

¹⁸³W(n,γ) E=res 1969Sa01

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

See separate data sets for E(n)=7.6 eV, 300 eV, 2 keV data.

Other: 1967Ra06 (E(n)=7.6, 27.1 eV).

1969Sa01: E(n)=4-400 eV, tof; Ge(Li) detectors (E_γ>3500, FWHM=5 At 1333, 15 At 7 MeV); measured primary γ spectra from 13 J^π=1⁻ and 4 J^π=0⁻ resonances (E=7.6-300 eV).

¹⁸⁴W Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	0 ⁺ #	1623	0 ⁺ ,1 ⁺ ,2 ⁺	2250	1 ⁺ @	2763	0 ⁺ ,1 ⁺ ,2 ⁺
111	2 ⁺ #	1651	0 ⁺ ,1 ⁺ ,2 ⁺	2293	0 ⁺ ,1 ⁺ ,2 ⁺	2803	0 ⁺ ,1 ⁺ ,2 ⁺
903	2 ⁺ #	1722	1 ⁺	2368	1 ⁺	2960	1 ⁺
1004	0 ⁺ #	1803	0 ⁺ ,1 ⁺ ,2 ⁺	2400	1 ⁺	2986	1 ⁺
1123	0 ⁺ ,1 ⁺ ,2 ⁺	2050	1 ⁺	2420	1 ⁺	3036	1 ⁺
1226	0 ⁺ ,1 ⁺ ,2 ⁺	2061	1 ⁺	2470	0 ⁺ ,1 ⁺ ,2 ⁺	3200	0 ⁺ ,1 ⁺ ,2 ⁺
1310	0 ⁺ ,1 ⁺ ,2 ⁺	2090	1 ⁺	2513	0 ⁺ ,1 ⁺ ,2 ⁺	3264	0 ⁺ ,1 ⁺ ,2 ⁺
1400	0 ⁺ ,1 ⁺ ,2 ⁺	2130	0 ⁺ ,1 ⁺ ,2 ⁺	2653	0 ⁺ ,1 ⁺ ,2 ⁺	7413	1 ⁻ ,0 ⁻ &
1433	0 ⁺ ,1 ⁺ ,2 ⁺	2170	1 ⁺	2688	0 ⁺ ,1 ⁺ ,2 ⁺		
1613	1 ⁺	2220	1 ⁺	2713	0 ⁺ ,1 ⁺ ,2 ⁺		

[†] From primary transition E_γ.

[‡] Values proposed by 1969Sa01 on the basis of measured level population patterns from various 1⁻ and 0⁻ resonances, assuming that the transitions seen are of E1 multipolarity, except as noted. See Adopted Levels for evaluator's adopted J^π. these are compatible with adopted J^π, except as noted.

From Adopted Levels.

@ ADOPTED J^π=(2)⁺ for a 2246 level.

& s-wave capture only on 1/2⁻ target.

γ(¹⁸⁴W)

E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	E _γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π
4149	7413	1 ⁻ ,0 ⁻	3264	0 ⁺ ,1 ⁺ ,2 ⁺	5193#	7413	1 ⁻ ,0 ⁻	2220	1 ⁺
4213	7413	1 ⁻ ,0 ⁻	3200	0 ⁺ ,1 ⁺ ,2 ⁺	5243#	7413	1 ⁻ ,0 ⁻	2170	1 ⁺
4377	7413	1 ⁻ ,0 ⁻	3036	1 ⁺	x5268‡				
4427#	7413	1 ⁻ ,0 ⁻	2986	1 ⁺	5283	7413	1 ⁻ ,0 ⁻	2130	0 ⁺ ,1 ⁺ ,2 ⁺
4453#	7413	1 ⁻ ,0 ⁻	2960	1 ⁺	5323#	7413	1 ⁻ ,0 ⁻	2090	1 ⁺
4610	7413	1 ⁻ ,0 ⁻	2803	0 ⁺ ,1 ⁺ ,2 ⁺	5352#	7413	1 ⁻ ,0 ⁻	2061	1 ⁺
4650	7413	1 ⁻ ,0 ⁻	2763	0 ⁺ ,1 ⁺ ,2 ⁺	5363#	7413	1 ⁻ ,0 ⁻	2050	1 ⁺
4700	7413	1 ⁻ ,0 ⁻	2713	0 ⁺ ,1 ⁺ ,2 ⁺	5610	7413	1 ⁻ ,0 ⁻	1803	0 ⁺ ,1 ⁺ ,2 ⁺
4725	7413	1 ⁻ ,0 ⁻	2688	0 ⁺ ,1 ⁺ ,2 ⁺	5691#	7413	1 ⁻ ,0 ⁻	1722	1 ⁺
4760	7413	1 ⁻ ,0 ⁻	2653	0 ⁺ ,1 ⁺ ,2 ⁺	5762	7413	1 ⁻ ,0 ⁻	1651	0 ⁺ ,1 ⁺ ,2 ⁺
4900	7413	1 ⁻ ,0 ⁻	2513	0 ⁺ ,1 ⁺ ,2 ⁺	5790	7413	1 ⁻ ,0 ⁻	1623	0 ⁺ ,1 ⁺ ,2 ⁺
4943	7413	1 ⁻ ,0 ⁻	2470	0 ⁺ ,1 ⁺ ,2 ⁺	5800#	7413	1 ⁻ ,0 ⁻	1613	1 ⁺
4993#	7413	1 ⁻ ,0 ⁻	2420	1 ⁺	5980	7413	1 ⁻ ,0 ⁻	1433	0 ⁺ ,1 ⁺ ,2 ⁺
5013	7413	1 ⁻ ,0 ⁻	2400	1 ⁺	6013	7413	1 ⁻ ,0 ⁻	1400	0 ⁺ ,1 ⁺ ,2 ⁺
5045#	7413	1 ⁻ ,0 ⁻	2368	1 ⁺	6103	7413	1 ⁻ ,0 ⁻	1310	0 ⁺ ,1 ⁺ ,2 ⁺
5120	7413	1 ⁻ ,0 ⁻	2293	0 ⁺ ,1 ⁺ ,2 ⁺	6187	7413	1 ⁻ ,0 ⁻	1226	0 ⁺ ,1 ⁺ ,2 ⁺
5163#	7413	1 ⁻ ,0 ⁻	2250	1 ⁺	6290	7413	1 ⁻ ,0 ⁻	1123	0 ⁺ ,1 ⁺ ,2 ⁺

Continued on next page (footnotes at end of table)

${}^{183}\text{W}(\text{n},\gamma)$ E=res **1969Sa01** (continued) $\gamma({}^{184}\text{W})$ (continued)

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
6409	7413	$1^-, 0^-$	1004	0^+
6510	7413	$1^-, 0^-$	903	2^+
7302	7413	$1^-, 0^-$	111	2^+
7413	7413	$1^-, 0^-$	0.0	0^+

[†] Approximate energy from **1969Sa01**. uncertainty unstated by authors, but FWHM=15 keV At 7 MeV will Be inadequate to resolve some close γ pairs.

[‡] E_γ implies level At $E \approx 2145$ for which No other evidence exists.

[#] Transition present In primary γ spectrum from a 0^- resonance (**1969Sa01**).

^x γ ray not placed in level scheme.

$^{183}\text{W}(n,\gamma) \text{E=res}$ 1969Sa01

Level Scheme

