

Table 19.11 from (1972AJ02): Levels of ^{19}F and ^{19}Ne from $^{16}\text{O}(^6\text{Li}, ^3\text{He})$ and $^{16}\text{O}(^6\text{Li}, t)$ (1971BI06)

J^π	E_x^a in ^{19}F (MeV)			$\sigma_{\max}(\theta)$ (mb/sr)	E_x^a in ^{19}Ne (MeV)			$\sigma_{\max}(\theta)$ (mb/sr)
	$K^\pi = \frac{1}{2}^+$	$K^\pi = \frac{1}{2}^-$	other		$K^\pi = \frac{1}{2}^+$	$K^\pi = \frac{1}{2}^-$	other	
$\frac{1}{2}^+$	0.0			0.106	0.0			0.095
$\frac{5}{2}^+$	0.197			0.682	0.238			0.612
$\frac{3}{2}^+$	1.55			0.279	1.54 ^b			0.294
$\frac{9}{2}^+$	2.78			1.16	2.79 ^b			0.763
$\frac{13}{2}^+$	4.65			0.197	4.62 ^b			0.125
$\frac{7}{2}^+$	5.46 ^d			0.347	5.43 ^b			0.169
$\frac{1}{2}^-$		0.110		0.026		0.275		0.026
$\frac{5}{2}^-$		1.35		0.173		1.51 ^b		0.082
$\frac{3}{2}^-$		1.46		0.065		1.62 ^b		0.052
$\frac{7}{2}^-$		4.00		0.357		4.14 ^b		0.072
$\frac{9}{2}^-$		4.04					4.20 ^b	
$\frac{3}{2}^+$			3.91 ^b	0.012			4.03 ^b	0.008
$\frac{7}{2}^+$			4.39	0.037			4.37 ^b	0.016
$\frac{5}{2}^+$ (+)			4.55	0.059				
$\frac{3}{2}^-$, ($\frac{1}{2}^-$)			4.56					4.55
$\frac{5}{2}^-$			4.68	c				
$\frac{5}{2}^-$ (-)			5.11	0.012				
$\frac{5}{2}^+$			5.34	0.005				
$\frac{7}{2}^-$			5.43	0.215				

^a Energies are nominal.

^b J^π assignment based on similarity in σ_{\max} in both reactions and on known spin of analog state.

^c Transition masked by strong group to $E_x = 4.65$ MeV.

^d See, however, (1971DI18).