^{168}Er(n,γ) E=resonance 1976Ga05

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 109, 2033 (2008)	15-Jun-2008

Others: 1967Mu17, 1968Ka17, 1970Bo29, 1972Li08, 1972Ra26.

1976Ga05: E(res)=79, 189, 244, 312, 527, 830, 1005 eV; Er oxide targets enriched to 95.47% in ^{168}Er; measured resonance properties and γ-ray spectra for individual resonances (Ge(Li), FWHM=6 keV at 7.6 MeV); deduced average resonance widths.

^{169}Er Levels

E(level)[‡]	J$^\pi$[†]	Comments
0.0	$1/2^-$[#]	
64.1	$3/2^-$[#]	
562.5	$(1/2)^-$[#]	
599.1	$(3/2)^-$[#]	
714.1	$(3/2)^-$[#]	
859.2	$(3/2^+)$[#]	
1053.1	$1/2^-,3/2^-$	
1079.6	$1/2^{(-)},3/2^{(-)}$	
1093.1	$1/2^-,3/2^-$	
1386.1	$1/2^-,3/2^-$	
1469.8	$1/2^{(-)},3/2^{(-)}$	
1486.9	$1/2^-,3/2^-$	
1529.8	$1/2^-,3/2^-$	
1554.1	$1/2^-,3/2^-$	
1572.3	$1/2^{(-)},3/2^{(-)}$	
1781	1/2,3/2	
1794	1/2,3/2	
1821.5	$1/2^{(-)},3/2^{(-)}$	
1839.5	$1/2^{(-)},3/2^{(-)}$	
1848.4	$1/2^-,3/2^-$	
1868.2	$1/2^{(-)},3/2^{(-)}$	
1896	1/2,3/2	
1929.3	$1/2^-,3/2^-$	
1947.6	$1/2^-,3/2^-$	
1955.5	$1/2^-,3/2^-$	
1966.9	1/2,3/2	
1998	1/2,3/2	
2022.9	$1/2^-,3/2^-$	Large average Γ_γ suggests populating transition is a doublet. E(level): the apparent discrepancy between Eγ=3980.2 and E(level)=2012.8 (see table 1 in 1976Ga05) is resolved if Eγ is taken as correct and E(level) is adjusted accordingly. There is a reference to 3980.2γ in the text.
2029.6	$1/2^-,3/2^-$	
2098	1/2,3/2	
2124.2	$1/2^-,3/2^-$	
2139.1	$1/2^{(-)},3/2^{(-)}$	
2165.1	$1/2^-,3/2^-$	
2180.1	$1/2^-,3/2^-$	
2222.5	$1/2^-,3/2^-$	
2264.5	1/2,3/2	
(6003.8 *5*)	$1/2^+$	E(level): composite state (includes all studied resonances). S(n)=6003.27 *15* In 2003Au03. J$^\pi$: the resonances studied all have J$^\pi$=$1/2^+$ (1984MuZY).

[†] Assigned by evaluator from population by E1 (or probable E1) transition from $1/2^+$ (multipolarities determined from average

Continued on next page (footnotes at end of table)

^{168}Er(n,γ) E=resonance 1976Ga05 (continued)

^{169}Er Levels (continued)

resonance widths), except where noted.
‡ Deduced from Eγ for primary transitions; values correspond to S(n)=6003.2.
# From Adopted Levels.