^{61}Ni(p,n),(p,nγ) 1970Ba64,1974Br34

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Kazimierz Zuber, Balraj Singh	NDS 125, 1 (2015)	25-Jan-2015

1970Ba64: E(p)=5.5-6.3 MeV. Measured neutron time of flight, FWHM≈10 keV. Enriched targets.
1974Br34: E(p)=5.3 MeV. Measured DSA (centroid shift) with escape-suppression spectrometer.
All data are from 1970Ba64, except as noted.

^{61}Cu Levels

E(level)[†]	$T_{1/2}$	Comments
0		
477 *1*		
973 *2*		
1314 *2*		
1398 *2*		
1660.2[‡]	193 fs *20*	E(level): 1663 *2* (1970Ba64).
1736 *2*		
1904.1[‡]	178 fs *18*	E(level): 1907 *2* (1970Ba64).
1932.6[‡]	84 fs *9*	E(level): 1963 *3* (1970Ba64).
1948 *3*		
2088.7[‡]	28.4[#] fs *35*	E(level): 2091 *2* (1970Ba64).
2206 *2*		
2296 *2*		
2338 *2*		
2360 *3*		
2401 *3*		
2474 *3*		
2575 *3*		

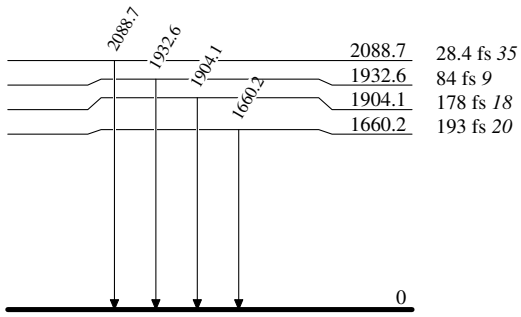
[†] From 1970Ba64 unless otherwise stated.
[‡] From γ-ray data (1974Br34).
[#] From 1974Br34. The values are based on DSAM in 1974Br34 and stopping power corrections determined by using measured lifetimes in their (α,pγ) study (1973Sa19).

γ(^{61}Cu)

$E_γ$	E_i(level)	E_f
1660.2	1660.2	0
1904.1	1904.1	0
1932.6	1932.6	0
2088.7	2088.7	0

^{61}Ni(p,n),(p,nγ) 1970Ba64,1974Br34

Level Scheme



$^{61}_{29}Cu_{32}$