^{92}Br β^-n decay 2000PfZZ

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

Parent: ^{92}Br: E=0.0; $J^\pi=(2^-)$; $T_{1/2}=0.343$ s *15*; Q(β^-n)=6670 *7*; %β^-n decay=33.1 *25*

^{92}Br-%β^-n decay: From %β^-n=33.1 *25* for ^{92}Br; this value is the weighted average of 32.0 *45* (1988Kr10), 34.6 *25* (1984Ew01) and 21 *8* (1978Cr03); it is consistent with value recommended in 1993Ru01. Others: 1974Kr21, 1978Kr15.

Others: 1988Kr10, 1984Ew01, 1978Cr03, 1978Kr15, 1974Kr21.

^{91}Kr Levels

E(level)†	Jπ‡	Comments
0.0	$5/2^{(+)}$	
144.5 *7*	$(3/2^+)$	
301.2 *7*		
482.7 *8*		
707.3 *8*		
780.5 *10*		
844.1 *8*		
967.1 *9*		
1120.4 *9*		neutron branch to level is significantly lower than that implied by Iγ balance At this level.
1356.7 *13*		
1420.0 *12*		neutron branch to level is significantly stronger than that implied by Iγ balance At this level.

† From least-squares fit to Eγ, assigning an uncertainty of 1 keV to all data.
‡ From Adopted Levels.

γ(^{91}Kr)

Iγ normalization: from Σ (I(γ+ce) to g.s.)=50% based on (I(n) to g.s.):I(n)(total)=19:38 In 2000PfZZ.

Eγ†	Iγ†#	Ei(level)	J_i^π	E_f	J_f^π	Mult.‡	α@	Comments
144.6	45	144.5	$(3/2^+)$	0.0	$5/2^{(+)}$	E2	0.237	α(K)=0.205 *3*; α(L)=0.0269 *4*; α(M)=0.00435 *6*; α(N+..)=0.000407 *6* α(N)=0.000407 *6*
301.4	100	301.2		0.0	$5/2^{(+)}$			
338.4	12	482.7		144.5	$(3/2^+)$			
361.7	11	844.1		482.7				
406.4	2	707.3		301.2				
482.8	40	482.7		0.0	$5/2^{(+)}$			
542.7	10	844.1		301.2				
666.4	2	967.1		301.2				
699.5	3	844.1		144.5	$(3/2^+)$			
707.0	22	707.3		0.0	$5/2^{(+)}$			
780.5	12	780.5		0.0	$5/2^{(+)}$			
818.7	4	1120.4		301.2				
822.0	4	967.1		144.5	$(3/2^+)$			
874.0	1	1356.7		482.7				
976.4	2	1120.4		144.5	$(3/2^+)$			
1118.8	4	1420.0		301.2				presumed by evaluator to be same γ As the 1121γ reported In coincidence with the 301γ In 2000PfZZ.

Continued on next page (footnotes at end of table)

^{92}Br β^-n decay 2000PfZZ (continued)

$\gamma(^{91}Kr)$ (continued)

† From 2000PfZZ; uncertainty unstated by authors.
‡ From Adopted Gammas.
# For absolute intensity per 100 decays, multiply by 0.072 *6*.
@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

Delayed Neutrons (^{91}Kr)

Particle normalization: from $\%\beta^-$n=33.1 *25* for ^{92}Br; this value is the weighted average of 32.0 *45* (1988Kr10), 34.6 *25* (1984Ew01) and 21 *8* (1978Cr03); it is consistent with value recommended in 1993Ru01. Others: 1974Kr21, 1978Kr15.

E(^{91}Kr)	I(n)†‡	E(^{91}Kr)	I(n)†‡	E(^{91}Kr)	I(n)†‡
				0.0	16.5
				144.5	2.3
				301.2	5.0
				482.7	3.0
				707.3	1.7
				780.5	0.9
				844.1	1.5
				967.1	0.52
				1120.4	0.09
				1356.7	0.09
				1420.0	0.70

† $\%\beta^-$n to level. Values given by 2000PfZZ, who assumed $\%\beta^-$n(^{92}Br)=38, were scaled by the evaluator to be consistent with adopted $\%\beta^-$n(^{92}Br)=33.1 *25*. The branching given In 2000PfZZ sums to 37%, leaving 1% to feed unspecified levels.
‡ For absolute intensity per 100 decays, multiply by 0.331 *25*.

^{92}Br β^-n decay 2000PfZZ

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- Coincidence