^{65}Cu(^{36}S,αnγ) 2000Gh01

History

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

E=142 MeV. Measured Eγ, $\gamma\gamma$, Iγ, $\gamma\gamma(\theta)$(DCO) using the Gammasphere array of 36 HPGe detectors. The level scheme from ^{82}Se(^{19}F,5nγ) (2001Bu19) doesn't agree well with the one from 2000Gh01. The former is adopted because a considerably larger number of $\gamma\gamma$ coincidences was obtained.

^{96}Tc Levels

E(level)†	J$^\pi$#	E(level)†	J$^\pi$#	E(level)†	J$^\pi$#	E(level)†
0.0‡	7$^+$	2150.3 *6*		5196.2‡ *10*	(19$^+$)	8834.7 *12*
927.1‡ *4*	9$^+$	2321.3‡ *6*	(12$^+$)	6125.4‡ *11*	(20$^+$)	9086.7 *12*
1181.1 *5*	(10$^+$)	2605.6‡ *7*	(13$^+$)	7198.6 *11*		9676.1 *12*
1706.1 *6*	(11$^+$)	3080.9‡ *8*	(15$^+$)	7636.6‡ *11*	(22$^+$)	10494.7 *15*
1924.2‡ *5*	(11$^+$)	4019.9‡ *9*	(17$^+$)	8768.7‡ *12*		

† From least-squares fit to Eγ's.
‡ Band(A): sequence based on g.s..
# As given by 2000Gh01.

γ(^{96}Tc)

E$_\gamma$†	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Comments
171.0 *4*	5.0 *10*	2321.3	(12$^+$)	2150.3		
226.1 *4*	5.0 *9*	2150.3		1924.2	(11$^+$)	
254.0 *4*	9.7 *10*	1181.1	(10$^+$)	927.1	9$^+$	DCO=1.5 *2*.
284.3 *4*	80 *8*	2605.6	(13$^+$)	2321.3	(12$^+$)	DCO=1.5 *1*.
397.1 *4*	70 *7*	2321.3	(12$^+$)	1924.2	(11$^+$)	DCO=1.5 *2*.
438.0 *4*	13 *1*	7636.6	(22$^+$)	7198.6		DCO=1.6 *3*.
475.3 *4*	71 *7*	3080.9	(15$^+$)	2605.6	(13$^+$)	DCO=1.9 *2*.
525.0 *4*	9.7 *10*	1706.1	(11$^+$)	1181.1	(10$^+$)	DCO=1.5 *2*.
589.4 *4*	3.3 *7*	9676.1		9086.7		
615.2 *4*	9.7 *10*	2321.3	(12$^+$)	1706.1	(11$^+$)	DCO=1.6 *2*.
927.1 *4*	100	927.1	9$^+$	0.0	7$^+$	DCO=2.0 *1*.
929.2 *4*	30 *3*	6125.4	(20$^+$)	5196.2	(19$^+$)	DCO=1.9 *2*.
939.0 *4*	64 *6*	4019.9	(17$^+$)	3080.9	(15$^+$)	DCO=2.1 *2*.
997.1 *4*	86 *9*	1924.2	(11$^+$)	927.1	9$^+$	DCO=2.0 *2*.
1073.2 *4*	7.0 *9*	7198.6		6125.4	(20$^+$)	DCO=1.5 *3*.
1132.1 *4*	12 *1*	8768.7		7636.6	(22$^+$)	DCO=1.5 *2*.
1176.3 *4*	49 *5*	5196.2	(19$^+$)	4019.9	(17$^+$)	DCO=1.9 *2*.
1198.1 *4*	8.0 *11*	8834.7		7636.6	(22$^+$)	DCO=1.5 *2*.
1450.1 *4*	4.0 *7*	9086.7		7636.6	(22$^+$)	
1511.2 *4*	21 *2*	7636.6	(22$^+$)	6125.4	(20$^+$)	DCO=2.1 *3*.
1660 *1*	5.3 *8*	10494.7		8834.7		
2002 *1*	5.4 *7*	7198.6		5196.2	(19$^+$)	DCO=1.5 *3*.

† Δ(Eγ)=0.4 for Eγ<1500 keV and 1.0 for Eγ>1500 keV as suggested by 2000Gh01.

$^{65}Cu(^{36}S,\alpha n\gamma)$ **2000Gh01**

Level Scheme

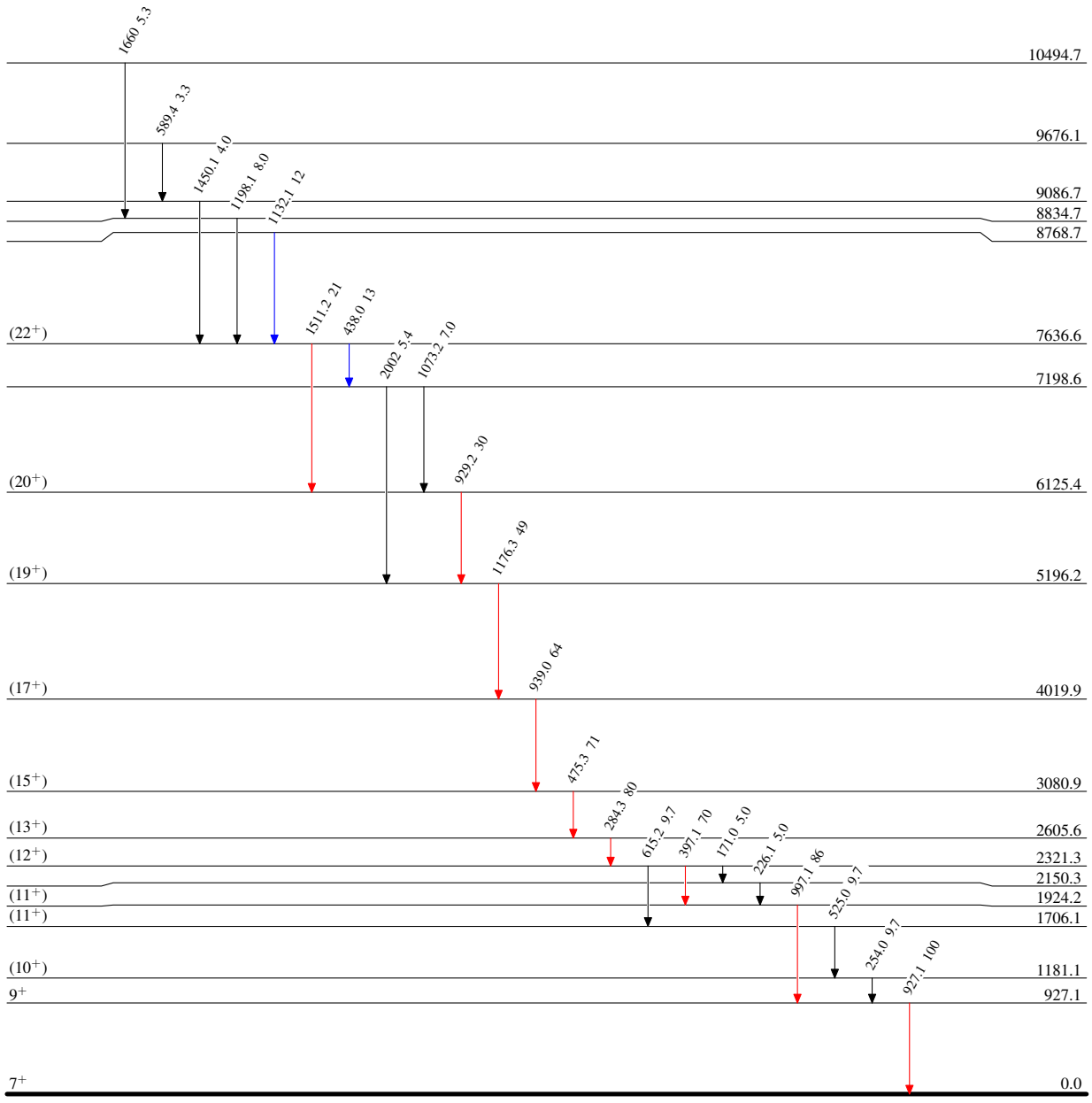
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

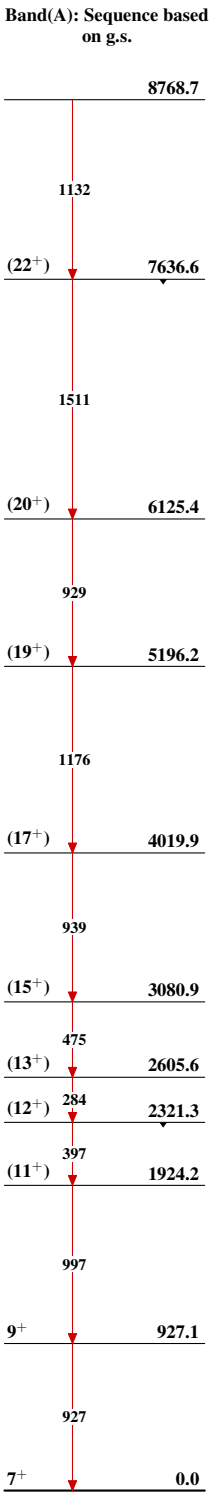
$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{96}_{43}Tc_{53}$

^{65}Cu(^{36}S,αnγ) 2000Gh01



$^{96}_{43}Tc_{53}$