

(HI,xn γ) 1997Re27,2001La09

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 121, 561 (2014)	31-Mar-2014

1997Re27: $^{208}\text{Pb}(^{208}\text{Pb,xng})$, $^{208}\text{Pb}(^{136}\text{Xe,X}\gamma)$ Target: 98.7% enriched ^{208}Pb . Projectiles: ^{208}Pb , E=1.35 GeV; ^{136}Xe , E=775 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin. Detector: EUROBALL, an array of Ge(Li) γ -ray detectors.

2001La09: $^{238}\text{U}(^{208}\text{Pb,xng})$ Target: ^{238}U . Projectile: ^{208}Pb , Energy not given. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin. Detector: GAMMASPHERE, an array of about 100 Ge(Li) γ -ray detectors.

 ^{210}Pb Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0 [†]	0 ⁺ #		
799.7 [†]	1		
1097.7 [†]	10		
1195 [†]	4	49 ns	$T_{1/2}$: From Adopted Levels.
1278 [†]	5	201 ns	$T_{1/2}$: From Adopted Levels.
1806	5		Configuration= $(\nu 2g_{9/2})(\nu 1i_{11/2})10^+$ (1997Re27).
2118?			
2512	5		Configuration= $(\nu 2g_{9/2})(\nu 1j_{15/2})11^-$ (1997Re27).
3152	5		Configuration= $(\nu 1i_{11/2})(\nu 1j_{15/2})13^-$ (1997Re27).
3215?			
4133	5		Configuration= $(\nu 1j_{15/2})^214^+$ (1997Re27).
4754			
5165			
5544			
5557			
5599			
5688			
5741			
5839			

[†] From Adopted Levels.

[‡] Observed only in $^{238}\text{U}(^{208}\text{Pb,xng})$ (2001La09).

Configuration= $(\nu 2g_{9/2})^2$ (1997Re27).

 $\gamma(^{210}\text{Pb})$

E_γ [†]	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
83	3	1278	8 ⁺	1195	6 ⁺	E_γ : From $^{210}\text{Tl} \beta^-$ decay (1964We06).
97	3	1195	6 ⁺	1097.7	4 ⁺	E_γ : From $^{210}\text{Tl} \beta^-$ decay (1964We06).
241		5839		5599		
298	1	1097.7	4 ⁺	799.7	2 ⁺	E_γ : From $^{214}\text{Po} \alpha$ decay (1976Ku08).
312		2118?		1806	(10 ⁺)	
411		5165		4754		
434		5599		5165		
528.0	2	1806	(10 ⁺)	1278	8 ⁺	
640.4	2	3152	(13 ⁻)	2512	(11 ⁻)	
704		3215?		2512	(11 ⁻)	

Continued on next page (footnotes at end of table)

(HI,xn γ) 1997Re27,2001La09 (continued) $\gamma(^{210}\text{Pb})$ (continued)

E_γ [†]	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
790 [‡]		5544		4754		
799.1	1	799.7	2 ⁺	0.0	0 ⁺	E_γ : From ^{214}Po α decay (1976Ku08).
803 [‡]		5557		4754		
981.0	4	32	4133	(14 ⁺)	3152	(13 ⁻)
1233.7	2	122	2512	(11 ⁻)	1278	8 ⁺
1346.0	2	69	3152	(13 ⁻)	1806	(10 ⁺)
1465 [‡]		5599		4133	(14 ⁺)	
1556 [‡]		5688		4133	(14 ⁺)	
1602 [‡]		4754		3152	(13 ⁻)	
1609 [‡]		5741		4133	(14 ⁺)	
2447 [‡]		5599		3152	(13 ⁻)	

[†] From 1997Re27, unless otherwise specified. I_γ are values measured in coincidence with 799 γ .

[‡] Observed only in $^{238}\text{U}(^{208}\text{Pb},\text{xng})$ (2001La09).

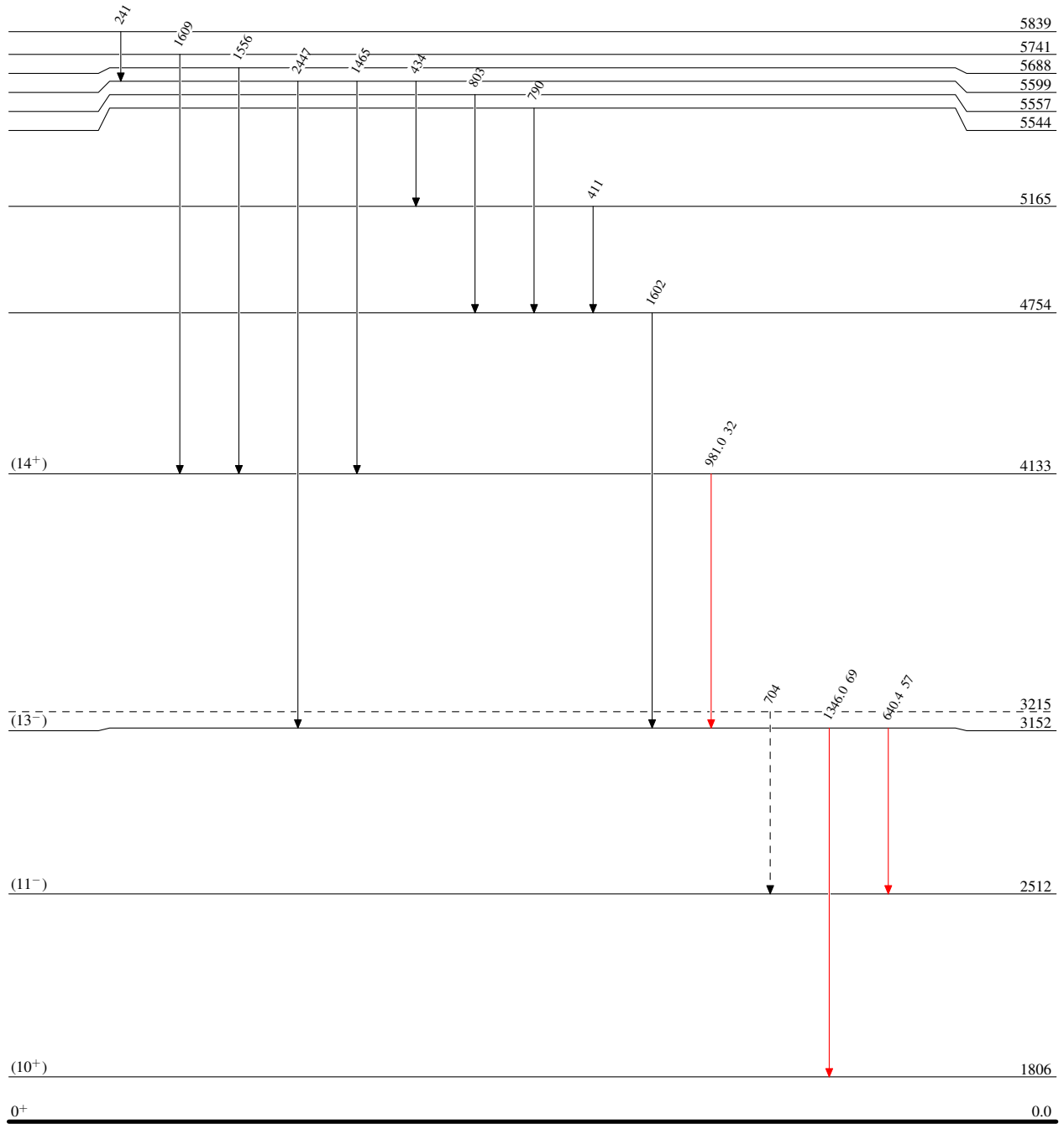
Placement of transition in the level scheme is uncertain.

(HI,xn γ) 1997Re27,2001La09

Legend

Level SchemeIntensities: Relative I_γ

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- - - - - γ Decay (Uncertain)

 $^{210}_{82}\text{Pb}_{128}$

(HI,xn γ) 1997Re27,2001La09

Legend

Level Scheme (continued)Intensities: Relative I_γ

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- - - - γ Decay (Uncertain)

