^{182}W(γ,γ′) 1993He15

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 130, 21 (2015)	15-Jul-2015

1993He15: E≈2.9-3.7 MeV bremsstrahlung radiation. Measured Eγ, Iγ, γγ(θ), deduced g.s. transition widths.

^{182}W Levels

Γ_0(reduced) (in meV)=Γ_0 (in meV)/[Eγ^3 (in MeV)^3].

E(level)	J^π‡	$T_{1/2}$†	Cross section In eV.b	Comments
0.0	0^+			
100	2^+			E(level): rounded off value from Adopted Levels. J^π: from Adopted Levels.
2382 *1*	1	7.9 fs *11*	21.6 *25*	Γ_0(reduced)=0.00176 eV *25*. B(M1)(↑)=0.46 *6*. B(E1)(↑)=5.0×10^{-5} *7*.
2474 *1*	1#	15 fs *2*	21.8 *26*	Γ_0(reduced)=0.00121 eV *17*. B(M1)(↑)=0.31 *5*. B(E1)(↑)=3.5×10^{-5} *5*.
2884 *1*	1#	16 fs *2*	20.9 *23*	Γ_0(reduced)=0.00085 eV *12*. B(M1)(↑)=0.22 *3*. B(E1)(↑)=2.4×10^{-5} *3*.
2892 *1*	(1)	27 fs *17*	4.0 *21*	Γ_0(reduced)=0.00029 eV *18*. B(M1)(↑)=0.07 *4*. B(E1)(↑)=0.8×10^{-5} *5*.
2941 *2*				
2996 *1*	1	6.7 fs *13*	13 *2*	Γ_0(reduced)=0.00094 eV *18*. B(M1)(↑)=0.25 *5*. B(E1)(↑)=2.7×10^{-5} *5*. K=(0) (1993He15).
3080 *1*	1#	17 fs *3*	13 *2*	Γ_0(reduced)=0.00056 eV *11*. B(M1)(↑)=0.15 *3*. B(E1)(↑)=1.6×10^{-5} *3*.
3163 *1*	1#	10.3 fs *14*	22.2 *25*	Γ_0(reduced)=0.00091 eV *12*. B(M1)(↑)=0.24 *3*. B(E1)(↑)=2.6×10^{-5} *4*.
3198 *1*	(1,2)#	16 fs *3*	12.8 *22*	Γ_0(reduced)=0.00054 eV *11*. B(M1)(↑)=0.14 *3*. B(E1)(↑)=1.5×10^{-5} *3*.
3365 *1*	1#	11.1 fs *23*	15 *3*	Γ_0(reduced)=0.00066 eV *13*. B(M1)(↑)=0.17 *4*. B(E1)(↑)=1.9×10^{-5} *4*.
3422 *1*	(1,2)#	10.3 fs *20*	19 *3*	Γ_0(reduced)=0.00072 eV *12*. B(M1)(↑)=0.19 *3*. B(E1)(↑)=2.1×10^{-5} *4*.
3601 *1*	1#	6.2 fs *12*	21 *3*	Γ_0(reduced)=0.00089 eV *18*. B(M1)(↑)=0.23 *4*. B(E1)(↑)=2.5×10^{-5} *5*.
3640 *2*				
3727 *2*				
3882 *2*				
3920 *2*	1			

† Deduced from $\Gamma_{\gamma 0}$ and branching ratio.

‡ From γγ(θ). The assignments are the same in Adopted Levels.

K=1 (1993He15).

^{182}W(γ,γ') 1993He15 (continued)

$\gamma(^{182}W)$

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
2382	1	2282 *1*	142 *20*	100	2^+	3198	(1,2)	3098 *1*	59 *21*	100	2^+
		2382 *1*	100	0.0	0^+			3198 *1*	100	0.0	0^+
2474	1	2374 *1*	66 *14*	100	2^+	3365	1	3265 *1*	63 *17*	100	2^+
		2474 *1*	100	0.0	0^+			3365 *1*	100	0.0	0^+
2884	1	2784 *1*	40 *11*	100	2^+	3422	(1,2)	3322 *1*	53 *15*	100	2^+
		2884 *1*	100	0.0	0^+			3422 *1*	100	0.0	0^+
2892	(1)	2792 *1*	150 *90*	100	2^+	3601	1	3501 *1*	77 *19*	100	2^+
		2892 *1*	100	0.0	0^+			3601 *1*	100	0.0	0^+
2941		2941 *2*		0.0	0^+	3640		3640 *2*		0.0	0^+
2996	1	2896 *1*	168 *35*	100	2^+	3727		3627 *2*		100	2^+
		2996 *1*	100	0.0	0^+			3727 *2*		0.0	0^+
3080	1	2980 *1*	61 *18*	100	2^+	3882		3782† *2*		100	2^+
		3080 *1*	100	0.0	0^+			3882 *2*		0.0	0^+
3163	1	3063 *1*	54 *12*	100	2^+	3920	1	3920 *2*		0.0	0^+
		3163 *1*	100	0.0	0^+						

† Placement of transition in the level scheme is uncertain.

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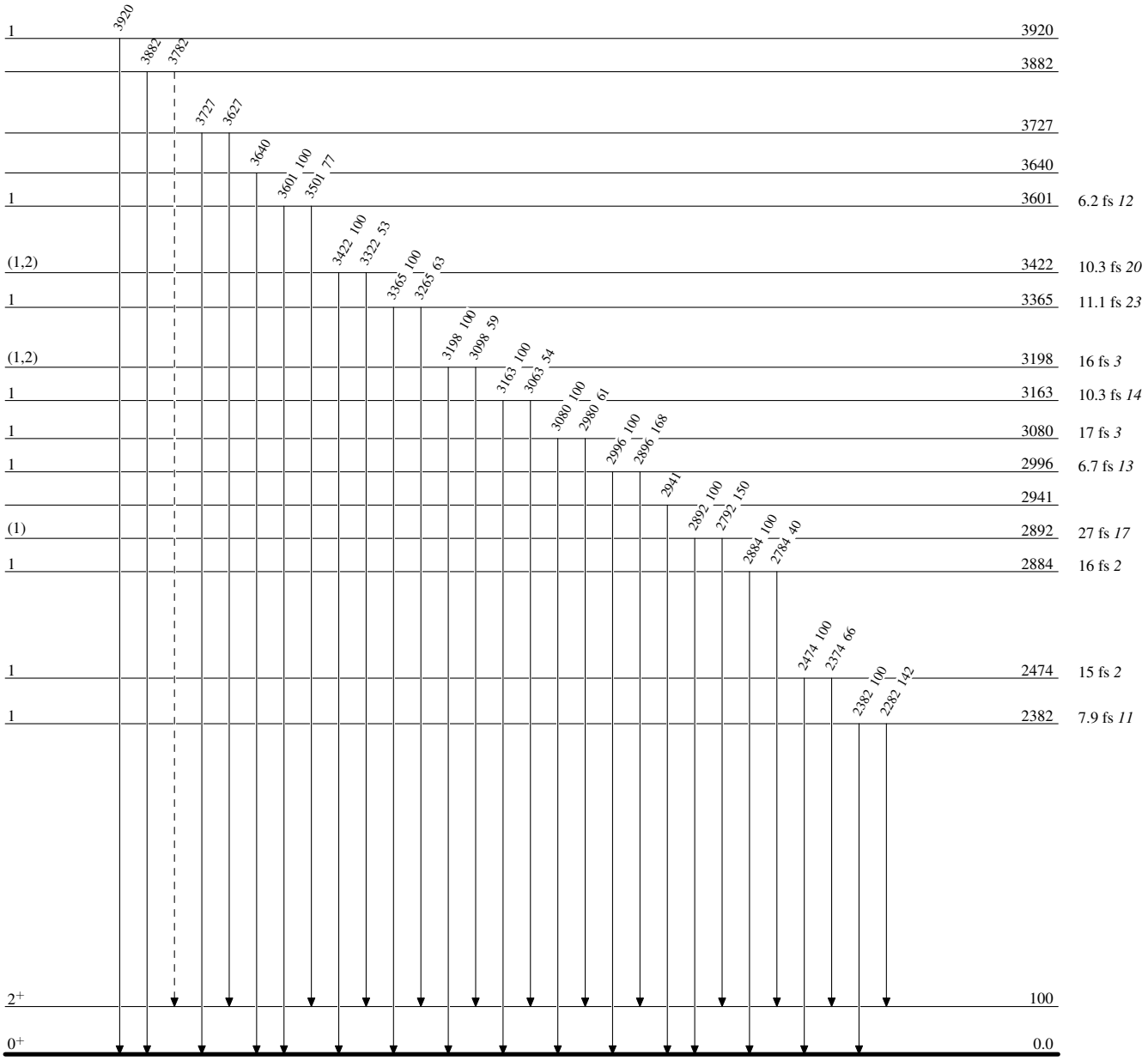
Legend

Level Scheme

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



$^{182}_{74}W_{108}$