

$^{196}\text{Pt}(\text{e},\text{e}')$     **1988Bo08,1992Po09**

Type	Author	History	Literature Cutoff Date
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**1988Bo08:**  $E(\text{e})=200$  MeV,  $\theta=30^\circ$  to  $65^\circ$  ( $5^\circ$  steps);  $E(\text{e})=500$  MeV,  $\theta=25^\circ$  to  $62^\circ$  ( $2^\circ$  steps),  $\theta=62^\circ$  to  $74^\circ$  ( $4^\circ$  steps); >99% enriched  $^{196}\text{Pt}$  targets; momentum transfer= $0.6$ - $3.2 \text{ fm}^{-1}$ , measured  $E(\text{level})$  ( $\Delta E/E=1.5\times 10^{-4}$ ), determined ground state and transition charge densities; used interacting boson model to interpret results.

**1992Po09:**  $E(\text{e})=90$ - $334$  MeV,  $\theta=35^\circ$  to  $85^\circ$ , 99% enriched  $^{196}\text{Pt}$  targets, QDD spectrometer, momentum transfer= $0.36$ - $2.43 \text{ fm}^{-1}$ , momentum resolution= $\approx 8\times 10^{-5}$ . Deduced transition charge densities,  $B(\lambda)\uparrow$ ,  $J^\pi$ .

**1985Bo14:**  $E(\text{e})=500$  MeV. QDD and QDQ spectrometer. Resolution ( $\text{dp}/\text{p}$ ):  $2\times 10^{-4}$  to  $6\times 10^{-5}$ .

Others: [1987Bo06](#), [1984De26](#), [1982BoZO](#).

 $^{196}\text{Pt}$  Levels

$E(\text{level})$	$J^\pi \dagger$	Comments
0.0	$0^+$	
356	$2^+$	$B(E2)\uparrow=1.44~4$ $B(E2)\uparrow$ : Weighted average of 1.44 4 ( <a href="#">1988Bo08</a> ) and 1.49 21 ( <a href="#">1992Po09</a> ).
877.7	$4^+$	$B(E4)\uparrow=0.0186~21$ $B(E4)\uparrow$ : Weighted average of 0.0171 19 ( <a href="#">1988Bo08</a> ), 0.024 5 ( <a href="#">1985Bo14</a> ), and 0.0247 54 ( <a href="#">1992Po09</a> ).
1271 <sup>†</sup>	$5^-$	$B(E5)\uparrow=0.00204~20$ ( <a href="#">1992Po09</a> )
1293 <sup>†</sup>	$4^+$	$B(E4)\uparrow=0.0201~28$ $B(E4)\uparrow$ : Weighted average of 0.020 4 ( <a href="#">1985Bo14</a> ) and 0.0201 40 ( <a href="#">1992Po09</a> ).
1374 <sup>†</sup>	$7^-$	
1447	$3^-$	$B(E3)\uparrow=0.1111~11$ $B(E3)\uparrow$ : Weighted average of 0.103 18 ( <a href="#">1988Bo08</a> ) and 0.116 14 ( <a href="#">1992Po09</a> ). the large error band of the $3^-$ level is a consequence of inability to separate the $3^-$ level from neighboring $6^+$ and $7^-$ levels.
1884 <sup>†</sup>	$4^+$	$B(E4)\uparrow=0.044~9$ $B(E4)\uparrow$ : Weighted average of 0.044 13 ( <a href="#">1985Bo14</a> ) and 0.044 13 ( <a href="#">1992Po09</a> ).
2008	$4^+$	$E(\text{level})$ : composite peak ( <a href="#">1985Bo14</a> ).
2280	$4^+$	$E(\text{level})$ : composite peak ( <a href="#">1985Bo14</a> ).
2431	$3^-$	$B(E3)\uparrow=0.087~14$ ( <a href="#">1992Po09</a> )
2638	$3^-$	$B(E3)\uparrow=0.072~13$ ( <a href="#">1992Po09</a> )

<sup>†</sup> From spectrum of  $E(\text{e})=370.9$  MeV  $^{196}\text{Pt}(\text{e},\text{e}')$  at  $\theta=76.0^\circ$  ([1984De26](#)).

<sup>‡</sup> From Adopted Levels.