

¹⁶⁴Er(n,γ) E=res:av 1970Bo29

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ashok K. Jain and Anwesha Ghosh, Balraj Singh		NDS 107, 1075 (2006)	15-Apr-2006

1970Bo29: E=reactor neutrons. Average-resonance neutron capture. Measured primary γ's.

Additional information 1.

¹⁶⁵Er Levels

E(level)	J ^π †	Comments
0.0	5/2 ⁻	
47.2	5/2 ⁺	
77.3	7/2 ⁻	
242.9 3	3/2 ⁻	
297.6 2	1/2 ⁻	
356.4 2	3/2 ⁻	
506.4 20	1/2 ⁺	
532.8 15	3/2 ⁺	
590.2 10	3/2 ⁺ &1/2 ⁻	
608.5 2	3/2 ⁻	
853.3 15	3/2 ⁺	
921.0 3	1/2 ⁻	
962.5 10	3/2 ⁻	
1045.0 3		
(6650.2 7)	1/2,3/2	J ^π : S- and/or P-wave capture In ¹⁶⁴ Er g.s..

† From 'Adopted Levels'.

γ(¹⁶⁵Er)

E _γ	I _γ †	E _i (level)	J _i ^π	E _f	J _f ^π
5605.1 7	30.5 16	(6650.2)	1/2,3/2	1045.0	
5687.6 12	40 4	(6650.2)	1/2,3/2	962.5	3/2 ⁻
5729.1 7	27.3 13	(6650.2)	1/2,3/2	921.0	1/2 ⁻
5796.8 16	5.5 12	(6650.2)	1/2,3/2	853.3	3/2 ⁺
6041.6 6	40.4 20	(6650.2)	1/2,3/2	608.5	3/2 ⁻
6059.9 12	42 3	(6650.2)	1/2,3/2	590.2	3/2 ⁺ &1/2 ⁻
6117.3 16	7.8 30	(6650.2)	1/2,3/2	532.8	3/2 ⁺
6143.7 21	6.5 23	(6650.2)	1/2,3/2	506.4	1/2 ⁺
6293.7 6	61.1 25	(6650.2)	1/2,3/2	356.4	3/2 ⁻
6352.5 6	62.0 26	(6650.2)	1/2,3/2	297.6	1/2 ⁻
6407.2 7	39.2 18	(6650.2)	1/2,3/2	242.9	3/2 ⁻
6572.7‡ 6	<2.8	(6650.2)	1/2,3/2	77.3	7/2 ⁻
6602.7‡ 6	<2.9	(6650.2)	1/2,3/2	47.2	5/2 ⁺
6649.9‡ 6	<2.9	(6650.2)	1/2,3/2	0.0	5/2 ⁻

† Deduced by evaluators from measured reduced γ intensity=I_γ/E_γ³.

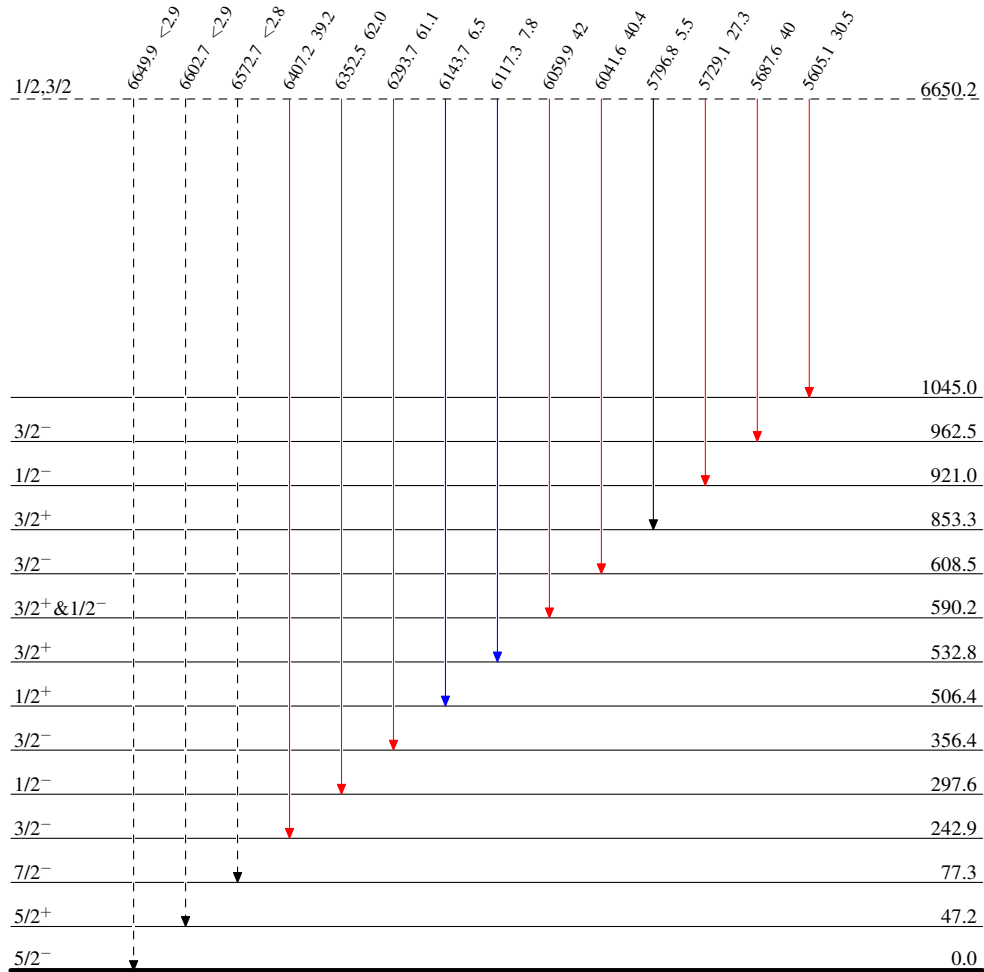
‡ Placement of transition in the level scheme is uncertain.

$^{164}\text{Er}(n,\gamma)$ E=res:av 1970Bo29

Legend

Level Scheme
 Intensities: Relative I_γ

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

 $^{165}_{68}\text{Er}_{97}$