Adopted Levels

	Type	Author	History Citation	Literature Cutoff Date
	Full Evaluation	T. W. Burrows	NDS 108,923 (2007)	20-Feb-2007

$Q(\beta^-)$=1.050×10^4 *9*; $S(n)$=3.55×10^3 *8*; $S(p)$=1.869×10^4 *19*; $Q(\alpha)$=−1.544×10^4 *9*   2012Wa38
Note: Current evaluation has used the following Q record 9.79E3   10 *4.26E3 11 18*.49E3 *72*   2003Au03.
$Q(\beta^-n)$=1.44 MeV *10* (syst).
$Q(2\beta^-)$=16.43 MeV *10* (syst).
Δ=−25.3 MeV *2* (2006Ga30. ^{2}H(^{46}Ar,^{47}Ar) E=10 MeV/nucleon) compared to −25.19 MeV *10* (2003Au03).
1995So03: ^{64}Ni(^{48}Ca,X) E=60 MeV/nucleon. 116 mg/cm^2 target. Selection by LISE3 spectrometer. Additional energy loss
   selection (A^3/Z^2) by means of 220 μm wedge-shaped aluminum. Identification by ΔE-tof technique (two Si detectors). One Si
   detector served for implantation and detection of correlated β-decay. 4π ^{3}He-α(P) detector for neutrons.
2004Gr20,2003Gr22: Be(^{48}Ca,X) E=60 MeV/nucleon. 530 μm-thick Be target; selection by LISE3 spectrometer. Particle
   identification by ΔE-tof technique. Residual energy measured in double-sided Si-strip implantation detector (DSSD). Measured β^-'s
   (two plastic scintillators on either side of the DSDD).
2004We09: produced by a pulsed beam of 1.4 GeV protons (3×10^{13} protons/pulse) from the PSB accelerator impinging on a
   standard ISOLDE uranium carbide graphite target, heated to about 1900° C. The reaction products diffused from the heated target
   and effused *via* a low-temperature, water-cooled transfer line to a standard FEBIAD MK-7 plasma ion source, where the ionization
   by plasma discharge took place. A tungsten converter was placed parallel to the target, allowing one to switch to the neutron
   irradiation of the target by changing the focus of the proton beam from the target to the converter. Measured Eγ, Eβ, Iγ, Iβ, $\gamma\gamma$-
   and $\beta\gamma$-coin, and T$_{1/2}$ using two Ge detectors and four 1.5-mm thick plastic detectors (for detecting β^-'s).
Others: 1985Be50, 1985Gu14, and 1990Tu01.

^{47}Ar Levels

Cross Reference (XREF) Flags

A ^{2}H(^{46}Ar,p)

E(level)	J$^{\pi\dagger}$	T$_{1/2}$	XREF	Comments
0	(3/2)$^-$	1.23 s *3*	A	%β^-=100; %β^-n<0.2 (2004We09) J$^\pi$: L(n)=1 in ^{2}H(^{46}Ar,p). 3/2$^-$ in analogy with other N=29 isotones (2004We09) and systematics (2003Au02). T$_{1/2}$: from 2004We09. Others: 1.25 s *15* (2004Gr20) and 0.7 s (1995So03). %β^-n: Other: <1 (1995So03).
1130 *75*	1/2$^-$,3/2$^-$		A	
1740 *95*	5/2$^-$,7/2$^-$		A	
2655 *80*			A	J$^\pi$: L(n)=3,(4) in ^{2}H(^{46}Ar,p).
3335 *80*			A	J$^\pi$: L(n)=3,(4) in ^{2}H(^{46}Ar,p).
3985 *85*			A	J$^\pi$: L(n)=4,(3) in ^{2}H(^{46}Ar,p).
4790 *95*			A	
5500 *85*	7/2$^+$,9/2$^+$		A	
6.20×10^3 *10*			A	

† From L(n) in ^{2}H(^{46}Ar,p), except as noted.