

$^{176}\text{Yb}(^{28}\text{Si},\text{X}\gamma)$ 2000De33

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 108,2035 (2007)	30-Mar-2007

E=145 MeV. Measured $E\gamma$ and $\gamma\gamma$ using EUROGAM II array consisting of 54 escape-suppressed Ge detectors; 30 of the detectors were large- volume coaxial detectors and the remaining 24 were four-element ‘clover’ detectors; Cranked HFB calculations.

 ^{104}Ru Levels

E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π
0.0 [‡]	0 ⁺	2196.2 [@] 17	(6 ⁺)	2847.2 [@] 20	(8 ⁺)	3472.9 [#] 21	(10 ⁻)
358.0 [‡] 10	2 ⁺	2232.6 ^{&} 15	5 ⁻	2861.3 18		3690.2 ^{&} 20	(11 ⁻)
888.5 [‡] 13	4 ⁺	2320.3 [‡] 18	(8 ⁺)	2927.9 [#] 18	(8 ⁻)	3712.8 [‡] 21	(12 ⁺)
892.9 [@] 13	2 ⁺	2600.6 [#] 17	(6 ⁻)	3034.7 17		4163.9 [#] 23	(12 ⁻)
1241.6 [@] 13	3 ⁺	2613.2 ^{&} 16	(7 ⁻)	3074.2 ^{&} 17	(9 ⁻)	4438.9 [‡] 23	(14 ⁺)
1502.2 [@] 14	(4 ⁺)	2622.0 [@] 17	(7 ⁺)	3111.6 [‡] 20	(10 ⁺)	4442.2 ^{&} 22	(13 ⁻)
1556.3 [‡] 15	6 ⁺	2628.1 17		3284.1 20	(10 ⁺)	5356.9 [‡] 25	(16 ⁺)
1871.0 [@] 14	(5 ⁺)	2758.1 17		3384.4 21			

[†] Level energy from least-squares adjustment.

[‡] Band(A): g.s. Band.

[#] Band(B): Band based on (6⁻).

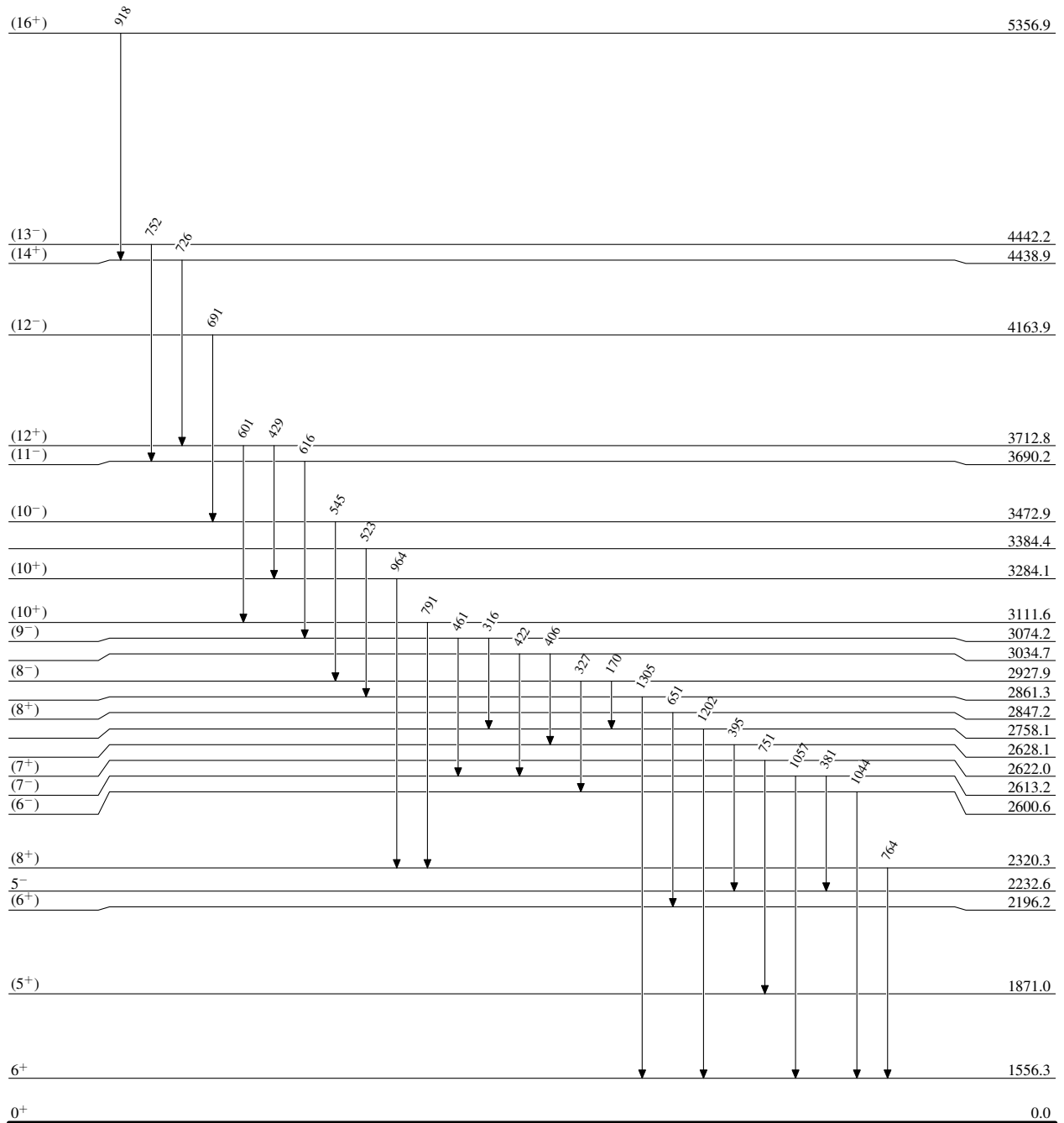
[@] Band(C): K^π=2⁺ band.

[&] Band(D): Band based on 5⁻.

 $\gamma(^{104}\text{Ru})$

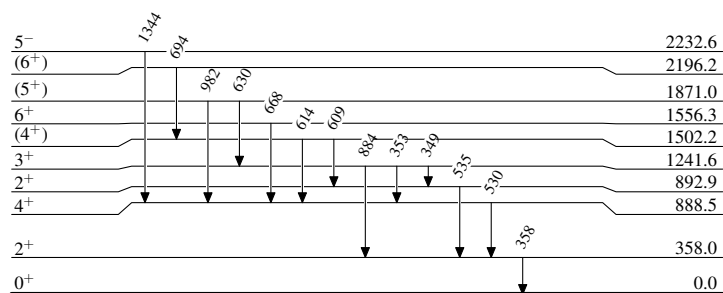
E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π
170 l	2927.9	(8 ⁻)	2758.1		630 l	1871.0	(5 ⁺)	1241.6	3 ⁺
316 l	3074.2	(9 ⁻)	2758.1		651 l	2847.2	(8 ⁺)	2196.2	(6 ⁺)
327 l	2927.9	(8 ⁻)	2600.6	(6 ⁻)	668 l	1556.3	6 ⁺	888.5	4 ⁺
349 l	1241.6	3 ⁺	892.9	2 ⁺	691 l	4163.9	(12 ⁻)	3472.9	(10 ⁻)
353 l	1241.6	3 ⁺	888.5	4 ⁺	694 l	2196.2	(6 ⁺)	1502.2	(4 ⁺)
358 l	358.0	2 ⁺	0.0	0 ⁺	726 l	4438.9	(14 ⁺)	3712.8	(12 ⁺)
381 l	2613.2	(7 ⁻)	2232.6	5 ⁻	751 l	2622.0	(7 ⁺)	1871.0	(5 ⁺)
395 l	2628.1		2232.6	5 ⁻	752 l	4442.2	(13 ⁻)	3690.2	(11 ⁻)
406 l	3034.7		2628.1		764 l	2320.3	(8 ⁺)	1556.3	6 ⁺
422 l	3034.7		2613.2	(7 ⁻)	791 l	3111.6	(10 ⁺)	2320.3	(8 ⁺)
429 l	3712.8	(12 ⁺)	3284.1	(10 ⁺)	884 l	1241.6	3 ⁺	358.0	2 ⁺
461 l	3074.2	(9 ⁻)	2613.2	(7 ⁻)	918 l	5356.9	(16 ⁺)	4438.9	(14 ⁺)
523 l	3384.4		2861.3		964 l	3284.1	(10 ⁺)	2320.3	(8 ⁺)
530 l	888.5	4 ⁺	358.0	2 ⁺	982 l	1871.0	(5 ⁺)	888.5	4 ⁺
535 l	892.9	2 ⁺	358.0	2 ⁺	1044 l	2600.6	(6 ⁻)	1556.3	6 ⁺
545 l	3472.9	(10 ⁻)	2927.9	(8 ⁻)	1057 l	2613.2	(7 ⁻)	1556.3	6 ⁺
601 l	3712.8	(12 ⁺)	3111.6	(10 ⁺)	1202 l	2758.1		1556.3	6 ⁺
609 l	1502.2	(4 ⁺)	892.9	2 ⁺	1305 l	2861.3		1556.3	6 ⁺
614 l	1502.2	(4 ⁺)	888.5	4 ⁺	1344 l	2232.6	5 ⁻	888.5	4 ⁺
616 l	3690.2	(11 ⁻)	3074.2	(9 ⁻)					

[†] ΔE not given , assumed to be 1 keV.

$^{176}\text{Yb}(^{28}\text{Si}, \text{X}\gamma)$ 2000De33Level Scheme $^{104}_{44}\text{Ru}_{60}$

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Level Scheme (continued)

 $^{104}_{44}\text{Ru}_{60}$

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