

$^{60}\text{Ni}(^6\text{Li},\text{d})$  1977Fu03,1978Be25

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 178, 41 (2021).	12-Nov-2021

1977Fu03: E=28,36 MeV. FWHM=50-125 keV,  $\sigma(\theta)$ , DWBA. Absolute cross sections accurate to 20%. See also 1980An16, 1975Fu02, 1975De03 and 1975An13 (from the same group) for measurement of g.s. transition strength and analysis.

1978Be25: E=34 MeV,  $\sigma(\theta)$ , DWBA.

Others:

1980Ne05: E=156 MeV,  $\sigma(\theta)$ . Projectile breakup studied.

[Additional information 1.](#)

 $^{64}\text{Zn}$  Levels

E(level) <sup>†</sup>	L <sup>†</sup>	S <sup>‡</sup>	Comments
0	0	1.0	S: 0.34 and 0.18 for different optical parameter sets at E( $^6\text{Li}$ )=28 MeV; and 0.37 at E( $^6\text{Li}$ )=36 MeV (1977Fu03).
992	2	0.26	
1800 <sup>#</sup>		0.01 <sup>@</sup>	
1910 <sup>#</sup>		<0.02 <sup>@</sup>	
2305	4	0.028	
2609 <sup>#</sup>			
2770 20	2	0.097	E(level): unresolved doublet (2737,2 <sup>+</sup> and 2793,4 <sup>+</sup> ).
2980 20	3	0.24	E(level): contribution from 3078 level small.
3260 <sup>#</sup> 20			L: not 0, 1.
3680 20	1	0.26	
3830	5,6	0.07	Reported by 1978Be25 only.
3900 20			E(level): probably several unresolved levels.

<sup>†</sup> From 1977Fu03, unless otherwise stated. Energies of levels up to 2609 quoted by 1977Fu03 from evaluation by 1974Au04.

<sup>‡</sup> From 1977Fu03 at E( $^6\text{Li}$ )=28 MeV, unless otherwise stated. Values are relative to 1.0 for ground state. Values at E( $^6\text{Li}$ )=28 MeV are also available in 1977Fu03.

<sup>#</sup> Weak group.

<sup>@</sup> From 1978Be25 (relative to 0.95 for g.s.).