

$^{168}\text{Er}(^{16}\text{O}, ^{15}\text{O}\gamma), (^{12}\text{C}, ^{11}\text{C}\gamma)$ [1981Bo16](#)

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

$E(^{16}\text{O})=120$ MeV, $E(^{12}\text{C})=95$ MeV; $\theta=42^\circ$; enriched ^{168}Er targets; measured particle spectra (Q3D mag spect, FWHM=100-150 keV (for ^{16}O), 80-120 keV (for ^{11}C)), relative populations in $(^{16}\text{O}, ^{15}\text{O}\gamma)$ and $(^{12}\text{C}, ^{11}\text{C}\gamma)$ (L+1/2 final states strongly favored for ^{16}O ; L+1/2 and L-1/2 states comparably favored for ^{12}C).

 ^{169}Er Levels

E(level)	J^π^\dagger	Comments
180 20	$(7/2)^-$	
510 20	$(13/2)^+$	
940 20	$(9/2)^-$	
1150 20	$(13/2^+)$	J^π : from relative population strengths in the two reactions; $13/2^+$ consistent with systematics for position of $13/2^+$ $9/2[624]$ state in Er isotopes.
2300		E(level): represents peak labeled on spectrum for $(^{16}\text{O}, ^{15}\text{O}\gamma)$, but not discussed in text by 1981Bo16 .
≈ 3400		Very broad peak observed only in $(^{16}\text{O}, ^{15}\text{O}\gamma)$; strength can be attributed to Er, but origin is not understood (1981Bo16).

† Adopted values, except where noted.