

$^{204}\text{Hg}(e,e')$ 1989BuZP

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	C. J. Chiara and F. G. Kondev		NDS 111,141 (2010)	1-Oct-2009

1989BuZP: Li-Hg amalgam targets enriched to 93.7% ^{204}Hg and 97.9% ^6Li , $\approx 15 \text{ mg/cm}^2$ thick, between thin Be foils; E(e)=83-477 MeV; magnetic spectrometer, FWHM= $8 \times 10^{-3}\%$ to $3 \times 10^{-2}\%$. DWBA analysis.

 ^{204}Hg Levels

E(level) [†]	J π^{\ddagger}	Comments
0	0 ⁺	
436.7 23	2 ⁺	B(E2) \uparrow =0.429 4 Additional information 1.
1128 6	4 ⁺	B(E4) \uparrow =0.045 6 Additional information 2.
1636 12	0 ⁺	M(E0)[e(fm) ²]=1.1 7. Additional information 3.
1944 33		
1974 60		
2047 70		
≈ 2090		
2124 30		
2200 60		
2262 5	5 ⁻	B(E5) \uparrow =0.041 9 Additional information 4.
2299 7	7 ⁻	B(E7) \uparrow = 32×10^{-4} 13. Additional information 5.
2359 5		
2397 12		
2462 29		
2507 40		
≈ 2570		
259×10^1 12		
2673 6	3 ⁻	B(E3) \uparrow =0.42 4 Additional information 6.
2719 7		
≈ 2730		
≈ 2760		
2813 7	3 ⁻	B(E3) \uparrow =0.139 16 Additional information 7.
2883 43		
2925 37		
3017 28	4 ⁺	B(E4) \uparrow =0.040 13 Additional information 8.
3096 18		
3187 70		
3222 24		
3316 9	3 ⁻	B(E3) \uparrow =0.109 13 Additional information 9.
3361 8	5 ⁻	B(E5) \uparrow =0.036 5 Additional information 10.
3426 15		
3475 14		
3539 70		
3594 35		
≈ 3670		
≈ 3720		
3750 70		

Continued on next page (footnotes at end of table)

$^{204}\text{Hg}(e,e')$ **1989BuZP (continued)** ^{204}Hg Levels (continued)

<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>Comments</u>
3820 <i>70</i>		
≈3860		
3919 <i>34</i>		
3968 <i>29</i>		
4033 <i>15</i>		
4100 <i>17</i>	4 ⁺	B(E4) [†] =0.054 <i>6</i> Additional information 11.
4147 <i>14</i>		
≈4210		
4245 <i>7</i>		
4348 <i>11</i>		
≈4380		
4413 <i>15</i>		
4493 <i>9</i>		
4539 <i>7</i>		
≈4610		
4663 <i>27</i>		
470×10 ¹ <i>10</i>		
4723 <i>7</i>		
4815 <i>13</i>		
4895 <i>24</i>		
4915 <i>26</i>		
4959 <i>60</i>		

[†] The listed uncertainties are statistical only; the systematic errors are estimated by [1989BuZP](#) to range from 2 keV for levels below 2462 keV to 5 keV for levels above 4413 keV.

[‡] From [1989BuZP](#), based on fits of the cross sections as functions of the momentum transfer with DWBA calculations.