^{100}Mo(^{3}He,p),^{104}Ru(d,α) 1982De03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110, 1745 (2009)	31-Dec-2008

E(^{3}He)=25 MeV; measured: σ(E(p),θ), θ=5° to 40°, FWHM=20 to 40 keV.
E(d)=20 MeV; measured: Eα for θ=15°, FWHM=20 keV.
Split-pole spectrograph, enriched targets, DWBA-analysis.
Deduced: Q(^{3}He,p)=6054±20 keV, Q(d,a)=7180±10 keV.

^{102}Tc Levels

E(level)‡	J$^{\pi}$†	L	Comments
0.0	(1^{+})	(0+2)	
20			J$^{\pi}$: from relative excitation probability in (^{3}He,p) and (d,α), a high spin was proposed.
34?			J$^{\pi}$: from relative excitation probability in (^{3}He,p) and (d,α), a high spin was proposed.
174			
195			
213			
248			
264			
298	(3^{+})	(2+4)	
315			
357	(1^{+})	(0+2)	
393			
416	(2^{-})	(1+3)	
443#			
472			
509			J$^{\pi}$: see remark for 526 level.
526			J$^{\pi}$: the angular distribution of the p-group, corresponding with the unresolved 509 and 526 levels, is consistent with L=(4+6), J^{π}=(5^{+}).
573			
618			
637			
689#			
727#			
868			Unresolved multiplet.

† From L-transfer in ^{100}Mo(^{3}He,p).
‡ Uncertainty 10 to 15 keV.
# Possible doublet.