

²⁰⁸Pb(d,d'),(pol d,d')

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

1971Un01 E=13 MeV, FWHM=3-10 keV, $\theta=125^\circ-150^\circ$.

1980Mo18 E=86 MeV, FWHM= 1×10^{-3} .

1982CI01 E=18-23 MeV, pol d, $\theta=10^\circ-160^\circ$.

1983BeZU E=45 MeV, FWHM=12-15 keV.

1999Dj01 E=400 MeV, pol d, FWHM \approx 200 keV, $\theta=2^\circ-5^\circ$.

2001Va04 E=22 MeV, FWHM=3.3 keV.

Others: 1962Jo05, 1968Hi09.

1999Dj01 measure the isoscalar spin excitation strength. In addition to the known 1⁺ and 4⁻ states At 5844 and 3475, respectively, the authors find strength between 6.5 MeV and 11 MeV and spread out over the continuum.

1980Wi12 E=108 MeV, $\theta=4^\circ-14^\circ$ (partial Data Also Reported In 1980Dj02)

1987Ta08 E=45 MeV, FWHM=15-20 keV. The Data Of These Authors Supersede Most Of The Data In 1983BeZU, An Earlier Report From This Group

²⁰⁸Pb Levels

No peak is observed At 19 MeV with strength comparable to that implied by data of 1979Do01 In (¹⁶O,¹⁶O') (1980Mo18).

E(level) [†]	J ^π	L	β (IS) [#]	Comments
0.0				
2614		3	0.774	β (IS): 1968Hi09 report $\beta_3=0.10$. 1980Wi12 report $\beta_3=0.090-0.103$, B(is,0 ⁺ to 3 ⁻)=30.2-39.6 In single-particle units. Other: 1982CI01.
3198		5	0.0548	
3475	4 ⁻			J ^π : from Adopted Levels. Measurement of spin variables In the (pol d,pol d') work of 1999Dj01 show that this is an isoscalar state.
3707		5	0.0138	
3959				
4037				
4083		2	0.350	β (IS): 1980Wi12 report $\beta_2=0.044-0.046$, B(is,0 ⁺ to 2 ⁺)=7.0-7.5 In single-particle units. Other: 1982CI01.
4320		4	0.166	
4358				
4421				
4477				
5345 ^{&}				
5483 ^a				
5515 ^a				
5542 ^a				
5564 ^a				
5690 ^a				
5814 ^a				
5844 ^a	3 1 ⁺			J ^π : from Adopted Levels. The observation that the measured strengths In (p,p') and (d,d') are very similar supports the isoscalar nature of this state. The measurement of spin variables In the (pol d,pol d') work of 1999Dj01 also supports the isoscalar nature of this state.
5993 ^a				
6008 ^{&}				
7400 [‡]		4 [‡]		%EWSR=2.7 (1980Mo18).

Continued on next page (footnotes at end of table)

$^{208}\text{Pb}(\text{d,d}'),(\text{pol d,d}') \text{ (continued)}$ ^{208}Pb Levels (continued)

E(level) [†]	L	Comments
8100 [‡]	4 [‡]	%EWSR=2.6 (1980Mo18).
10.5×10 ³ @ 2	2@	Γ=2800 keV 200 (1980Wi12) L: 1980Mo18 report that L>2 In addition to L=2 is required to fit their data. 1980Wi12 report %EWSR=104 15 or 85 15, depending on the potential ADOPTED.
13.5×10 ³ @ 3	0@	Γ=2800 keV 200 (1980Wi12) 1980Mo18 report $\sigma \leq 1/3\sigma(10.5 \text{ MeV level})$. 1980Wi12 report %EWSR=51 10 or 207 60, depending on the potential ADOPTED.

[†] From 1971Un01 for E<5000. Other levels are from sources indicated. 2001Va04 do not show their data, but state that their (d,d') spectrum looks very similar to their (p,p') spectrum (see data of 2001Va04 In (p,p')), In particular, they state that they see essentially all the levels reported In their (p,p') work.

[‡] From 1980Mo18.

Isoscalar transition rates (1980Mo18), B(is,0⁺ to J^π).

@ From 1980Wi12.

& From 1983BeZU.

^a From 1987Ta08.