

$^{122}\text{Sn}(^{14}\text{N},4n\gamma) E=70 \text{ MeV}$ 2004Gr06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. A. Rodionov and S. Sakharov, Balraj Singh		NDS 104, 497 (2005)	10-Feb-2005

Measured E_γ , I_γ , $\gamma\gamma$, $\gamma\gamma(\theta)$, lifetimes by DSAM using OSIRIS II array with ten Compton-suppressed Ge detectors.

 ^{132}La Levels

E(level) [‡]	J ^π [†]	T _{1/2}	Comments
774.5@ 4	9 ⁺		Additional information 1.
935.5# 8	10 ⁺		
1229.5@ 10	11 ⁺		
1522.5# 10	12 ⁺		
1557.5& 8	11 ⁺		
1915.5@ 11	13 ⁺		
1917.5& 10	12 ⁺		
2297.5& 10	13 ⁺	0.73 ps	
2300.5# 11	14 ⁺		
2407.5 ^b 14	(11 ⁺)		
2664.7 ^a 12	(12 ⁺)		
2700.4& 11	14 ⁺	0.80 ps	
2754.1@ 12	15 ⁺		
2906.8 ^b 12	(13 ⁺)		
3127.4& 13	15 ⁺		
3165.9 ^a 12	(14 ⁺)		
3206.3# 13	16 ⁺	0.54 ps	
3471.2 ^b 13	(15 ⁺)		
3616.3?& 13	16 ⁺		
3713.2@ 14	17 ⁺	0.44 ps	
3828.3 ^a 14	(16 ⁺)		
4200.2# 14	18 ⁺	0.38 ps	
4212.6 ^b 14	(17 ⁺)		
4643.5 ^a 15	(18 ⁺)		
4759.2@ 15	19 ⁺	0.53 ps	
5219.2# 18	20 ⁺	0.88 ps	

[†] As proposed by 2004Gr06.

[‡] From least-squares fit to E_γ 's.

Band(A): $\pi h_{11/2} \nu h_{11/2}$, $\alpha=0$.

@ Band(a): $\pi h_{11/2} \nu h_{11/2}$, $\alpha=1$.

& Band(B): Band based on 11⁺.

^a Band(C): band based on (12⁺), $\alpha=0$.

^b Band(c): band based on (11⁺), $\alpha=1$.

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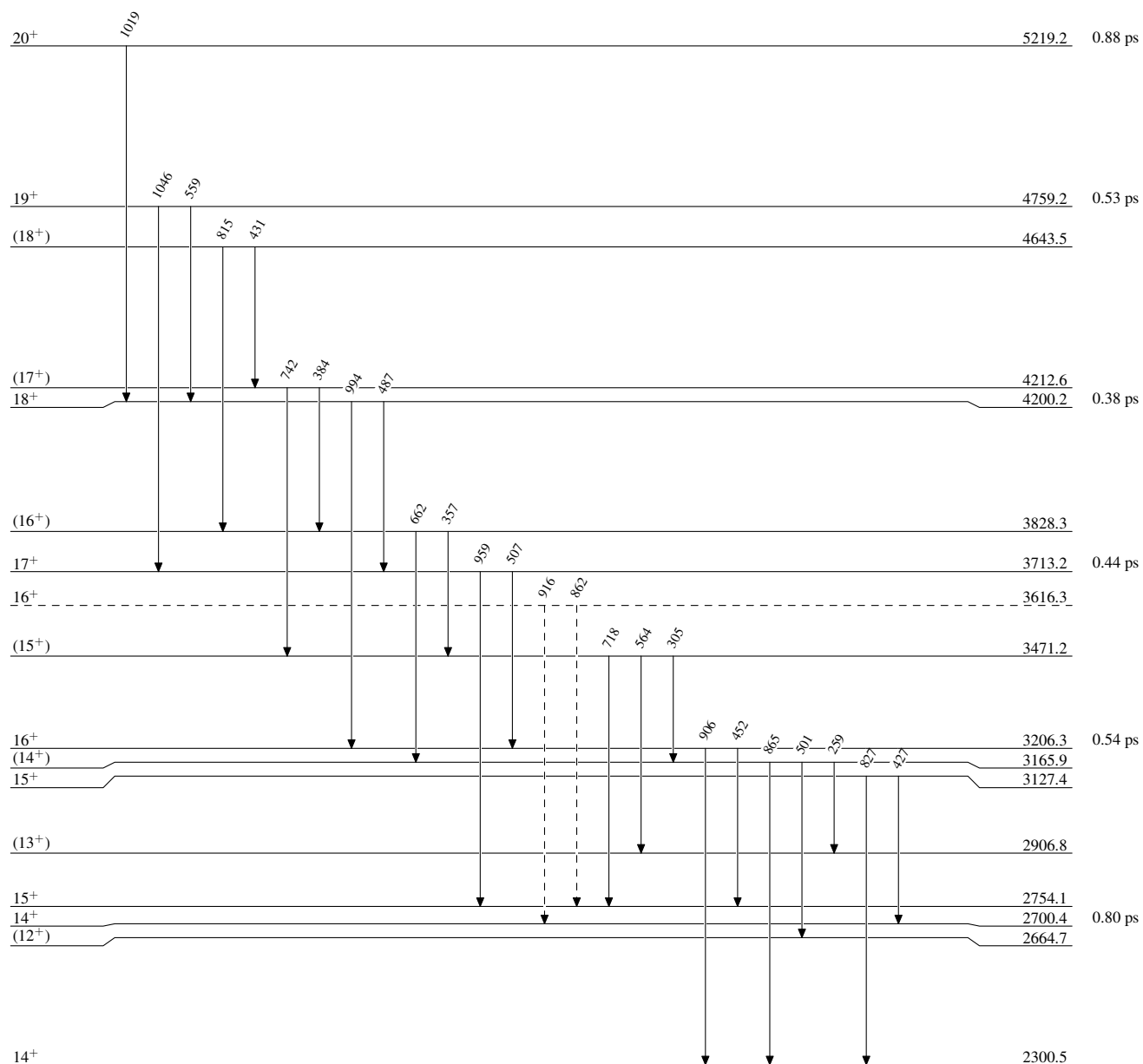
E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
161	935.5	10 ⁺	774.5	9 ⁺	686	1915.5	13 ⁺	1229.5	11 ⁺
242	2906.8	(13 ⁺)	2664.7	(12 ⁺)	688	1917.5	12 ⁺	1229.5	11 ⁺
257 [†]	2664.7	(12 ⁺)	2407.5	(11 ⁺)	718	3471.2	(15 ⁺)	2754.1	15 ⁺
259	3165.9	(14 ⁺)	2906.8	(13 ⁺)	740	2297.5	13 ⁺	1557.5	11 ⁺
293	1522.5	12 ⁺	1229.5	11 ⁺	742	4212.6	(17 ⁺)	3471.2	(15 ⁺)
294	1229.5	11 ⁺	935.5	10 ⁺	775	2297.5	13 ⁺	1522.5	12 ⁺
305	3471.2	(15 ⁺)	3165.9	(14 ⁺)	778	2300.5	14 ⁺	1522.5	12 ⁺
357	3828.3	(16 ⁺)	3471.2	(15 ⁺)	783	1557.5	11 ⁺	774.5	9 ⁺
360	1917.5	12 ⁺	1557.5	11 ⁺	783 [†]	2700.4	14 ⁺	1917.5	12 ⁺
380	2297.5	13 ⁺	1917.5	12 ⁺	785	2700.4	14 ⁺	1915.5	13 ⁺
384	4212.6	(17 ⁺)	3828.3	(16 ⁺)	815	4643.5	(18 ⁺)	3828.3	(16 ⁺)
385	2300.5	14 ⁺	1915.5	13 ⁺	827	3127.4	15 ⁺	2300.5	14 ⁺
393	1915.5	13 ⁺	1522.5	12 ⁺	839	2754.1	15 ⁺	1915.5	13 ⁺
403	2700.4	14 ⁺	2297.5	13 ⁺	862 [†]	3616.3?	16 ⁺	2754.1	15 ⁺
427	3127.4	15 ⁺	2700.4	14 ⁺	865	3165.9	(14 ⁺)	2300.5	14 ⁺
431	4643.5	(18 ⁺)	4212.6	(17 ⁺)	906	3206.3	16 ⁺	2300.5	14 ⁺
452	3206.3	16 ⁺	2754.1	15 ⁺	916 [†]	3616.3?	16 ⁺	2700.4	14 ⁺
454	2754.1	15 ⁺	2300.5	14 ⁺	959	3713.2	17 ⁺	2754.1	15 ⁺
487	4200.2	18 ⁺	3713.2	17 ⁺	991	2906.8	(13 ⁺)	1915.5	13 ⁺
501	3165.9	(14 ⁺)	2664.7	(12 ⁺)	994	4200.2	18 ⁺	3206.3	16 ⁺
507	3713.2	17 ⁺	3206.3	16 ⁺	1019	5219.2	20 ⁺	4200.2	18 ⁺
559	4759.2	19 ⁺	4200.2	18 ⁺	1046	4759.2	19 ⁺	3713.2	17 ⁺
564	3471.2	(15 ⁺)	2906.8	(13 ⁺)	1068	2297.5	13 ⁺	1229.5	11 ⁺
587	1522.5	12 ⁺	935.5	10 ⁺	1142	2664.7	(12 ⁺)	1522.5	12 ⁺
622	1557.5	11 ⁺	935.5	10 ⁺	1178	2407.5	(11 ⁺)	1229.5	11 ⁺
662	3828.3	(16 ⁺)	3165.9	(14 ⁺)					

[†] Placement of transition in the level scheme is uncertain.

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Legend

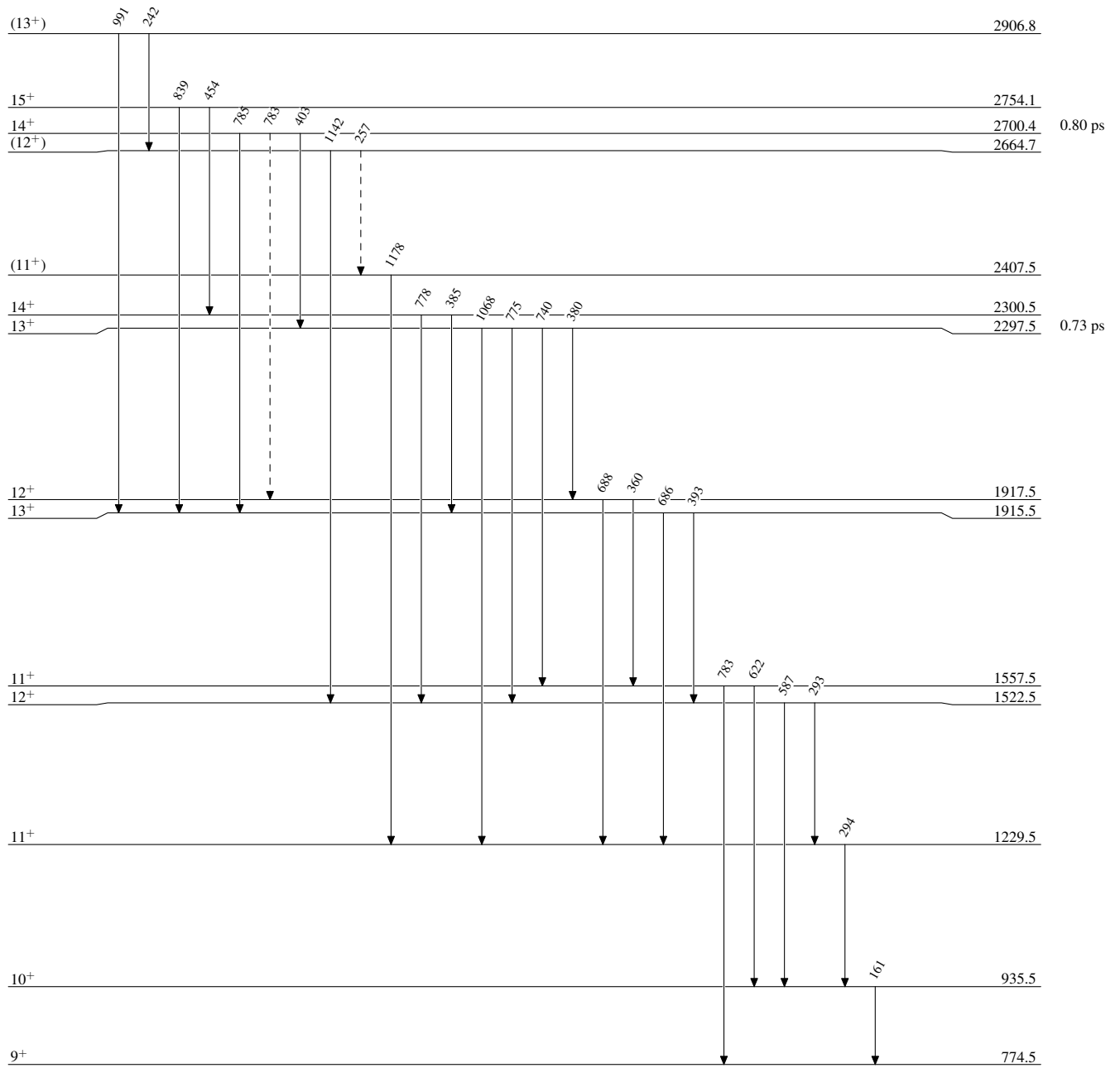
Level Scheme

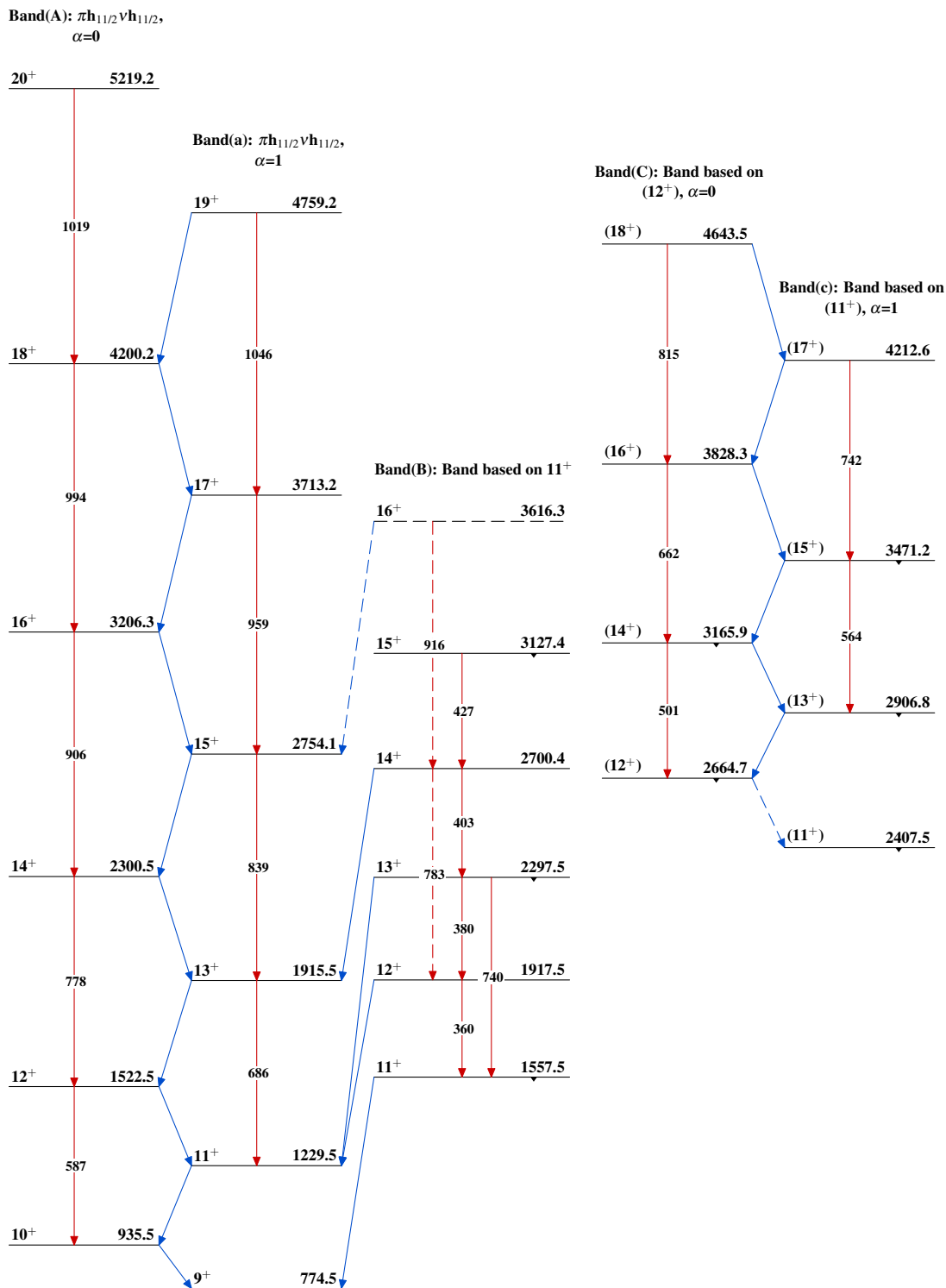
-----> γ Decay (Uncertain) $^{132}_{57}\text{La}_{75}$

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Legend

Level Scheme (continued)

-----► γ Decay (Uncertain) $^{132}_{57}\text{La}_{75}$

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