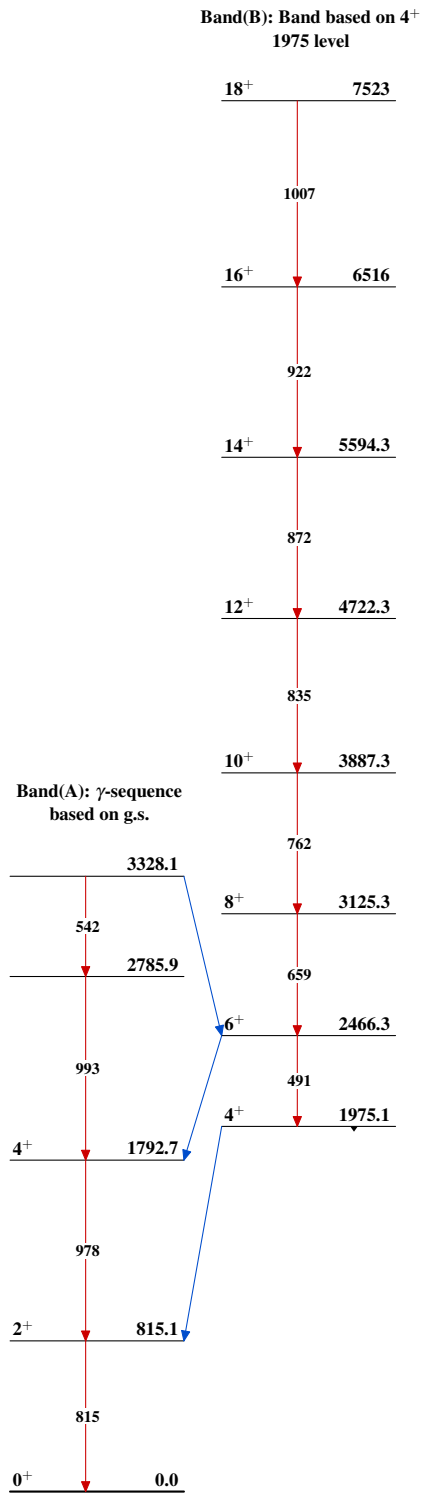
$E_i(\text{level})$	J^π_i	E_γ	I_γ [†]	E_f	J^π_f	$E_i(\text{level})$	J^π_i	E_γ	E_f	J^π_f
815.1	2 ⁺	815 1		0.0	0 ⁺	2481.5		361 1	2120.3	
1506.2	2 ⁺	691 1		815.1	2 ⁺			689 1	1792.7	4 ⁺
		1506.3		0.0	0 ⁺	2785.9		993 1	1792.7	4 ⁺
1627.1	2 ⁺	812 1		815.1	2 ⁺	3125.3	8 ⁺	659 1	2466.3	6 ⁺
1792.7	4 ⁺	978 1		815.1	2 ⁺	3328.1		542 1	2785.9	
1975.1	4 ⁺	348.0	22 4	1627.1	2 ⁺			862 1	2466.3	6 ⁺
		468.8	100	1506.2	2 ⁺	3887.3	10 ⁺	762 1	3125.3	8 ⁺
		1160.1 10	50 3	815.1	2 ⁺	4722.3	12 ⁺	835 1	3887.3	10 ⁺
2120.3		1305 1		815.1	2 ⁺	5594.3	14 ⁺	872 1	4722.3	12 ⁺
2466.3	6 ⁺	491.2 10	100	1975.1	4 ⁺	6516	16 ⁺	922 1	5594.3	14 ⁺
		673.6 10	126 7	1792.7	4 ⁺	7523	18 ⁺	1007 1	6516	16 ⁺

[†] Statistical uncertainty is quoted, systematic error could be 30% for weak branches.

$^{238}\text{U}(\alpha, \text{F}\gamma)$ 2004Wu08Level Scheme

Intensities: Relative photon branching from each level



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