^{4}He(^{19}F,pγ) 1979Al01,1979Fo02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 127, 69(2015)	1-Apr-2015

Others: 1978Ek01,1978Fi04.

1979Al01: ^{4}He(^{19}F,pγ), E=41 MeV; protons were detected by ΔE+E Si telescope and γ rays by Ge(Li) detectors; measured pγ-coincidence, deduced mean lifetime for excited levels using the Doppler-shift attenuation method.

1979Fo02: ^{19}F beam, E=23.25-, 28.5-MeV, bombarded a thin (≈ 25 μm) metallic foil containing implanted ^{4}He; protons were detected by ΔE+E Si telescope and γ rays by 2 Ge(Li) detectors; measured pγ-coincidence, deduced mean lifetime for excited levels using the Doppler-shift attenuation method.

^{22}Ne Levels

E(level)†	$T_{1/2}$†	Comments
0.0		
1275‡	3.6 ps *2*	$T_{1/2}$: From 1979Fo02.
3357‡	225 fs *6*	$T_{1/2}$: Weighted average of 227 fs *7* (1978Ek01), 216 fs *12* (1978Fi04), and 225 fs *6* (1979Fo02). Uncertainty: Lowest experimental value.
4457	<11 fs	
5147	0.9 ps *3*	
5522	19 fs *3*	
5641	<14 fs	
6311	49 fs *7*	
6345	<11 fs	
6636	<14 fs	
6817	<11 fs	

† From 1979Al01, except otherwise noted.

‡ From 1979Fo02.