^{9}Be(^{48}V,^{47}Tiγ) 2022Ut02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Ota and E. A. Mccutchan	NDS 203,1 (2025)	1-Apr-2025

2022Ut02: Secondary beam was produced through fragmentation of a primary ^{58}Ni beam with E=160 MeV/nucleon on a ^{9}Be target. Fragmentation products separated with the A1900 separator. Measured Eγ, Iγ, $\gamma\gamma$, recoil-γ using the GRETINA array coupled with the S800 spectrograph.

^{47}Ti Levels

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
0.0	5/2$^-$	1793	1/2$^-$	2682	11/2$^-$	3568	17/2$^-$
159	7/2$^-$	1825	3/2$^+$	2749	15/2$^-$	3994	15/2$^-$
1252	9/2$^-$	2297	7/2$^-$	2785		4494	19/2$^-$
1444	11/2$^-$	2406	9/2$^-$	2810			
1549	3/2$^-$	2668	(13/2$^-$)	3288	13/2$^-$		

† From Eγ.
‡ As proposed by 2022Ut02.

γ(^{47}Ti)

E$_\gamma$†	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	E$_\gamma$†	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
159		159	7/2$^-$	0.0	5/2$^-$	1285	100 *5*	1444	11/2$^-$	159	7/2$^-$
192	9.8 *9*	1444	11/2$^-$	1252	9/2$^-$	1305	57 *5*	2749	15/2$^-$	1444	11/2$^-$
605	5 *1*	3288	13/2$^-$	2682	11/2$^-$	1390	4 *3*	1549	3/2$^-$	159	7/2$^-$
706	5 *4*	3994	15/2$^-$	3288	13/2$^-$	1430	29 *2*	2682	11/2$^-$	1252	9/2$^-$
819	9 *1*	3568	17/2$^-$	2749	15/2$^-$	1793	10 *3*	1793	1/2$^-$	0.0	5/2$^-$
926	5 *1*	4494	19/2$^-$	3568	17/2$^-$	1825	12 *5*	1825	3/2$^+$	0.0	5/2$^-$
1093	70 *3*	1252	9/2$^-$	159	7/2$^-$	2247	7 *4*	2406	9/2$^-$	159	7/2$^-$
1154	2 *1*	2406	9/2$^-$	1252	9/2$^-$	2297	2 *2*	2297	7/2$^-$	0.0	5/2$^-$
1224	15 *4*	2668	(13/2$^-$)	1444	11/2$^-$	2785	7 *5*	2785		0.0	5/2$^-$
1238	3 *3*	2682	11/2$^-$	1444	11/2$^-$	2810	16 *5*	2810		0.0	5/2$^-$
1252	0.9 *6*	1252	9/2$^-$	0.0	5/2$^-$						

† 2022Ut02 state that all γ ray energies measured in their work are consistent with the literature.

^{9}Be(^{48}V,^{47}Tiγ) 2022Ut02

Level Scheme

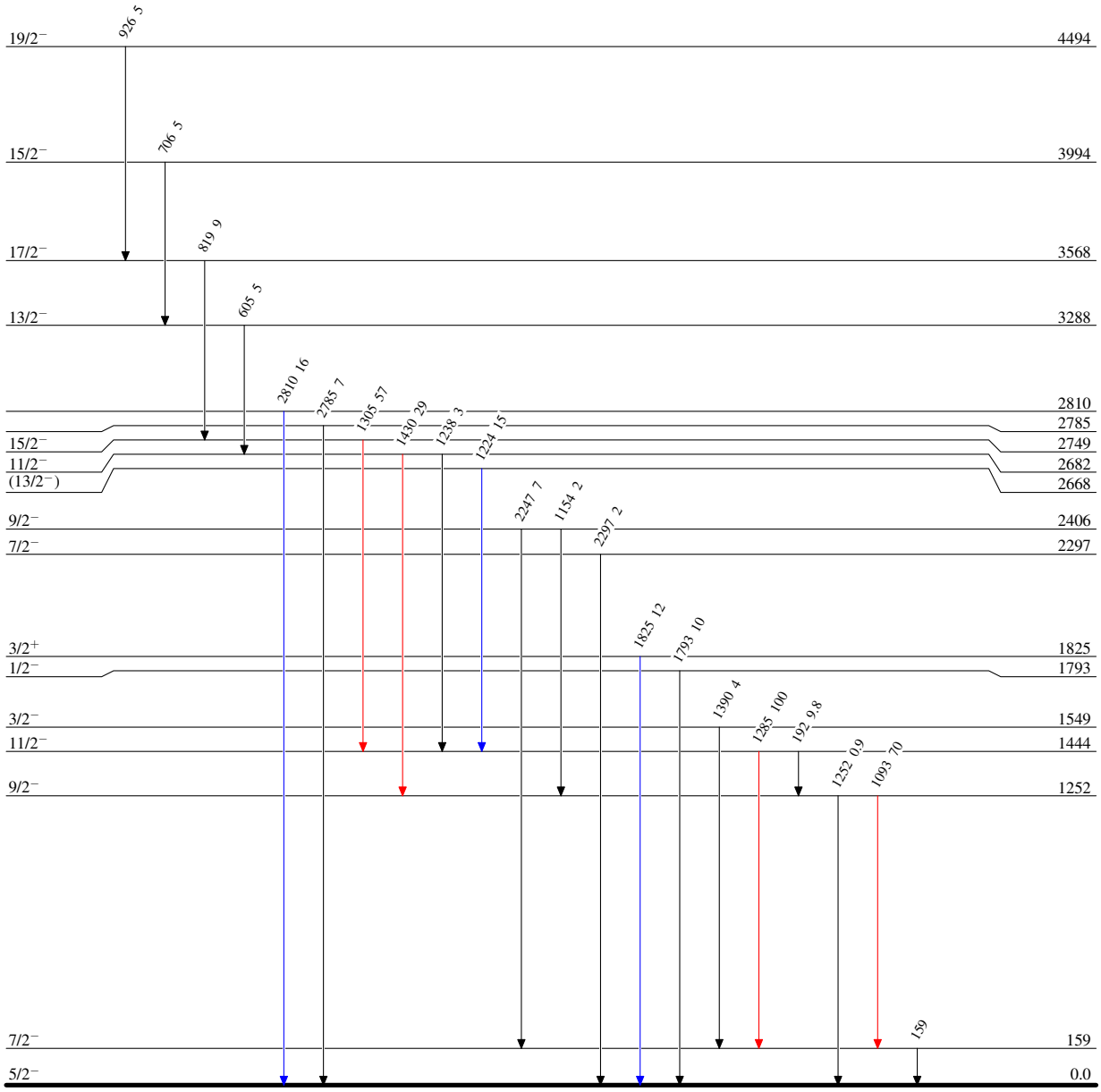
Intensities: Relative I_γ

Legend

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

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

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



$^{47}_{22}Ti_{25}$