^{144}Nd(^{3}He,d) 1980St10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 110, 507 (2009)	1-Oct-2008

E=24 MeV (1980St10,1973MaYO), 35.2 MeV (1976Sh05).
Measured: σ(E,θ), DWBA analysis.

^{145}Pm Levels

E(level)	Jπ†	L	S′‡	E(level)	Jπ†	L	S′‡	E(level)	Jπ†	L	S′‡
0.0	$5/2^+$	2	2.33	1386	$7/2^-$	3	0.19	2112	$1/2^+$	0	0.12
60	$7/2^+$	4	1.59	1489	$(3/2^+)$	(2)	(0.16)	2168			
498	$3/2^+$	2	0.02	1507	$(3/2)^+$	2	0.23	2190	$(3/2^+)$	(2)	(0.18)
728	$1/2^+$	0	0.52	1563				2210	$(3/2^+)$	(2)	(0.12)
773	$(3/2)^+$	2	0.15	1716	$1/2^+$	0	0.030	2282@		@	@
796	$11/2^-$	5	8.77	1753	$1/2^+$	0	0.036	2294@		@	@
960	$(3/2)^+$	2	1.41	1753	$(11/2)^-$	5	1.3	2329			
1059	$1/2^+$	0	0.56	1809	$(1/2^+)$	(0)	(0.023)	2401			
1214#				1849				2431			
1226	$(3/2)^+$	2	0.25	1978	$1/2^+$	0	0.18	2474			
1260				2008	$(3/2)^+$	2	0.53	2562			

† Adopted values. Almost all expected strength for L=2 d5/2 levels was observed in transition to $5/2^+$ g.s.; therefore, L=2 excited levels populated in this reaction are probably $3/2^+$ (d3/2).
‡ For dσ/dΩ(40°) see 1980St10.
# Observed in 1973MaYO.
@ For doublet 2282+2294 L=2, S′=0.26.