^{187}Re(n,γ) E=res 1979LoZY

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley	NDS 150, 1 (2018)	1-Feb-2018

See the following references for measurement of neutron resonances: 1976Na13 (also 1973Na11,1971St23,1967St08 from the same group) list about 400 n-resonances in the range 24 to 2000 eV. 1967St08 suggest J=3 for the 4.4 eV resonance and J=2 for the 11.2 eV resonance. Others: 1972Id01, 1968Fr16.

Additional information 1.

For relative population of g.s. and the 18.6 min isomer in this reaction, see 1981Ar22.

1979LoZY report data for the following neutron resonances: 4.41, 11.17, 16.1, 17.6, and 18.6 eV. Semiconducting detector used for measurement of primary γ rays. Intensities are not given.

^{188}Re Levels

E(level)[†]	Comments
0.0	
41.7 *15*	E(level): Level not adopted.
65.7 *15*	
100.7 *15*	E(level): Level not adopted.
111.7 *15*	E(level): Level not adopted.
158.7 *15*	
171.7 *15*	
185.0 *15*	
206.5 *15*	
231.7 *15*	
258.3 *15*	
284.9 *15*	
290.7 *15*	
317.7 *15*	
325.7 *15*	
330.7 *15*	
364.7 *15*	
373.7 *15*	
403.9 *15*	
522.7 *15*	
559.0 *15*	
611.7 *15*	
629.4 *15*	
711.7 *15*	
741.7 *15*	
815.5 *15*	
861.1 *15*	
870.5 *15*	
912.6 *15*	
920.4 *15*	
926.6 *15*	
5872.7 *15*	

[†] Based on g.s. transition of 5872.5 *15*.

^{187}Re(n,γ) E=res 1979LoZY (continued)

$\gamma(^{188}Re)$

E_γ	E_i(level)	E_f	E_γ	E_i(level)	E_f	E_γ	E_i(level)	E_f
4946.1 *15*	5872.7	926.6	5350.0 *15*	5872.7	522.7	5666.2 *15*	5872.7	206.5
4952.3 *15*	5872.7	920.4	5468.8 *15*	5872.7	403.9	5687.7 *15*	5872.7	185.0
4960.1 *15*	5872.7	912.6	5499.0 *15*	5872.7	373.7	5701.0 *15*	5872.7	171.7
5002.2 *15*	5872.7	870.5	5508.0 *15*	5872.7	364.7	5714.0 *15*	5872.7	158.7
5011.6 *15*	5872.7	861.1	5542.0 *15*	5872.7	330.7	5761.0 *15*	5872.7	111.7
5057.2 *15*	5872.7	815.5	5547.0 *15*	5872.7	325.7	5772.0 *15*	5872.7	100.7
5131.0 *15*	5872.7	741.7	5555.0 *15*	5872.7	317.7	5807.0 *15*	5872.7	65.7
5161.0 *15*	5872.7	711.7	5582.0 *15*	5872.7	290.7	5831.0 *15*	5872.7	41.7
5243.3 *15*	5872.7	629.4	5587.8 *15*	5872.7	284.9	5872.7 *15*	5872.7	0.0
5261.0 *15*	5872.7	611.7	5614.4 *15*	5872.7	258.3			
5313.7 *15*	5872.7	559.0	5641.0 *15*	5872.7	231.7			

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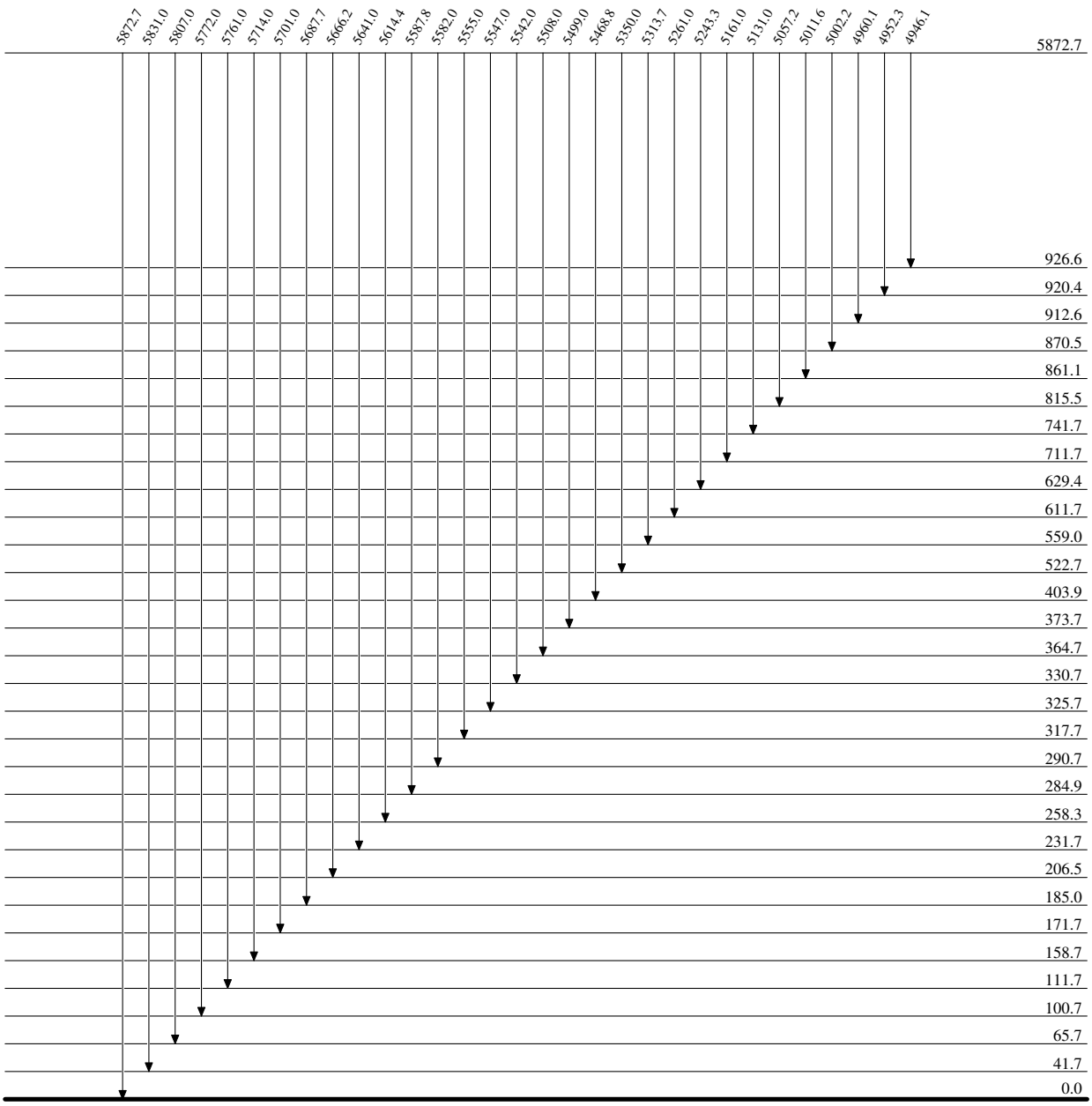
Level Scheme



$^{188}_{75}Re_{113}$