Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huang Xiaolong, J. K. Tuli	NDS 106,159 (2005)	1-Apr-2005

Q(β^-)=−1.001×10^4 *7*; S(n)=12633 *6*; S(p)=2269.2 *25*; Q(α)=−2465.1 *14* 2012Wa38
Note: Current evaluation has used the following Q record −10157 SY1.32E+4 *7* 2310 *100*−2.52e$^+$310 2003Au03.

^{67}As Levels

Cross Reference (XREF) Flags

A ^{40}Ca(^{32}S,αpγ)
B ^{67}Se ε decay

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0	(5/2$^-$)	42.5 s *12*	AB	%ε+%β^+=100 T$_{1/2}$: from 1980Mu12. J$^\pi$: 3/2$^-$,5/2$^-$ from log *ft* to 5/2$^-$ level; shell model systematics favors 5/2.
68.56? *19*			A	
352.0? *10*			B	
697.19 *10*	(7/2)		A	
1103.57? *17*			A	
1422.57# *13*	9/2$^+$	12 ns *2*	A	T$_{1/2}$: from ^{40}Ca(^{32}S,αpγ) (2001Je10).
2282.34@ *24*	(11/2$^+$)		A	
2365.14# *16*	(13/2$^+$)		A	
3180.42@ *19*	(13/2$^+$)		A	
3593.61# *19*	(17/2$^+$)		A	
3885.66@ *21*	(15/2$^+$)		A	
4524.31@ *20*	(19/2$^+$)		A	
4951.12# *20*	(21/2$^+$)		A	
5726.02# *23*	(25/2$^+$)		A	
6710.3# *3*	29/2$^+$		A	
7791.3# *6*	(33/2$^+$)		A	

† From a least-squares fit to Eγ data.
‡ From $\gamma(\theta)$, $\gamma\gamma(\theta)$ and odd-A level systematics in this mass region, unless indicated otherwise.
# Band(A): Band based on 9/2$^+$.
@ Band(B): γ sequence based on (11/2$^+$).

γ(^{67}As)

E$_i$(level)	J$_i^\pi$	E$_\gamma$†	I$_\gamma$†‡	E$_f$	J$_f^\pi$	Comments
352.0?		352		0	(5/2$^-$)	E$_\gamma$: not observed in (HI,xnγ) reactions and placed assuming observed γ populates the g.s.
697.19	(7/2)	697.2 *1*	100	0	(5/2$^-$)	
1103.57?		1035.0 *1*	100	68.56?		
1422.57	9/2$^+$	319.0 *1*	50.9 *25*	1103.57?		
		725.4 *1*	100 *3*	697.19	(7/2)	
		1422.4 *3*	18.3 *21*	0	(5/2$^-$)	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{67}As)$ (continued)

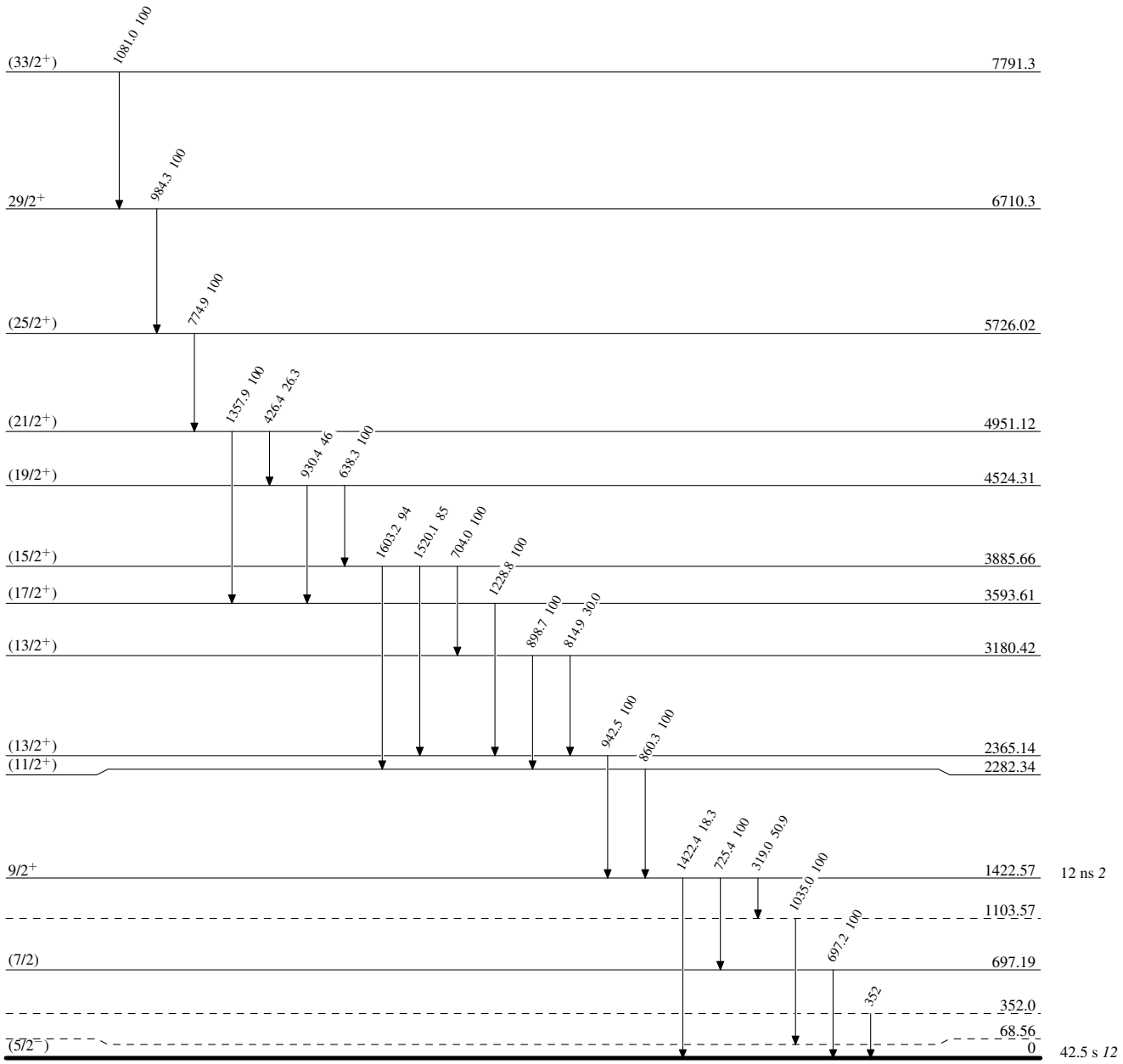
E_i(level)	J_i^π	E_γ [†]	I_γ [†‡]	E_f	J_f^π	Comments
2282.34	$(11/2^+)$	860.3 *3*	100	1422.57	$9/2^+$	
2365.14	$(13/2^+)$	942.5 *1*	100	1422.57	$9/2^+$	
3180.42	$(13/2^+)$	814.9 *1*	30.0 *23*	2365.14	$(13/2^+)$	
		898.7 *3*	100 *5*	2282.34	$(11/2^+)$	
3593.61	$(17/2^+)$	1228.8 *1*	100	2365.14	$(13/2^+)$	
3885.66	$(15/2^+)$	704.0 *2*	100 *10*	3180.42	$(13/2^+)$	
		1520.1 *5*	85 *10*	2365.14	$(13/2^+)$	
		1603.2 *3*	94 *7*	2282.34	$(11/2^+)$	
4524.31	$(19/2^+)$	638.3 *1*	100 *7*	3885.66	$(15/2^+)$	
		930.4 *2*	46 *4*	3593.61	$(17/2^+)$	
4951.12	$(21/2^+)$	426.4 *1*	26.3 *20*	4524.31	$(19/2^+)$	
		1357.9 *1*	100 *4*	3593.61	$(17/2^+)$	
5726.02	$(25/2^+)$	774.9 *1*	100	4951.12	$(21/2^+)$	
6710.3	$29/2^+$	984.3 *2*	100	5726.02	$(25/2^+)$	Additional information 1.
7791.3	$(33/2^+)$	1081.0 *5*	100	6710.3	$29/2^+$	

[†] From $^{40}Ca(^{32}S,\alpha p\gamma)$, except as noted.
[‡] Relative photon branching from each level.

Adopted Levels, Gammas

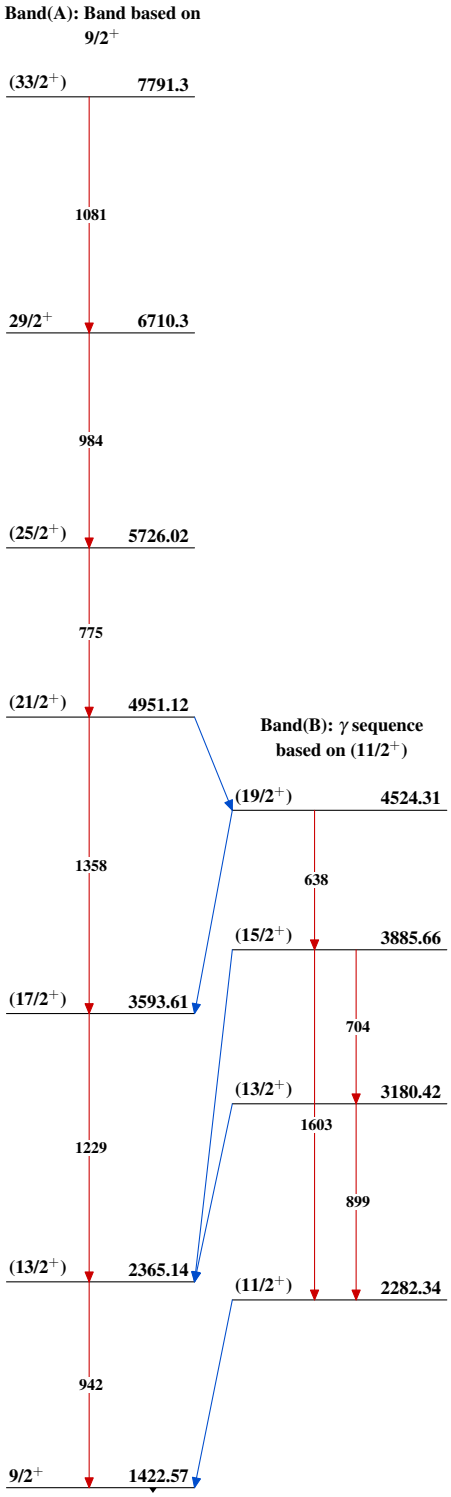
Level Scheme

Intensities: Relative photon branching from each level



$^{67}_{33}As_{34}$

Adopted Levels, Gammas



$^{67}_{33}As_{34}$