

$^{208}\text{Pb}(^{18}\text{O},\text{X}\gamma)$ **2007Ve14**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154, 1 (2018)	20-Nov-2018

Dataset based on unevaluated XUNDL file compiled by S. Geraedts and B. Singh (McMaster) from [2007Ve14](#).

[2007Ve14](#): E=85 MeV beam provided by Legnaro XTU tandem accelerator. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin using Euroball III and IV arrays of 15 Cluster Ge detectors and 26 Clover Ge detectors.

 ^{140}Ba Levels

E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π
0.0 [‡]	0 ⁺	2151.8 [#] 8	(5 ⁻)	3296.4 [#] 10	(9 ⁻)	4659.2 [#] 11	(13 ⁻)
601.9 [‡] 5	2 ⁺	2468.1 [‡] 9	(8 ⁺)	3384.4 [‡] 10	(10 ⁺)	4858.3 [@] 12	(14 ⁻)
1130.2 [‡] 7	4 ⁺	2722.3 [#] 9	(7 ⁻)	3770.0 [#] 10	(11 ⁻)	5076.5 [@] 13	(15 ⁻)
1660.0 [‡] 8	6 ⁺	2800.3 10	(8 ⁺)	4529.9 [@] 11	(13 ⁻)	5426.5 [@] 13	(16 ⁻)

[†] From least-squares fit to $E\gamma$'s (by compilers and assumed by evaluator), assuming an uncertainty of 0.5 keV for each γ ray.

[‡] Band(A): g.s. band.

[#] Band(B): Octupole band.

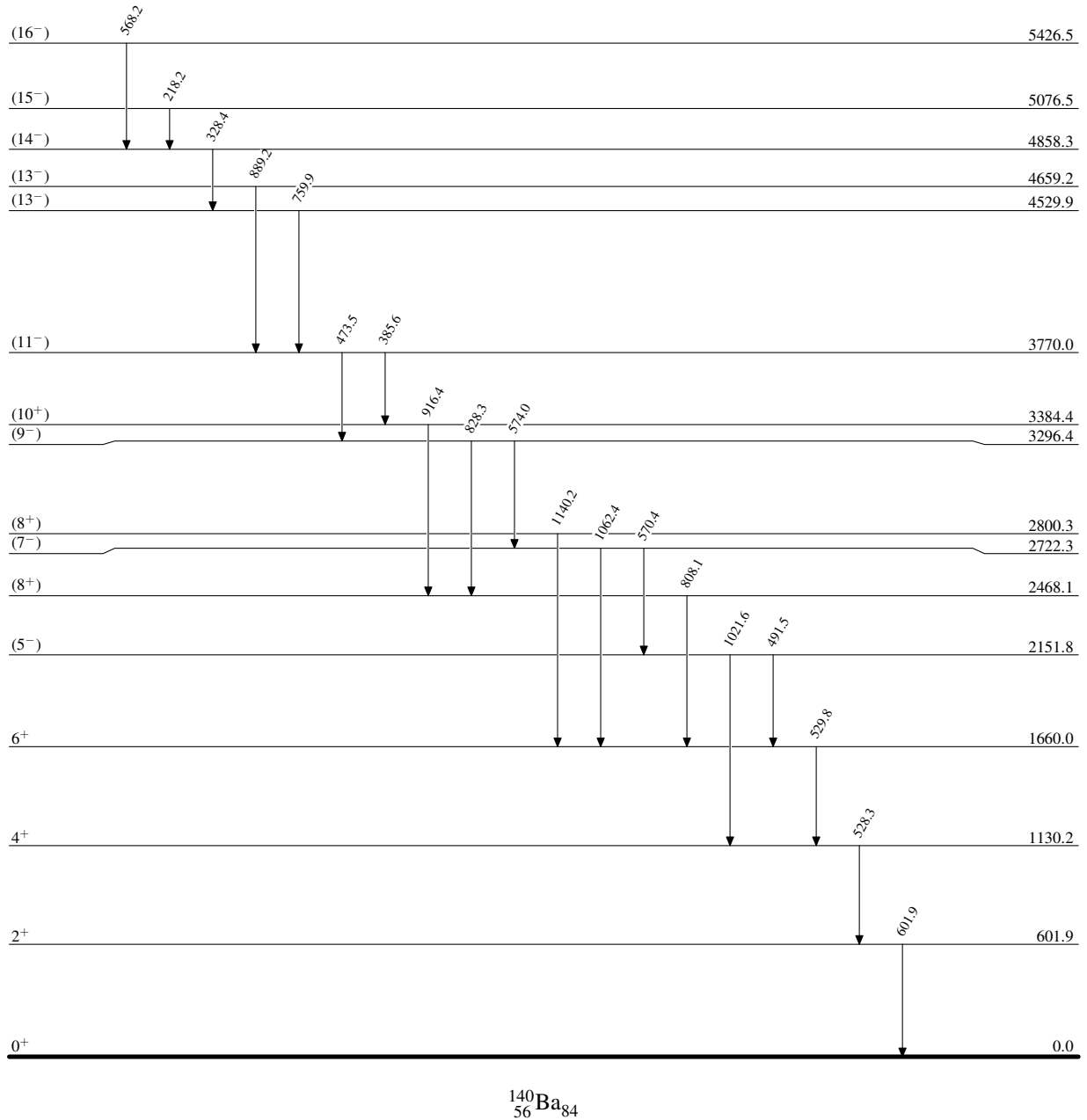
[@] Band(C): $\Delta J=1$ band based on (13⁻). Possible configuration= $(\pi g_{7/2}^{-1})(\pi h_{11/2}^1) \otimes (v f_{7/2}^2)$ or $(\pi g_{7/2}^{-1})(\pi h_{11/2}^1) \otimes (v f_{7/2}^1)$ ($v h_{9/2}^1$).

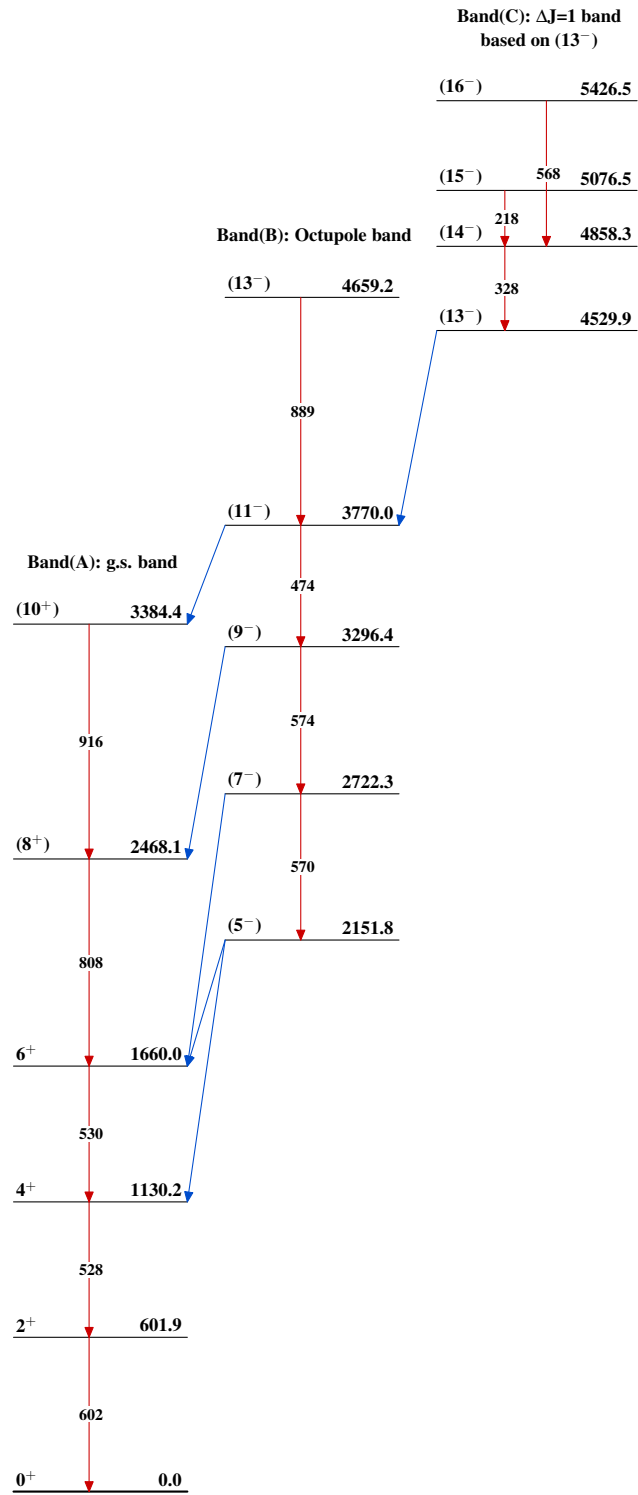
 $\gamma(^{140}\text{Ba})$

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
218.2	5076.5	(15 ⁻)	4858.3	(14 ⁻)	601.9	601.9	2 ⁺	0.0	0 ⁺
328.4	4858.3	(14 ⁻)	4529.9	(13 ⁻)	759.9	4529.9	(13 ⁻)	3770.0	(11 ⁻)
385.6	3770.0	(11 ⁻)	3384.4	(10 ⁺)	808.1	2468.1	(8 ⁺)	1660.0	6 ⁺
473.5	3770.0	(11 ⁻)	3296.4	(9 ⁻)	828.3	3296.4	(9 ⁻)	2468.1	(8 ⁺)
491.5	2151.8	(5 ⁻)	1660.0	6 ⁺	889.2	4659.2	(13 ⁻)	3770.0	(11 ⁻)
528.3	1130.2	4 ⁺	601.9	2 ⁺	916.4	3384.4	(10 ⁺)	2468.1	(8 ⁺)
529.8	1660.0	6 ⁺	1130.2	4 ⁺	1021.6	2151.8	(5 ⁻)	1130.2	4 ⁺
568.2	5426.5	(16 ⁻)	4858.3	(14 ⁻)	1062.4	2722.3	(7 ⁻)	1660.0	6 ⁺
570.4	2722.3	(7 ⁻)	2151.8	(5 ⁻)	1140.2	2800.3	(8 ⁺)	1660.0	6 ⁺
574.0	3296.4	(9 ⁻)	2722.3	(7 ⁻)					

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Level Scheme

 $^{140}_{56}\text{Ba}_{84}$

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