^{184}W(γ,γ):Mossbauer

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111,275 (2010)	1-Oct-2009

1968Pe06: ^{184}Re source (from ^{185}Re(p,pn) At E(p)=32 MeV) In hexagonal Re metal; thin-window Ge(Li) detector; absorber: 3.6 atomic-% W dissolved In Fe for magnetic interaction measurements, polycrystalline WS_2 and WO_3 for quadrupole interaction measurements.
1969Ch23: source from Coulomb excitation of W, Eα=8 MeV, WS_2 absorber; T=25° K.
1970Me09: source from Coulomb excitation of W, Eα=6 MeV; W absorber; T=80° K; Ge(Li) detector.
1971HaWV: W(p,p′γ) source, E=3 MeV; WO_2 absorber; T=22° K.
1971Ob02: source from Coulomb excitation of W, Eα=6 MeV; WO_3, WC, WS_2 absorbers, T=78° K, 20°−30° K.
1971WaYS: ^{184}Re source; 1.5% W-98.5% Cr, 1.5% W-98.5% Ni, and Na_2WO_4 absorbers; T=4.2° K.

^{184}W Levels

E(level)	J^{π} †	$T_{1/2}$	Comments
0.0	0^+		
111	2^+	1.29 ns *12*	g=0.295 *10* Q: Q/Q(^{182}W)=0.938 *15* (1968Pe06), 0.930 *16* (1969Ch23), 0.965 *8* (1971Ob02). Isomer shift $\delta\langle r^2\rangle/\langle r^2\rangle$ =+0.19×10^{-4} *12* (1971HaWV),≈+0.13×10^{-4} (1971WaYS). $\delta\langle r^2\rangle/\delta\langle r^2\rangle(^{182}W)$=−0.8 *7* (1971HaWV), −0.81 *22* (1971WaYS). g: From 1968Pe06, assuming H(internal)=−630 *13* kG (1967Ko28), based on g(^{183}W)=0.1172 *7*. 1968Pe06 report g/g(^{182}W)=1.11 *2* and g(^{182}W)=0.266 *9*. $T_{1/2}$: 1.28 ns *13* from 1970Me09, adjusted by 1971Ob02 for their Q ratios; based on $T_{1/2}$(182W, 100 level)=1.372 ns *14* (1964Sc21).

† From Adopted Levels.