^{37}Ar(n,n),(n,α):resonances   2000Go32,2006MuZX

$J^{\pi}(^{37}$Ar g.s.$)=3/2^{+}$.

2006MuZX: Compilation of thermal neutron induced σ and resonance parameter data for nuclei of Z=1-100.

2000Go32: E<100 keV. Measured resonance parameters.

^{38}Ar Levels

All resonance parameters including resonance neutron energies, J, π, L, widths, are directly adopted from the compilation in 2006MuZX.

E(level)[†]	J$^{\pi}$[‡]	Γ	L	E$_n$(lab) (keV)	Comments
11840.0 3	2$^+$	302 eV	0	1.540 20	Γ_n=37 eV, Γ_{γ}=[1 eV], Γ_{α}=257 eV, Γ_p=7 eV.
11841.0 3	2$^+$	267 eV	0	2.63 3	Γ_n=54 eV, Γ_{γ}=[1 eV], Γ_{α}=209 eV, Γ_p=4 eV.
11859.4 4				21.50 20	Γ_{α}=68 b.eV 15.
11875.5 7				38.0 7	Γ_{α}=32 b.eV 14.

[†] From E$_n$(c.m.)+S(n) where S(n)=11838.47 28 (2017Wa10) and E$_n$(c.m.) deduced from E$_n$(lab) in 2006MuZX.

[‡] L=0 gives 1$^+$ or 2$^+$ and with further restriction from analysis of resonance data.