Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev	NDS 113,1315 (2012)	1-Aug-2011

S(n)=1.38×10^4 *4*; S(p)=1.53×10^3 *11*; Q(α)=3875 *11* 2012Wa38
Note: Current evaluation has used the following Q record 14071 syst 1.53E3 11 *3875* 11 2011AuZZ.

^{110}Xe Levels

Cross Reference (XREF) Flags

A ^{114}Ba α decay (0.43 s)
B ^{58}Ni(^{54}Fe,2nγ)

E(level)†	J$^\pi$‡	$T_{1/2}$	XREF	Comments
0.0	0$^+$	93 ms *3*	AB	%α=64 *35* (2002Ma19); %ε+%β^+=36 *35*; %εp=? %α: from 2002Ma19, deduced by assuming %α(^{114}Ba)=0.9 *3* and %α(^{106}Te)=100. $T_{1/2}$: From recoil-α(t) in 2007Sa36. Others: 110 ms *+30−20* (from the least-squares fit of the theoretical time distribution to the experimental data) and 100 ms *+30−20* (using grow−in and decay pattern) in 2005Ja03 (note that a value of 105 ms +35−25 was adopted in 2005Ja03) and 160 ms *+290−60* (from the analysis of time correlations between ^{114}Ba and ^{110}Xe-^{106}Te α-decay events) in 2002Ma19. Eα=3717 *19* (2007Sa36), 3737 *30* (1981Sc17) and 3730 *30* (2002Ma19).
469.70 *20*	(2$^+$)		B	
1113.1 *4*	(4$^+$)		B	
1889.7 *7*	(6$^+$)		B	

† From least-squares fit to Eγ's.
‡ Band(A): Possible members of g.s band (2007Sa36).

γ(^{110}Xe)

E$_i$(level)	J$_i^\pi$	E$_\gamma$†	I$_\gamma$†	E$_f$	J$_f^\pi$	Mult.
469.70	(2$^+$)	469.7 *2*	100	0.0	0$^+$	[E2]
1113.1	(4$^+$)	643.4 *3*	100	469.70	(2$^+$)	[E2]
1889.7	(6$^+$)	776.6 *6*	100	1113.1	(4$^+$)	[E2]

† From 2007Sa36. Eγ are correlated with Eα(^{110}Xe)=3717 keV 19.

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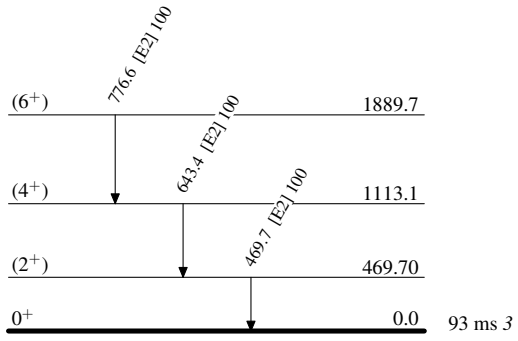
Level Scheme

Intensities: Relative photon branching from each level



$^{110}_{54}Xe_{56}$