^{93}Nb(d,p)　　1965Sh03,1969Mo24

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 107, 2423 (2006)	1-Jan-2006

^{94}Nb Levels

J^{π}(target)=9/2^{+}.

1965Sh03: E=10.2 MeV to 12.2 MeV. Magnetic spectrometer, FWHM=12 keV to 13 keV. θ=35° to 105°. An extended analysis of peak shapes and angular distributions of this measurement was performed by 1968Ju01.

1969Mo24: E=12.0 MeV. Magnetic spectrograph, FWHM=7 keV to 9 keV θ=8° to 55°. Only the energy range up to 2320 keV was studied.

E(level)[†]	L[‡]	S′[a]	E(level)[†]	L[‡]	S′[a]	E(level)[†]	L[‡]	S′[a]
0.0	2	0.22	1390[#]	2	0.023	2236[#]	0+2	0.014+0.030
41 1	2	0.081	1405 1	4	0.15	2253[#]	2	0.041
59 1	2	0.12	1428	[&]		2305 1	2	0.10
79 1	2	0.16	1496 5	1	0.0043	2320[#]	0	0.015
114 1	0+2	0.048+0.17	1521	1[&]	0.047	2372 5		
314 2	2	0.020	1574 3	0	0.069	2441 1		
334 3	2	0.049	1627 2	0+(2)	0.035+0.047	2474 2		
631 4	2	0.059	1658 5	(0)	0.055	2542 3		
640 4	2	0.088	1696 2			2574 2		
793 2	2	0.009	1725 2			2623 5		
818 2			1783 4	2+4	0.032+0.12	2651 2		
932[#]	2	0.025	1808 6	2	0.067	2675 4		
959 2	0	0.24	1826	2	0.060	2763 1		
963[#]			1865 2	0	0.044	2813 5		
1006 3	0+2	0.036+0.053	1930[#]	0+2	0.016+0.013	2845 3		
1062 2	0[&]	0.039	1969[#]			2896 5		
1173 2	0+2	0.006+0.12	1995[#]	0+2	0.010+0.007	3060 5		
1202[#]	4	0.052	2044[#@]	2	0.049	3105 6		
1232 3	2	0.100	2056[#@]	2	0.089	3202 3		
1259	2	0.024	2071[#]	0	0.026	3264 6		
1282 1	0[&]	0.11	2142 3			3337 5		
1325 2	0	0.13	2190 1					
1359[#]	2	0.037	2214[#]	2	0.039			

[†] Levels up to 1865 keV are from the 1968Ju01 analysis of the 1965Sh03 measurement. Levels higher than 1865 keV are from 1965Sh03. 1969Mo24 report level energies without uncertainties. These levels are included only if level was not observed by 1965Sh03. Note that the ^{92,94,96}Mo(d,p) energies of 1969Mo24 have been increased by about 1% by 1970Di06 following recalibration of the magnetic spectrograph. The evaluators have applied the same correction to the ^{93}Nb(d,p) data.

[‡] From DWBA (1969Mo24).

[#] From 1969Mo24.

[@] 1965Sh03 deduce E=2051 keV 2 for the unresolved doublet.

[&] L=2 deduced by 1968Ju01. Possibly a doublet.

[a] S′ as defined by σ(exp)=(2J+1)S′×σ(DWBA) (1969Mo24).