

$^{64}\text{Ni}(\alpha, p)$ 2001Ny01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huang Xiaolong, J. K. Tuli		NDS 106, 159 (2005)	1-Apr-2005

2001Ny01: $E(\alpha)=25$ MeV, target: purity 99.8%, FWHM ≈ 25 keV, position-sensitive focal-plane detector, angles ranging: from 7.5° to 77.5° In steps of 5° , DWBA analysis.

1972Bu17: $E(\alpha)=19.3$ MeV, FWHM=150-200 keV; measured $\sigma(\theta)$, DWBA analysis.

Others: **1975Se14**, **1968Se03**, **1965Sa21**.

All data are from **2001Ny01**, except As noted.

 ^{67}Cu Levels

ΔE : **2001Ny01** observed that the uncertainties for the strongest are ≈ 2 keV, for the weakest are ≈ 5 keV. The rest are estimated based on authors' FIG.12 by the evaluators.

E(level)	J^π †	L#	E(level)	J^π ‡	E(level)	J^π ‡
0	$3/2^-$	1	3334 4		4059 3	(7/2)
1115	$5/2^-$	1+3	3364 4		4127 3	(7/2)
1169 2	$1/2^-$		3394 5		4163 2	(9/2)
1633 2	$5/2^-$	3	3480 3	(11/2 ⁻ , 9/2)	4195 3	(7/2)
1937 4	$3/2^-$		3522 4	(7/2, 9/2 ⁻)	4262 3	(7/2)
2270 5			3638 2	(11/2 ⁻)	4315 3	(13/2 ⁺)
2507 2	$9/2^+$	4	3693 4	(11/2 ⁻ , 9/2)	4364 2	(7/2, 11/2 ⁻)
2680 4	$3/2^-$		3736 4	(5/2)	4406 3	(11/2 ⁻)
2996 4	(3/2 ⁻)		3838 4	(5/2)	4448 5	(7/2, 9/2 ⁻)
3036 5	(7/2 ⁻)		3865 3	(5/2)	4493 4	
3123 3	(11/2 ⁻ , 9/2 ⁺)		3947 5	(5/2)	4518 4	
3250 4	(7/2 ⁺ , 9/2 ⁻)		3998 4	(17/2 ⁺ , 15/2 ⁻)	4561 4	
3277 4	(5/2)		4031 4		4603 4	

† **2001Ny01** observed that the uncertainties for the strongest are ≈ 2 keV, for the weakest are ≈ 5 keV. The rest are estimated based on authors' FIG.12 by the evaluators.

‡ Based on measured angular distributions and DWBA analysis.

From **1972Bu17** based on DWBA fit to $\sigma(\theta)$ data.