^{204}Pb(d,d′) 1971Un01,1967Bj01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. J. Chiara and F. G. Kondev	NDS 111,141 (2010)	1-Oct-2009

1971Un01: Metallic Pb target enriched to 99.7% ^{204}Pb, 30 to 150 μg/cm^2, on≈40−μg/cm^2 C backing; E(d)=13 MeV; magnetic spectrograph, FWHM=3-10 keV; measured $\sigma(\theta)$ at 125° and 150°.

1967Bj01: 100−μg/cm^2 ^{204}Pb target on thin C backing; E(d)=12.35 MeV; magnetic spectrograph, FWHM=15 keV, θ>90°; measured d(θ) compared with DW calculations; deduced β(L).

^{204}Pb Levels

dσ/dΩ [μb/sr] (1971Un01)		
E(level)	125°	150°
0	19900	12300
899	193	185
1272	38	39
1351	11	12
1561	7	9
1579	4	4
1663	8	10
1816	19	17
1871	3	7
2156	3	3
2180	2	3
2256	19	33
2508	2	3
2618	225	268
2804	4	6
2884	6	9
2896	10	12
3561	12	15
3719	2	5
3778	4	4
3799	3	3
3824	3	3
3951		11
4004		9

E(level)†	Jπ‡	L#	β(L)@	Comments
0	0$^+$			
899	2$^+$	2	0.030	Additional information 1.
1272	4$^+$	4	0.022	Additional information 2.
1351				Additional information 3.
1561	(4$^+$)			
1579				E(level): Probably a doublet, based on Adopted Levels.
1663				
1816				
1871				
2156				
2180	9$^-$			
2256				Additional information 4.
2508				
2618	3$^-$	3	0.062	Additional information 5.

Continued on next page (footnotes at end of table)

^{204}Pb(d,d′) 1971Un01,1967Bj01 (continued)

^{204}Pb Levels (continued)

E(level)[†]	E(level)[†]	E(level)[†]
2804	3561	3799
2884	3719	3824
2896	3778	3951
		4004

† From 1971Un01; uncertainties not given, evaluators estimate <10 keV. Comparison with Adopted Levels suggests that most E(level)′s are≈2 keV low.
‡ Assigned by 1971Un01 based on optical-model fits.
# From fits to DW calculations in 1967Bj01.
@ From $(\beta(L) \times R)^2$ fit to data in 1967Bj01, where $\beta(L)=[(\beta(L) \times R)^2]^{1/2}/(1.2*A^{1/3})$.