^{197}Au(^{3}He,d) 1982Bl21,1985Si15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao	NDS 133, 221 (2016)	1-Dec-2015

Target $J^{\pi}=3/2^{+}$.

1982Bl21: E=50 MeV; measured dσ/dΩ(E(d),θ); DWBA analysis.

1983Dj02: E=130 MeV; measured σ(E(d),θ); deduced ^{3}He breakup $\sigma(\theta)$, target mass dependence.

1985Si15: E=90 MeV; measured dσ/dΩ(E(d),θ); calculated inclusive fragmentation $\sigma(\theta$ d,E(d)) with diffraction disassociated theory.

^{198}Hg Levels

All data are from 1982Bl21.

E(level)†	L‡	C^2S'#@	E(level)†	L‡	C^2S'#@	E(level)†	L‡
0	2	0.53	2130	0	0.10&	2840	(3,5)
410	0	0.24&	2300	2	0.08	2940	(5,6)
1050	2	0.20b	2450	0	0.35&	2990	(3)
1090	0+2	0.05+0.10a	2480	(5)	0.19c	3070	
1760	2	0.06	2550	0+2	0.03+0.17a	3150	(3,5)
1820	2	0.02	2600	0+2	0.08+0.05a	3200	(5)
1900	0	0.04&	2730	0+2	0.07+0.01a	3270	
2070	0	0.05&	2780	0+2	0.03+0.10a	3440	(3)

† Uncertainty is ±5 to ±15 keV.

‡ From $\sigma(\theta)$ DWBA analysis.

Absolute spectroscopic strengths are accurate to within 30%. $C^2S'=[(2J+1)/4.42]\times[[d\sigma/d\Omega(exp)]/[d\sigma/d\Omega(DWBA)]]$.

@ $d_{3/2}$ assumed for L=2, except as noted.

& $s_{1/2}$ assumed for L=0.

a S=s($s_{1/2}$)+s($d_{3/2}$) assumed for L=0+2.

b $d_{5/2}$ assumed for L=2.

c $h_{11/2}$ assumed for L=5.