^{75}As(n,γ),(n,n):resonances 2018MuZY

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

J^π(^{75}As g.s.)=3/2$^-$.
All resonance parameters taken from 2018MuZY evaluation, unless otherwise stated.
2018MuZY: evaluation of neutron resonance energies, J^π values, width parameters, and resonance strengths for nuclei of Z=1-60.
Experimental data: 1988Ma24, 1995Ra25, 1997Ka47, 2003Ka10.

^{76}As Levels

S(n)=7328.50 *7* (2021Wa16).

E(level)	J$^\pi$	L	Resonance strength (meV)[†]	Comments
S(n)-1.147?	2$^-$	0		E(level): fictitious level. Γ_γ=(0.300) eV.
S(n)-0.377?	1$^-$	0		E(level): fictitious level. Γ_γ=(0.300) eV.
S(n)+0.0470 *2*	2$^-$	0	19 *2*	2gΓ_n=0.044 eV *4*, Γ_γ=0.26 eV *4*.
S(n)+0.0924 *3*	1$^-$	0		2gΓ_n=0.016 eV *2*, Γ_γ=0.25 eV *4*.
S(n)+0.2527 *5*	2$^-$	0		2gΓ_n=0.058 eV *5*, Γ_γ=0.27 eV *7*.
S(n)+0.3186 *5*	2$^-$	0		2gΓ_n=0.59 eV *5*, Γ_γ=0.30 eV *3*.
S(n)+0.3267 *5*	1$^-$	0		2gΓ_n=0.41 eV *3*, Γ_γ=0.35 eV *6*.
S(n)+0.4555 *6*	1$^-$	0		2gΓ_n=0.032 eV *8*, Γ_γ=0.34 eV *7*.
S(n)+0.4769 *6*	1$^-$	0		2gΓ_n=0.011 eV *3*, Γ_γ=0.34 eV *10*.
S(n)+0.4933 *3*		(1)		2gΓ_n=1.3 meV *4*, Γ_γ=(0.300) eV.
S(n)+0.5334 *10*	2$^-$	0		2gΓ_n=3.38 eV *20*, Γ_γ=0.28 eV *5*.
S(n)+0.6649 *8*	2$^-$	0		2gΓ_n=0.320 eV *20*, Γ_γ=0.31 eV *7*.
S(n)+0.7333 *8*	1$^-$	0		2gΓ_n=0.90 eV *9*, Γ_γ=0.35 eV *20*.
S(n)+0.7374 *8*	2$^-$	0		2gΓ_n=2.45 eV *22*, Γ_γ=0.30 eV *20*.
S(n)+0.8746 *6*		(1)		2gΓ_n=0.0059 eV *12*, Γ_γ=(0.300) eV.
S(n)+0.8955 *8*	1$^-$	0		2gΓ_n=0.160 eV *15*, Γ_γ=0.34 eV *6*.
S(n)+0.929 *1*	2$^-$	0		2gΓ_n=1.18 eV *8*, Γ_γ=0.24 eV *12*.
S(n)+1.110 *1*	1$^-$	0		2gΓ_n=0.135 eV *15*, Γ_γ=0.33 eV *5*.
S(n)+1.299 *2*	2$^-$	0		2gΓ_n=2.38 eV *22*, Γ_γ=0.33 eV *5*.
S(n)+1.353 *2*	1$^-$	0		2gΓ_n=0.54 eV *6*, Γ_γ=0.26 eV *6*.
S(n)+1.443 *2*	2$^-$	0		2gΓ_n=1.72 eV *14*, Γ_γ=0.28 eV *6*.
S(n)+1.4793 *15*	(1$^-$)	0		2gΓ_n=0.050 eV *15*, Γ_γ=(0.300) eV.
S(n)+1.683 *2*	2$^-$	0		2gΓ_n=4.0 eV *4*, Γ_γ=(0.300) eV.
S(n)+1.739 *2*		(1)		2gΓ_n=0.013 eV *3*, Γ_γ=(0.300) eV.
S(n)+1.807 *3*	1$^-$	0		2gΓ_n=0.58 eV *9*, Γ_γ=0.29 eV *6*.
S(n)+1.8456 *10*		(1)		2gΓ_n=0.0176 eV *26*, Γ_γ=(0.300) eV.
S(n)+1.904 *3*	2$^-$	0		2gΓ_n=3.7 eV *3*, Γ_γ=0.240 eV.
S(n)+2.0211 *10*		(1)		2gΓ_n=0.019 eV *4*, Γ_γ=(0.300) eV.
S(n)+2.049 *3*	1$^-$	0		2gΓ_n=0.30 eV *8*, Γ_γ=0.200 eV.
S(n)+2.1900 *15*		(1)		2gΓ_n=0.011 eV *4*, Γ_γ=(0.300) eV.
S(n)+2.2320 *15*		(1)		2gΓ_n=0.0057 eV *19*, Γ_γ=(0.300) eV. Spurious or p-wave resonance.
S(n)+2.2560 *15*		(1)		2gΓ_n=0.016 eV *3*, Γ_γ=(0.300) eV.
S(n)+2.2880 *15*		(1)		2gΓ_n=0.024 eV *5*, Γ_γ=(0.300) eV.
S(n)+2.3300 *15*		(1)		2gΓ_n=0.0106 eV *19*, Γ_γ=(0.300) eV.
S(n)+2.3650 *15*	(1$^-$)	0		2gΓ_n=0.088 eV *5*, Γ_γ=(0.300) eV.
S(n)+2.3950 *15*		(1)		2gΓ_n=0.018 eV *3*, Γ_γ=(0.300) eV.
S(n)+2.4030 *15*		(1)		2gΓ_n=0.0049 eV *20*, Γ_γ=(0.300) eV. Spurious or p-wave resonance.
S(n)+2.4700 *15*		(1)		2gΓ_n=0.015 eV *5*, Γ_γ=(0.300) eV.

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^{75}As(n,γ),(n,n):resonances 2018MuZY (continued)

^{76}As Levels (continued)

E(level)	Jπ	L	Resonance strength (meV)†	Comments
S(n)+2.511 *3*	1−	0		2gΓn=1.09 eV *11*, Γγ=0.28 eV *6*.
S(n)+2.5770 *15*		(1)		2gΓn=0.015 eV *4*, Γγ=(0.300) eV.
S(n)+2.616 *3*	2−	0		2gΓn=2.9 eV *3*, Γγ=(0.300) eV.
S(n)+2.676 *3*		(1)		2gΓn=0.0128 eV *14*.
S(n)+2.734 *3*	2−	0	189.8 *13*	2gΓn=4.4 eV *5*, Γγ=0.332 eV *10*.
S(n)+2.751 *3*		(1)	3.5 *1*	2gΓn=0.0072 eV *1*.
S(n)+2.766 *3*		(1)	2.7 *1*	2gΓn=0.0055 eV.
S(n)+2.822 *3*	1−	0	125 *1*	2gΓn=2.55 eV *21*, Γγ=0.370 eV *8*.
S(n)+2.840 *3*		(1)	8.0 *2*	2gΓn=0.0168 eV *4*.
S(n)+2.904 *3*		(1)	15.1 *2*	2gΓn=0.0318 eV *16*.
S(n)+2.939 *3*		(1)	24.2 *2*	2gΓn=0.053 eV *4*.
S(n)+2.945 *3*		(1)	4.7 *4*	2gΓn=0.0097 eV *1*.
S(n)+3.009 *3*		(1)	3.3 *2*	2gΓn=0.0067 eV *1*.
S(n)+3.083 *3*		(1)	36.9 *3*	2gΓn=0.075 eV *16*.
S(n)+3.146 *3*	2−	0	189.0 *17*	2gΓn=1.90 eV *22*, Γγ=0.38 eV *3*.
S(n)+3.228 *3*	2−	0	116 *1*	2gΓn=0.42 eV *8*, Γγ=0.417 eV.
S(n)+3.278 *3*		(1)	3.5 *3*	2gΓn=0.0072 eV *1*.
S(n)+3.308 *3*		(1)	7.9 *4*	2gΓn=0.0158 eV *8*.
S(n)+3.425 *3*		(1)	3.1 *3*	2gΓn=0.0063 eV *1*.
S(n)+3.461 *4*	2−	0	178.7 *21*	2gΓn=3.4 eV *4*, Γγ=0.319 eV *10*.
S(n)+3.504 *4*	1−	0	113 *3*	2006MuZX state that a level at 3505 eV observed in transmission measurements is a doublet. 2gΓn=7.1 eV *10*, Γγ=0.311 eV *4*.
S(n)+3.510 *4*			171 *3*	
S(n)+3.570 *4*		(1)	5.8 *4*	2gΓn=0.0120 eV *2*.
S(n)+3.714 *4*	2−	0	202.1 *22*	2gΓn=4.9 eV *6*, Γγ=0.353 eV *11*.
S(n)+3.731 *4*		(1)	10.1 *7*	2gΓn=0.0216 eV *7*.
S(n)+3.749 *4*	(1−)	0	9 *1*	Uncertainty=0 in 2006MuZX seems a misprint, evaluators assign 1. 2gΓn=0.120 eV *25*.
S(n)+3.782 *4*		(1)	18.1 *7*	2gΓn=0.026 eV *15*.
S(n)+3.822 *4*	2−	0	73.5 *3*	2gΓn=0.223 eV *25*, Γγ=0.346 eV.
S(n)+3.855 *4*	2−	0	187.7 *24*	2gΓn=3.1 eV *4*, Γγ=0.342 eV *16*.
S(n)+3.928 *4*		(1)	13.3 *16*	2gΓn=0.0290 eV *13*.
S(n)+3.936 *4*	2−	0	198.6 *26*	2gΓn=5.3 eV *6*, Γγ=0.344 eV *9*.
S(n)+3.978 *4*		(1)	7.6 *6*	2gΓn=0.0160 eV *4*.
S(n)+3.990 *4*		(1)	13.1 *8*	2gΓn=0.0285 eV *13*.
S(n)+4.002 *4*	1−	0	117.2 *17*	2gΓn=2.15 eV *26*, Γγ=0.351 eV *14*.
S(n)+4.099 *4*		(1)	15.5 *28*	2gΓn=0.0364 eV *20*.
S(n)+4.100 *4*		(1)	11.4 *27*	2gΓn=0.0245 eV *9*.
S(n)+4.148 *4*	(1−)	0	68.9 *4*	2gΓn=0.17 eV *5*.
S(n)+4.245 *4*		(1)	6.5 *8*	2gΓn=0.0135 eV *3*.
S(n)+4.256 *4*		(1)	62.1 *14*	2gΓn=0.085 eV *20*.
S(n)+4.290 *4*	2−	0	98.2 *25*	2gΓn=0.33 eV *5*, Γγ=0.393 eV.
S(n)+4.358 *4*	2−	0	154 *3*	2gΓn=0.79 eV *13*, Γγ=0.402 eV.
S(n)+4.380 *4*		(1)	47.8 *15*	2gΓn=0.08 eV *6*.
S(n)+4.444 *4*		(1)	37.1 *13*	2gΓn=0.070 eV *11*.
S(n)+4.471 *5*		(1)	17.3 *9*	2gΓn=0.0375 eV *13*.
S(n)+4.517 *5*	1−	0	131 *3*	2gΓn=1.48 eV *27*, Γγ=0.43 eV *6*.
S(n)+4.580 *5*	1−	0	168 *4*	2gΓn=0.51 eV *10*.
S(n)+4.674 *5*	2−	0	180 *3*	2gΓn=4.10 eV *4*, Γγ=0.316 eV *8*.
S(n)+4.763 *5*	2−	0	181 *3*	2gΓn=3.3 eV *4*, Γγ=0.325 eV *14*.
S(n)+4.781 *5*		(1)	34.8 *15*	2gΓn=0.089 eV *12*.
S(n)+4.856 *5*		(1)	8.1 *5*	2gΓn=0.0171 eV *5*.
S(n)+4.870 *5*		(1)	7.9 *13*	2gΓn=0.0166 eV *4*.

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^{75}As(n,γ),(n,n):resonances 2018MuZY (continued)

^{76}As Levels (continued)

E(level)	J^{π}	L	Resonance strength (meV)†	Comments
S(n)+4.877 *5*		(1)	106.4 *19*	$2g\Gamma_n$=0.056 eV *14*.
S(n)+4.909 *5*	2^-	0	199.6 *23*	$2g\Gamma_n$=3.6 eV *6*, Γ_γ=0.359 eV *21*.
S(n)+4.996 *5*		(1)	13.1 *1*	$2g\Gamma_n$=0.0285 eV *13*.
S(n)+5.009 *5*	2^-	0	189.3 *23*	$2g\Gamma_n$=3.8 eV *6*, Γ_γ=0.336 eV *16*.
S(n)+5.049 *5*		(1)	46.8 *2*	$2g\Gamma_n$=0.014 eV *14*.
S(n)+5.091 *5*	1^-	0	124.1 *21*	$2g\Gamma_n$=1.4 eV *3*, Γ_γ=0.40 eV *7*.
S(n)+5.160 *5*		(1)	3.1 *4*	$2g\Gamma_n$=0.0063 eV *1*.
S(n)+5.185 *5*		(1)	20.3 *7*	$2g\Gamma_n$=0.041 eV *5*.
S(n)+5.203 *5*		(1)	6.3 *5*	$2g\Gamma_n$=0.0131 eV *3*.
S(n)+5.304 *5*		(1)	35.5 *9*	$2g\Gamma_n$=0.068 eV *20*.
S(n)+5.325 *5*		(1)	58.3 *11*	$2g\Gamma_n$=0.12 eV *7*.
S(n)+5.391 *5*	1^-	0	103.1 *19*	$2g\Gamma_n$=1.7 eV *3*, Γ_γ=0.313 eV *25*.
S(n)+5.451 *6*	2^-	0	122.6 *14*	$2g\Gamma_n$=0.59 eV *15*, Γ_γ=0.34 eV *6*.
S(n)+5.471 *6*		(1)	49 *1*	$2g\Gamma_n$=0.09 eV *5*.
S(n)+5.490 *6*		(1)	22.9 *8*	$2g\Gamma_n$=0.054 eV *5*.
S(n)+5.514 *6*		(1)	16.5 *6*	$2g\Gamma_n$=0.0368 eV *21*.
S(n)+5.532 *6*		(1)	5.6 *6*	$2g\Gamma_n$=0.0116 eV *2*.
S(n)+5.565 *6*		(1)	21.7 *14*	$2g\Gamma_n$=0.050 eV *4*.
S(n)+5.577 *6*	2^-	0	200 *3*	$2g\Gamma_n$=9.3 eV *8*, Γ_γ=0.335 eV *6*.
S(n)+5.614 *6*	1^-	0	130.0 *22*	$2g\Gamma_n$=3.8 eV *8*, Γ_γ=0.373 eV *19*.
S(n)+5.631 *6*		(1)	21 *1*	$2g\Gamma_n$=0.049 eV *4*.
S(n)+5.712 *6*			127.6 *18*	
S(n)+5.736 *6*	1^-	0	106.3 *18*	$2g\Gamma_n$=7.6 eV *15*, Γ_γ=0.292 eV *6*.
S(n)+5.760 *6*	2^-	0	166.7 *24*	$2g\Gamma_n$=2.7 eV *3*, Γ_γ=0.304 eV *13*.
S(n)+5.826 *6*		(1)	4.1 *4*	$2g\Gamma_n$=0.0084 eV *1*.
S(n)+5.865 *6*	1^-	0	109.0 *19*	$2g\Gamma_n$=2.3 eV *3*, Γ_γ=0.321 eV *13*.
S(n)+5.906 *6*		(1)	1.6 *4*	$2g\Gamma_n$=3.23 meV *2*.
S(n)+5.925 *6*		(1)	23.0 *7*	$2g\Gamma_n$=0.054 eV *5*.
S(n)+5.999 *6*	2^-	0	206 *3*	$2g\Gamma_n$=7.8 eV *16*, Γ_γ=0.348 eV *14*.
S(n)+6.022 *6*		(1)	6.3 *10*	$2g\Gamma_n$=0.0131 eV *3*.
S(n)+6.040 *6*		(1)	27.8 *11*	$2g\Gamma_n$=0.067 eV *7*.
S(n)+6.073 *6*		(1)	144.9 *25*	$2g\Gamma_n$=0.08 eV *3*.
S(n)+6.151 *6*		(1)	3.5 *8*	$2g\Gamma_n$=0.0072 eV *1*.
S(n)+6.178 *6*	2^-	0	182 *3*	$2g\Gamma_n$=3.3 eV *6*, Γ_γ=0.33 eV *3*.
S(n)+6.275 *6*		(1)	24.9 *10*	$2g\Gamma_n$=0.053 eV *6*.
S(n)+6.306 *6*		(1)	23.8 *10*	Resonance strength (meV): uncertainty of 0.01 in 2006MuZX seems a misprint, evaluators assign 1.0, as for many other resonances. $2g\Gamma_n$=0.056 eV *5*.
S(n)+6.337 *6*		0	126.7 *18*	$2g\Gamma_n$=0.40 eV *8*.
S(n)+6.423 *6*	2^-	0	190.3 *29*	$2g\Gamma_n$=4.8 eV *6*, Γ_γ=0.331 eV *11*.
S(n)+6.448 *6*	2^-	0	173 *3*	$2g\Gamma_n$=5.1 eV *6*, Γ_γ=0.296 eV *7*.
S(n)+6.509 *7*		(1)	13.8 *9*	$2g\Gamma_n$=0.023 eV *7*.
S(n)+6.553 *7*	2^-	0	169 *4*	$2g\Gamma_n$=2.1 eV *5*, Γ_γ=0.32 eV *6*.
S(n)+6.601 *7*		(1)	2.4 *6*	$2g\Gamma_n$=0.0049 eV *1*.
S(n)+6.679 *7*		(1)	11.7 *9*	$2g\Gamma_n$=0.0252 eV *10*.
S(n)+6.729 *7*		(1)	40.1 *14*	$2g\Gamma_n$=0.108 eV *18*.
S(n)+6.747 *7*		(1)	13.1 *11*	$2g\Gamma_n$=0.0285 eV *13*.
S(n)+6.764 *7*		(1)	56.4 *16*	$2g\Gamma_n$=0.13 eV *5*.
S(n)+6.803 *7*		(1)	35.3 *13*	$2g\Gamma_n$=0.091 eV *13*.
S(n)+6.868 *7*		(1)	11.3 *9*	$2g\Gamma_n$=0.0243 eV *9*.
S(n)+6.887 *7*		(1)	28.7 *13*	$2g\Gamma_n$=0.070 eV *8*.
S(n)+6.905 *7*	2^-	0	70.7 *18*	$2g\Gamma_n$=0.22 eV *8*, Γ_γ=0.327 eV.
S(n)+6.931 *7*		(1)	8.0 *9*	$2g\Gamma_n$=0.0168 eV *4*.
S(n)+6.960 *7*	2^-	0	211 *3*	$2g\Gamma_n$=5.4 eV *7*, Γ_γ=0.367 eV *11*.
S(n)+6.976 *7*		(1)	58.6 *22*	$2g\Gamma_n$=0.19 eV *5*.

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^{75}As(n,γ),(n,n):resonances 2018MuZY (continued)

^{76}As Levels (continued)

E(level)	Jπ	L	Resonance strength (meV)†	Comments
S(n)+7.074 *7*	(1⁻)	0	71.0 *19*	2gΓn=0.42 eV *9*.
S(n)+7.122 *7*	(1⁻)	0	238 *6*	2gΓn=0.59 eV *17*.
S(n)+7.262 *7*		(1)	11 *1*	2gΓn=0.0246 eV *10*.
S(n)+7.302 *7*		(1)	20.4 *13*	2gΓn=0.032 eV *15*.
S(n)+7.368 *7*		(1)	15.3 *35*	2gΓn=0.0338 eV *18*.
S(n)+7.379 *7*	(1⁻)	0	254 *5*	2gΓn=2.6 eV *5*.
S(n)+7.446 *7*	2⁻	0	165 *4*	2gΓn=1.7 eV *4*, Γγ=0.33 eV *6*.
S(n)+7.490 *8*		(1)	23.7 *14*	2gΓn=0.037 eV *19*.
S(n)+7.514 *8*		(1)	9 *1*	2gΓn=0.0197 eV *6*.
S(n)+7.530 *8*		(1)	10.9 *12*	2gΓn=0.0234 eV *9*.
S(n)+7.598 *8*	1⁻	0	80.9 *27*	2gΓn=0.61 eV *14*, Γγ=0.294 eV.
S(n)+7.628 *8*		0	334 *5*	2gΓn=1.8 eV *4*.
S(n)+7.683 *8*	1⁻	0	89.0 *27*	2gΓn=0.53 eV *11*, Γγ=0.359 eV.
S(n)+7.713 *8*		(1)	84.9 *26*	2gΓn=0.18 eV *9*.
S(n)+7.735 *8*		(1)	8.7 *12*	2gΓn=0.0184 eV *5*.
S(n)+7.780 *8*	2⁻	0	165 *6*	2gΓn=1.3 eV *3*, Γγ=0.352 eV.
S(n)+7.809 *8*		(1)	4.6 *11*	2gΓn=0.0095 eV *1*.
S(n)+7.851 *8*		(1)	18.0 *11*	2gΓn=0.041 eV *3*.
S(n)+7.878 *8*		(1)	63.1 *18*	2gΓn=0.12 eV *3*.
S(n)+7.921 *8*	2⁻	0	141.9 *25*	2gΓn=0.66 eV *9*, Γγ=0.399 eV.
S(n)+7.990 *8*		(1)	19.1 *13*	2gΓn=0.043 eV *3*.
S(n)+8.029 *8*		(1)	200.8 *37*	2gΓn=0.27 eV *9*.
S(n)+8.060 *8*		(1)	29.6 *14*	2gΓn=0.073 eV *8*.
S(n)+8.137 *8*		(1)	12 *1*	2gΓn=0.0257 eV *10*.
S(n)+8.245 *8*	2⁻	0	180 *4*	2gΓn=3.5 eV *7*, Γγ=0.32 eV *3*.
S(n)+8.273 *8*		(1)	19.0 *13*	2gΓn=0.043 eV *3*.
S(n)+8.318 *8*	2⁻	0	185 *4*	2gΓn=2.7 eV *6*, Γγ=0.34 eV *4*.
S(n)+8.342 *8*		(1)	38.9 *17*	2gΓn=0.103 eV *17*.
S(n)+8.383 *8*	1⁻	0	138 *3*	2gΓn=5.9 eV *9*, Γγ=0.385 eV *9*.
S(n)+8.504 *9*		(1)	13 *5*	2gΓn=0.0271 eV *11*.
S(n)+8.514 *9*	1⁻	0	243 *5*	2gΓn=2.2 eV *4*.
S(n)+8.540 *9*		(1)	20.7 *18*	2gΓn=0.048 eV *4*.
S(n)+8.557 *9*		(1)	54 *2*	2gΓn=0.19 eV *3*.
S(n)+8.595 *9*	2⁻	0	151 *7*	2gΓn=0.83 eV *19*, Γγ=0.378 eV.
S(n)+8.678 *9*		(1)	49.3 *19*	2gΓn=0.14 eV *3*.
S(n)+8.737 *9*		(1)	9.6 *11*	2gΓn=0.0204 eV *7*.
S(n)+8.773 *9*		(1)	129 *3*	2gΓn=0.28 eV *10*.
S(n)+8.830 *9*		(1)	86.9 *25*	2gΓn=0.07 eV *4*.
S(n)+8.876 *9*	2⁻	0	198 *5*	2gΓn=1.4 eV *4*, Γγ=0.440 eV.
S(n)+8.904 *9*			151 *4*	
S(n)+8.946 *9*		(1)	5.8 *12*	2gΓn=0.0120 eV *2*.
S(n)+8.992 *9*		(1)	14.8 *13*	2gΓn=0.0326 eV *17*.
S(n)+9.033 *9*	2⁻	0	232 *4*	2gΓn=10.84 eV *19*, Γγ=0.388 eV *10*.
S(n)+9.086 *9*		(1)	12.9 *19*	2gΓn=0.0281 eV *12*.
S(n)+9.101 *9*			79.0 *24*	
S(n)+9.141 *9*		(1)	19.8 *13*	2gΓn=0.051 eV *6*.
S(n)+9.179 *9*		(1)	37.9 *17*	2gΓn=0.100 eV *15*.
S(n)+9.219 *9*		0	213 *5*	2gΓn=1.3 eV *3*.
S(n)+9.258 *9*		(1)	17.5 *13*	2gΓn=0.0393 eV *24*.
S(n)+9.322 *9*		(1)	22.2 *14*	2gΓn=0.052 eV *4*.
S(n)+9.366 *9*		(1)	17 *3*	2gΓn=0.0391 eV *24*.
S(n)+9.379 *9*		0	235 *5*	2gΓn=0.78 eV *19*.
S(n)+9.438 *9*		(1)	50.4 *20*	2gΓn=0.172 eV *23*.
S(n)+9.525 *10*	2⁻	0	218 *5*	2gΓn=4.3 eV *10*, Γγ=0.39 eV *4*.
S(n)+9.547 *10*	1⁻	0	127.8 *10*	2gΓn=2.4 eV *6*, Γγ=0.38 eV *5*.

Continued on next page (footnotes at end of table)

^{75}As(n,γ),(n,n):resonances 2018MuZY (continued)

^{76}As Levels (continued)

E(level)	Jπ	L	Resonance strength (meV)†	Comments
S(n)+9.561 *10*			123 *5*	
S(n)+9.621 *10*		(1)	5.2 *12*	$2g\Gamma_n$=0.0107 eV *2*.
S(n)+9.648 *10*	2^-	0	116 *3*	$2g\Gamma_n$=0.59 eV *20*, Γ_γ=0.307 eV.
S(n)+9.683 *10*		0	263 *5*	$2g\Gamma_n$=1.5 eV *4*.
S(n)+9.724 *10*		(1)	10.3 *12*	$2g\Gamma_n$=0.0220 eV *8*.
S(n)+9.778 *10*		(1)	53 *2*	$2g\Gamma_n$=0.16 eV *4*.
S(n)+9.804 *10*		(1)	31.7 *16*	$2g\Gamma_n$=0.079 eV *10*.
S(n)+9.902 *10*		(1)	57.1 *21*	$2g\Gamma_n$=0.18 eV *5*.
S(n)+9.994 *10*			66 *3*	
S(n)+10.010 *10*			70.6 *25*	
S(n)+10.080 *10*			186 *6*	
S(n)+10.100 *10*			141 *4*	
S(n)+10.130 *10*			140 *3*	
S(n)+10.160 *10*		(1)	57.3 *22*	$2g\Gamma_n$=0.18 eV *5*.
S(n)+10.230 *10*			242 *7*	
S(n)+10.260 *10*			88 *3*	
S(n)+10.310 *10*			73.2 *25*	
S(n)+10.370 *10*		(1)	24.1 *14*	$2g\Gamma_n$=0.057 eV *5*.
S(n)+10.430 *10*			214 *4*	
S(n)+10.450 *11*		(1)	35.4 *19*	$2g\Gamma_n$=0.091 eV *13*.
S(n)+10.550 *11*			71.9 *22*	
S(n)+10.570 *11*			74.5 *22*	
S(n)+10.620 *11*		(1)	7.8 *16*	$2g\Gamma_n$=0.0164 eV *4*.
S(n)+10.640 *11*		(1)	57.7 *21*	$2g\Gamma_n$=0.18 eV *5*.
S(n)+10.700 *11*		(1)	9.3 *11*	$2g\Gamma_n$=0.0197 eV *6*.
S(n)+10.730 *11*		(1)	5.3 *15*	$2g\Gamma_n$=0.0110 eV *2*.
S(n)+10.770 *11*			140 *3*	
S(n)+10.810 *11*			193 *6*	
S(n)+10.830 *11*		(1)	59 *4*	$2g\Gamma_n$=0.19 eV *6*.
S(n)+10.890 *11*		(1)	8.3 *12*	$2g\Gamma_n$=0.0175 eV *5*.
S(n)+10.930 *11*			167 *7*	
S(n)+10.940 *11*		(1)	40 *4*	$2g\Gamma_n$=0.109 eV *18*.
S(n)+11.070 *11*		(1)	44.0 *18*	$2g\Gamma_n$=0.122 eV *23*.
S(n)+11.110 *11*			67.6 *22*	
S(n)+11.190 *11*			305 *7*	
S(n)+11.250 *11*			252 *7*	
S(n)+11.340 *11*			306 *8*	
S(n)+11.370 *11*			81 *4*	
S(n)+11.420 *11*		(1)	35.0 *23*	$2g\Gamma_n$=0.090 eV *13*.
S(n)+11.450 *12*			88 *3*	
S(n)+11.500 *12*		(1)	37.8 *23*	$2g\Gamma_n$=0.099 eV *15*.
S(n)+11.540 *12*			103 *5*	
S(n)+11.560 *12*			154 *5*	
S(n)+11.680 *12*		(1)	56 *5*	$2g\Gamma_n$=0.17 eV *5*.
S(n)+11.700 *12*			288 *9*	
S(n)+11.730 *12*			126 *6*	
S(n)+11.800 *12*			63 *3*	
S(n)+11.850 *12*			285 *7*	
S(n)+11.940 *12*		(1)	15.8 *26*	$2g\Gamma_n$=0.0351 eV *19*.
S(n)+11.960 *12*		(1)	52 *3*	$2g\Gamma_n$=0.16 eV *4*.

† Resonance strength=$g\Gamma_n\Gamma_\gamma/\Gamma$ in meV; where g=statistical weight factor=(2J+1)/[(2s+1)(2I+1)], where J=spin of resonance, s=1/2 for neutron, I=target spin=$3/2^-$.