$^{184}$W(n,n′)    **1967Li11,1981De02,1985An20**

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

Dataset includes $^{184}$W(pol n,n) (1964Bu06; E(n)=3.05-3.40 MeV).

Others: 1967Li11, 1981De02.

1985An20: E(n)=4.87, 6 MeV, beam energy spread≈50 keV; 99% $^{184}$W target; tof, NE213 detector (FWHM=65-75 keV); measured E(n), $\sigma(\theta)$; coupled channels analysis.

1982Gu18: E(n)=0.3-5 MeV, monoenergetic pulsed beam, energy spread 10-50 keV; >95% enriched target; tof, P recoil scintillation detector; measured $\sigma$ (E=1-5 MeV, 200 keV steps), $\sigma(\theta)$, $\theta=20°-160°$ (10 angles, E(n)=1.5-4.0 MeV); statistical model and coupled channels analyses.

1981De02: E(n)=3.40 MeV; measured $\sigma(\theta)$, $\theta$(lab)=20°-160°; 94.9% $^{184}$W target; coupled channels and statistical model analyses. Deduced $\beta_2$, $\beta_4$, charge and matter radii.

1967Li11: E=0.3-1.5 MeV. Data supersede earlier data by one of the present authors (1963Sm07). A level at 690, tentatively reported by 1963Sm07, was not confirmed by 1967Li11 and, consequently, is not included here.

### $^{184}$W Levels

| E(level)[†] | Comments |
|---|---|
| 0.0 | |
| 110 *5* | $\beta_2$=+0.209 (1981De02, 1985An20). |
| 360 *10* | $\beta_{42}$=−0.056 (1981De02, 1985An20). |
| 748[‡] | |
| 901 *10* | |
| 1003 *10* | |
| 1120 *10* | |
| 1134[‡] | unresolved from 1121 level (1985An20). |
| 1221[‡] | |
| 1323[#] *43* | |
| 1376[#] *23* | |
| 1435[#] *17* | |
| 1528[#] *12* | |
| 1613[#] *18* | |
| 1667[#] *13* | |
| 1725[#] *29* | |
| 1787[#] *32* | |
| 1911[#] *25* | |
| 2008[#] *30* | |
| 2105[#] *37* | |
| 2155[#] *34* | |
| 2240[#] *25* | |
| 2324[#] *24* | |
| 2440[#] | |
| 2520[#] | |
| 2580[#] | |
| 2638[#] | |
| 2663[#] | |
| 2735[#] | |
| 2811?[#] | |

Continued on next page (footnotes at end of table)

$^{184}$W(n,n′)     **1967Li11,1981De02,1985An20** (continued)

$^{184}$W Levels (continued)

E(level)[†]

2866?[#]
2918?[#]

[†] From 1967Li11, except As noted.
[‡] Rounded value from Adopted Levels. reported by 1985An20.
[#] From 1982Gu18. authors state uncertainty only when At least five determinations were made. values shown As uncertain are tentative and May result from the excitation of more than one level.

$^{184}$W(n,n′)     **1967Li11,1981De02,1985An20** (continued)