

¹⁹⁵Pt(n,n'γ) 1983Gh01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 121, 395 (2014)	1-Mar-2014

E=0.5-2.0 MeV.

Measured E_γ, I_γ, and σ(E,E_γ,θ) with Ge(Li). Compared data with predictions of multi-J supersymmetry in interacting boson-fermion approximation.

¹⁹⁵Pt Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	1/2 ⁻	389.3 8	5/2 ⁻ #	546.9 22	(11/2) ⁺	814.8 10	9/2 ⁻
99.0 5	3/2 ⁻	419.7 7	3/2 ⁻ #	562.8 12	(9/2) ⁻	822.1 13	5/2 ⁺
129.9 6	5/2 ⁻	432.3 16	9/2 ⁺	590.9 8	3/2 ⁻ #	895.4 12	9/2 ⁻ #
199.4 6	3/2 ⁻	449.8 10	7/2 ⁻ #	612.7 9	(7/2) ⁻	927.1 12	1/2 ⁻ ,3/2 ⁻
211.3 6	3/2 ⁻ #	455.1 7	5/2 ⁻ #	630.1 8	1/2 ⁻ ,3/2 ⁻	1096.2 10	1/2 ⁻ ,3/2 ⁻
222.3 7	1/2 ⁻ #	508.0 9	7/2 ⁻ , (5/2 ⁻)#	664.1 7	5/2 ⁻ ,7/2 ⁻	1122.9 16	3/2 ⁺ ,5/2 ⁺ #
239.1 6	5/2 ⁻ #	524.9 7	3/2 ⁻ #	695.2 6	(7/2) ⁻ #		
259.1 19	13/2 ⁺	544.2 8	(5/2 ⁻)#	739.7 8	1/2 ⁻ ,3/2 ⁻ #		

[†] From scheme and E_γ using least-squares fit to data.

[‡] From Adopted Levels, except as noted.

From γ(θ) analysis.

γ(¹⁹⁵Pt)

E _γ [†]	I _γ [#]	E _i (level)	J _i ^π	E _f	J _f ^π	Comments
98.9		99.0	3/2 ⁻	0.0	1/2 ⁻	
129.7		129.9	5/2 ⁻	0.0	1/2 ⁻	
173.2		432.3	9/2 ⁺	259.1	13/2 ⁺	
199.5		199.4	3/2 ⁻	0.0	1/2 ⁻	
211.4@		211.3	3/2 ⁻	0.0	1/2 ⁻	γ(θ): A ₂ =+0.04 2.
216.1@	22	455.1	5/2 ⁻	239.1	5/2 ⁻	γ(θ): A ₂ =+0.23 12.
222.4@		222.3	1/2 ⁻	0.0	1/2 ⁻	γ(θ): A ₂ =+0.04 10.
239.3@		239.1	5/2 ⁻	0.0	1/2 ⁻	γ(θ): A ₂ =+0.20 3.
243.7@	17	455.1	5/2 ⁻	211.3	3/2 ⁻	γ(θ): A ₂ =-0.04 11.
255.7	20	455.1	5/2 ⁻	199.4	3/2 ⁻	
259.3@	24	389.3	5/2 ⁻	129.9	5/2 ⁻	γ(θ): A ₂ =+0.28 6.
287.8		546.9	(11/2) ⁺	259.1	13/2 ⁺	
290.3@	76	389.3	5/2 ⁻	99.0	3/2 ⁻	γ(θ): A ₂ =-0.38 4.
300.8		1122.9	3/2 ⁺ ,5/2 ⁺	822.1	5/2 ⁺	γ(θ): A ₂ =-0.36 4.
305.7@	37	695.2	(7/2) ⁻	389.3	5/2 ⁻	γ(θ): A ₂ =-0.23 14.
319.8@		449.8	7/2 ⁻	129.9	5/2 ⁻	γ(θ): A ₂ =+0.33 3.
320 [‡]		739.7	1/2 ⁻ ,3/2 ⁻	419.7	3/2 ⁻	
320.8	11	419.7	3/2 ⁻	99.0	3/2 ⁻	
356 [‡]		455.1	5/2 ⁻	99.0	3/2 ⁻	
364.9	53	814.8	9/2 ⁻	449.8	7/2 ⁻	
368.7@	47	590.9	3/2 ⁻	222.3	1/2 ⁻	γ(θ): A ₂ =-0.14 7.
373.5	73	612.7	(7/2) ⁻	239.1	5/2 ⁻	
378.2@	42	508.0	7/2 ⁻ , (5/2 ⁻)	129.9	5/2 ⁻	γ(θ): A ₂ =+0.08 5.

Continued on next page (footnotes at end of table)

$^{195}\text{Pt}(n,n'\gamma)$ **1983Gh01** (continued) $\gamma(^{195}\text{Pt})$ (continued)

E_γ †	I_γ #	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
389.8		822.1	$5/2^+$	432.3	$9/2^+$	
395.0 @	37	524.9	$3/2^-$	129.9	$5/2^-$	$\gamma(\theta): A_2=-0.07$ 10.
401.5	27	612.7	$(7/2)^-$	211.3	$3/2^-$	
407.9 ‡		630.1	$1/2^-, 3/2^-$	222.3	$1/2^-$	
408.9 @	58	508.0	$7/2^-, (5/2^-)$	99.0	$3/2^-$	$\gamma(\theta): A_2=+0.20$ 3.
418.7 ‡		630.1	$1/2^-, 3/2^-$	211.3	$3/2^-$	
419.7 @	89	419.7	$3/2^-$	0.0	$1/2^-$	$\gamma(\theta): A_2=-0.03$ 2.
425.4	26	664.1	$5/2^-, 7/2^-$	239.1	$5/2^-$	
425.9	16	524.9	$3/2^-$	99.0	$3/2^-$	
430.6		630.1	$1/2^-, 3/2^-$	199.4	$3/2^-$	
432.8		822.1	$5/2^+$	389.3	$5/2^-$	
432.9		562.8	$(9/2)^-$	129.9	$5/2^-$	
440.3 @		895.4	$9/2^-$	455.1	$5/2^-$	$\gamma(\theta): A_2=+0.32$ 5.
445.2 @	36	544.2	$(5/2^-)$	99.0	$3/2^-$	$\gamma(\theta): A_2=-0.08$ 6.
452.8	17	664.1	$5/2^-, 7/2^-$	211.3	$3/2^-$	
455.9	27	695.2	$(7/2)^-$	239.1	$5/2^-$	
464.7	24	664.1	$5/2^-, 7/2^-$	199.4	$3/2^-$	
495.8	12	695.2	$(7/2)^-$	199.4	$3/2^-$	
524.8	47	524.9	$3/2^-$	0.0	$1/2^-$	
533.7	33	664.1	$5/2^-, 7/2^-$	129.9	$5/2^-$	
544.2	64	544.2	$(5/2^-)$	0.0	$1/2^-$	
565.5	24	695.2	$(7/2)^-$	129.9	$5/2^-$	
590.9 @	53	590.9	$3/2^-$	0.0	$1/2^-$	$\gamma(\theta): A_2=-0.01$ 8.
596.5 ‡		695.2	$(7/2)^-$	99.0	$3/2^-$	
684.9	47	814.8	$9/2^-$	129.9	$5/2^-$	
688.0		927.1	$1/2^-, 3/2^-$	239.1	$5/2^-$	
739.6 @		739.7	$1/2^-, 3/2^-$	0.0	$1/2^-$	$\gamma(\theta): A_2=+0.07$ 13.
1096.2		1096.2	$1/2^-, 3/2^-$	0.0	$1/2^-$	

† ΔE not given by authors. $\Delta E=1$ keV assumed in using least-squares fit to data.

‡ Transition obscured by stronger γ ray or by spectral complications.

Relative photon branching from each level. The uncertainties are generally $\approx 15\%$ for $E_\gamma > 500$ keV and are larger for lower energy γ rays.




@ A_2 coefficients measured in $\gamma(\theta)$ (1983Gh01).

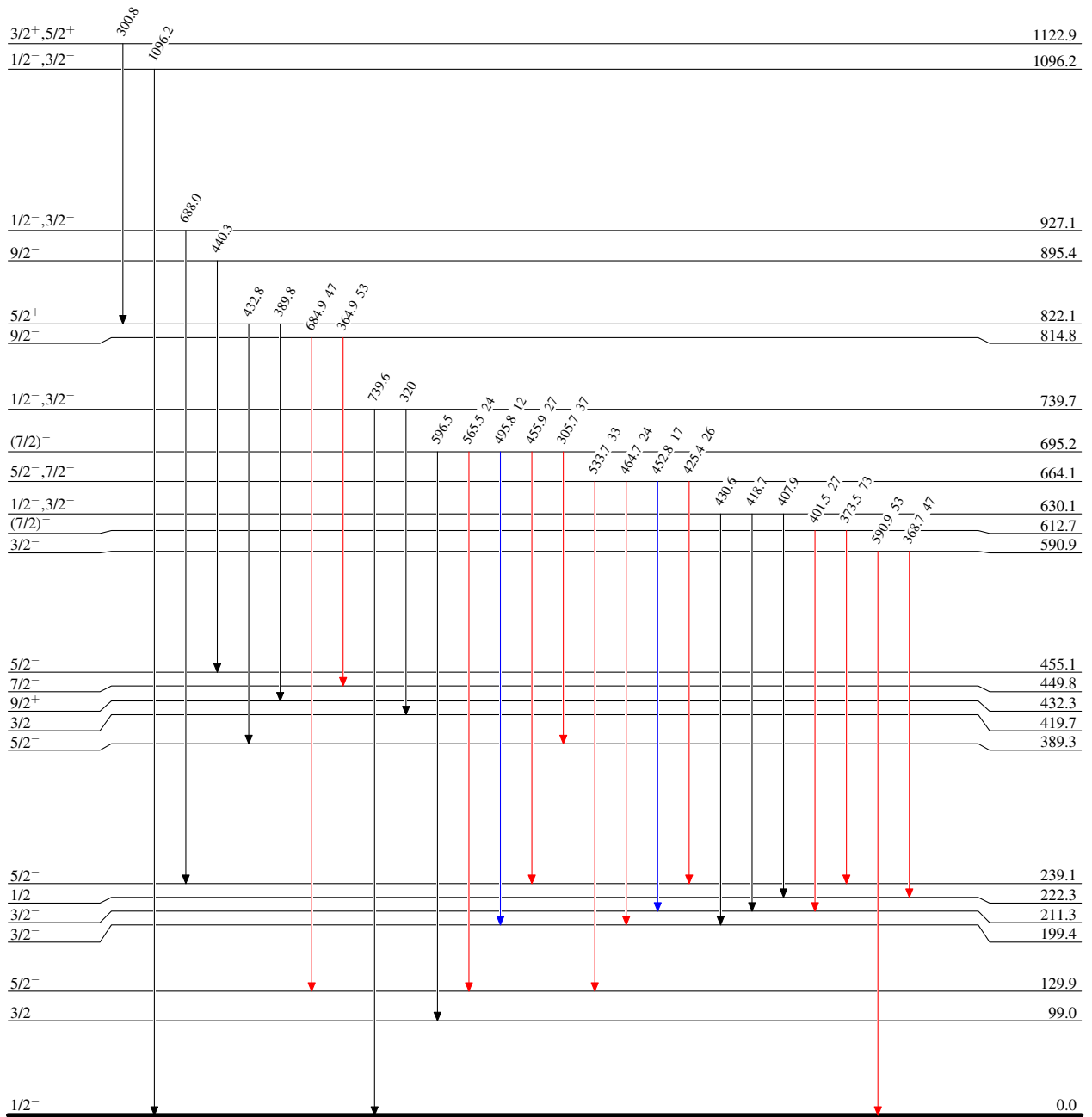
$^{195}\text{Pt}(n,n'\gamma)$ 1983Gh01

Level Scheme

Intensities: Relative I_γ

Legend

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



$^{195}_{78}\text{Pt}_{117}$

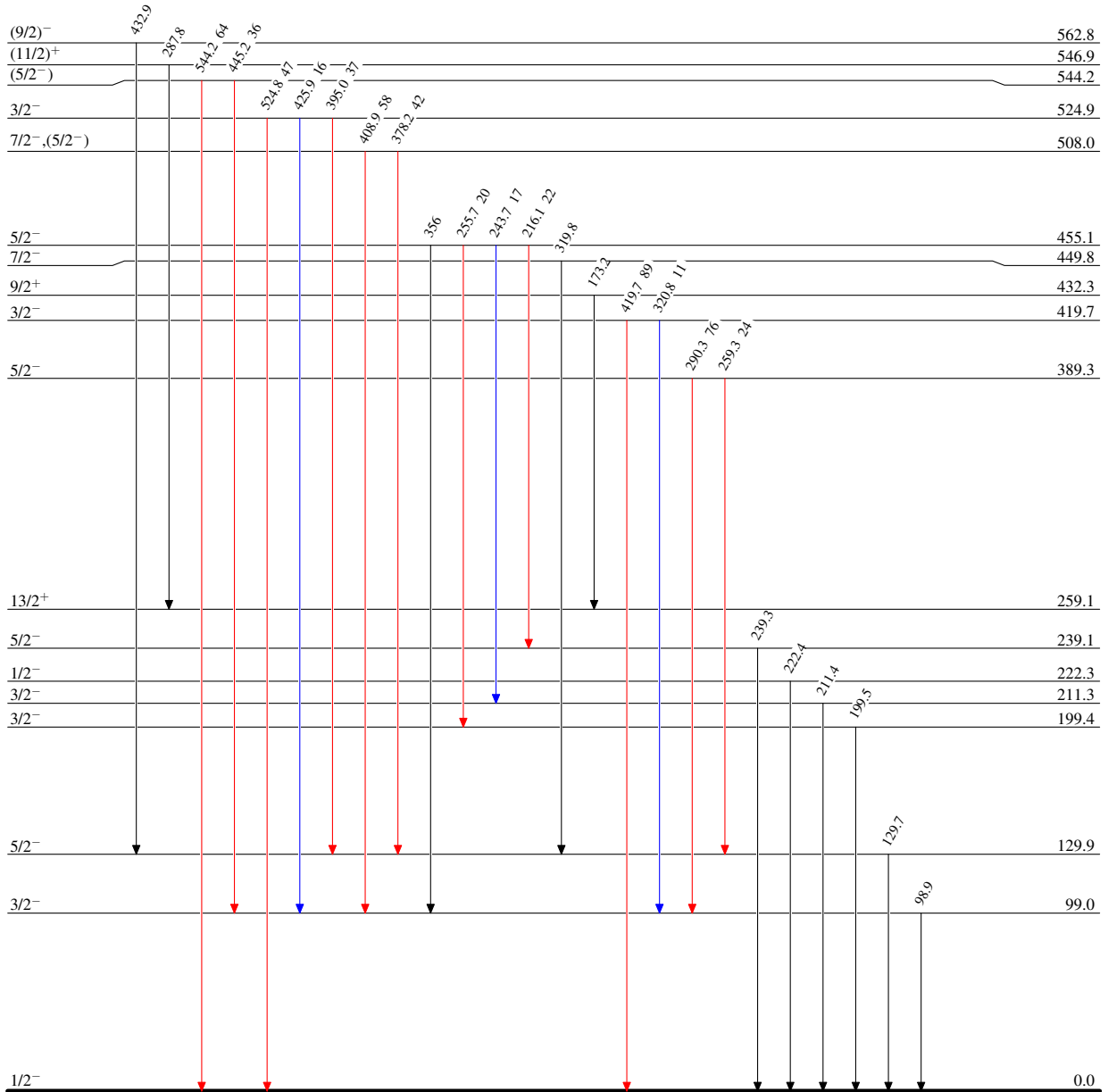
¹⁹⁵Pt(n,n' γ) 1983Gh01

Level Scheme (continued)

Intensities: Relative I γ

Legend

- I γ < 2% × I γ ^{max}
- I γ < 10% × I γ ^{max}
- I γ > 10% × I γ ^{max}



¹⁹⁵Pt₇₈117