

¹⁸⁶W(³He, α),(d,t) 1973K107

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 106, 619 (2005)	1-Nov-2005

Target: >94% enriched ¹⁸⁶W. Projectiles: ³He, E=20.3 MeV, and deuterons, E=12.1 MeV. Measured scattered α 's and tritons.
 Detector: magnetic spectrograph, FWHM(α) \approx 30 keV, FWHM(t) \approx 8 keV.

¹⁸⁵W Levels

E(level) [†]	J π^a	L [‡]
(0)		
384 [@]	13/2 ⁺	6
716 ^{&}	(9/2 ⁺)	
1020 [#]	13/2 ⁺	6
1561 [#]	13/2 ⁺	6
1666 [#]	(9/2 ⁺)	
1846 [#]	13/2 ⁺	6

[†] From 1972Ca01.

[‡] Deduced from (³He, α)/(d,t) measured cross-section ratios.

[#] N=6 (i_{13/2}) strongly Coriolis-mixed state.

[@] 11/2[615].

[&] 9/2[624].

^a Spin/parity and Nilsson orbital assignments are based on measured L-value transfers, on the comparison of experimental cross-sections with values calculated with the DWBA approximation and Nilsson's model (including an hexadecapole deformation), and on the energy systematics of Nilsson orbitals in odd-A tungsten nuclei.