

⁹²Mo(⁵⁸Ni,2pn γ) [1992De30](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	N. Nica and B. Singh		NDS 181, 1 (2022)	9-Mar-2022

E=260 MeV. Measured E γ , $\gamma\gamma$ and $\gamma\gamma(\theta)$ (DCO) using 6 Compton-suppressed Ge detectors and a multiplicity filter composed of 14 BaF₂ crystals. γ -rays were identified by means of γ -recoil coincidences at the Recoil Mass Spectrometer (RMS) at LNL. Also measured γ - γ -charged particle-neutron with Nordball, 4 π Silicon ball, and n-detector array at the Niels Bohr Tandem Accelerator Laboratory.

¹⁴⁷Er Levels

E(level) [†]	J π [‡]	T _{1/2}	Comments
0.0+x [#]	(11/2 ⁻)	1.6 s 2	E(level): x=100 keV 50 (2021Ko07 , syst). T _{1/2} : from Adopted Levels.
543.0+x [#]	(15/2 ⁻)		
1455.0+x [#]	(19/2 ⁻)		
1668.0+x			
2179.0+x			
2430.0+x [#]	(23/2 ⁻)		
2549.0+x			
2606.0+x			
2793.0+x			
3197.0+x			
3361.0+x			E(level): 2361 is a misprint in figure 3 "Level Scheme of ¹⁴⁷ Er" of 1992De30 .
3468+x			
4323+x			
5008+x			

[†] No uncertainties are available for the E γ input. The E(level) values are from a least-squares fit to the E γ data with the assumption that the uncertainties are the same for all the E γ 's.

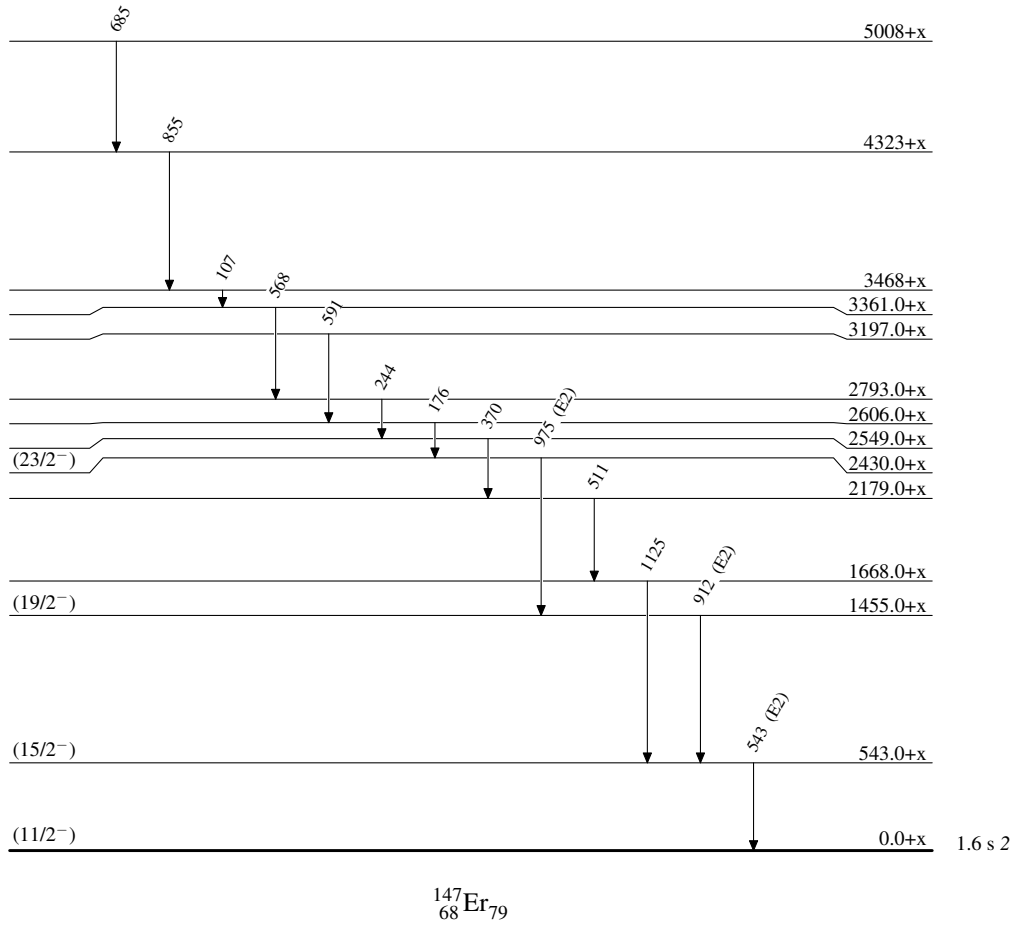
[‡] Based on multiplicities and comparison with ¹³⁹Nd, ¹⁴¹Sm, ¹⁴³Gd, and ¹⁴⁵Dy isotones.

[#] Band(A): (11/2⁻) v_h1_{1/2} band.

$\gamma(^{147}\text{Er})$

E γ	E _i (level)	J π _i	E _f	J π _f	Mult. [†]
107	3468+x		3361.0+x		
176	2606.0+x		2430.0+x	(23/2 ⁻)	
244	2793.0+x		2549.0+x		
370	2549.0+x		2179.0+x		
511	2179.0+x		1668.0+x		
543	543.0+x	(15/2 ⁻)	0.0+x	(11/2 ⁻)	(E2)
568	3361.0+x		2793.0+x		
591	3197.0+x		2606.0+x		
685	5008+x		4323+x		
855	4323+x		3468+x		
912	1455.0+x	(19/2 ⁻)	543.0+x	(15/2 ⁻)	(E2)
975	2430.0+x	(23/2 ⁻)	1455.0+x	(19/2 ⁻)	(E2)
1125	1668.0+x		543.0+x	(15/2 ⁻)	

[†] Based on DCO (values of DCO's and multiplicities not given in [1992De30](#)). They assume E2 for quadrupole transitions

$^{92}\text{Mo}(^{58}\text{Ni}, 2\text{pn}\gamma)$ **1992De30**Level Scheme $^{147}_{68}\text{Er}_{79}$

$^{92}\text{Mo}(^{58}\text{Ni}, 2\text{pn}\gamma)$ 1992De30

Band(A): $(11/2^-)$ $\nu h_{11/2}$
band

$(23/2^-)$ 2430.0+x

975

$(19/2^-)$ 1455.0+x

912

$(15/2^-)$ 543.0+x

543

$(11/2^-)$ 0.0+x

$^{147}_{68}\text{Er}_{79}$