Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 195,1 (2024)	19-Sep-2023

Q(β^-)=−7950 *syst*; S(n)=9680 *syst*; S(p)=−765 *11*; Q(α)=6240 *5* 2021Wa16
ΔQ(β^-)=360, ΔS(n)=250 (syst,2021Wa16).
S(2n)=21720 *360*, S(2p)=1210 *210*, Q(εp)=9040 *200* (syst,2021Wa16).
Additional information 1.
Data are from ^{162}Re α-decay studies, primarily those of 1996Pa01 and 1997Da07.

^{162}Re Levels

Cross Reference (XREF) Flags

A ^{166}Ir α decay (10.5 ms)
B ^{166}Ir α decay (15.1 ms)

E(level)	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	(2$^-$)	107 ms *13*	A	%α=94 *6*; %ε+%β^+=6 *6* J$^\pi$: fed by an unhindered α transition from a (2$^-$) level in ^{166}Ir. T$_{1/2}$: from 1997Da07, α(t). %α: not measured by 1997Da07, but assumed by them to be equal to that of the (9$^+$) isomeric state, which they report to be (94±6)%. The evaluator has chosen to list this value, although the %α value adopted for the isomer is somewhat different from this because a second measured value has been included in determining it. %ε+%β^+: deduced from %α, assuming no other modes of decay from this level. See the comment on the %α value.
173 *13*	(9$^+$)	77 ms *9*	B	%α=91 *5*; %ε+%β^+=9 *5* E(level): computed from excitation energy of the (9$^+$) state in ^{166}Ir together with the difference in the energies of the α transitions from the (9$^+$) and (2$^-$) states in ^{166}Ir to the corresponding states in ^{162}Re (1997Da07). T$_{1/2}$: weighted average of 66 ms *7* (1996Pa01,α(t)) and 85 ms *6* (1997Da07,α(t)). Other: 100 ms *30* (1979Ho10,α(t)). J$^\pi$: fed by an unhindered α transition from a (9$^+$) level in ^{166}Ir. %α: weighted average of 85 *9* (1996Pa01) and 94 *6* (1997Da07). 1979Ho10 report %α>3. %ε+%β^+: deduced from %α, assuming no other modes of decay from this level.