

Muonic atom **1970Hi03**

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

Others: [1966Ba04](#), [1968Ba36](#), [1968Be24](#), [1968Ga26](#), [1974Ba77](#), [1974Wa22](#).

**1970Hi03**: negative  $\mu$  beam from Nevis cyclotron; Ge(Li) detector; 94.3%  $^{184}\text{W}$  target; measured K(2p-1s) and L(2d-2p) muonic x-ray spectra (energy and intensity) and isotope shifts; deduced parameters of nuclear charge distribution, B(E2) from intrinsic Q.

 $^{184}\text{W}$  Levels

E(level)	$J\pi^\dagger$	$T_{1/2}$	Comments
0.0	$0^+$		
111	$2^+$	1.19 ns <i>4</i>	B(E2) $\uparrow$ =3.91 <i>10</i> ( <a href="#">1970Hi03</a> ) $T_{1/2}$ : from B(E2) and adopted $\alpha=2.57$ . Isomer shift studied ( <a href="#">1968Be24</a> , <a href="#">1968Ga26</a> , <a href="#">1974Ba77</a> , <a href="#">1974Wa22</a> ). $\delta\langle r^2 \rangle / \langle r^2 \rangle$ consistent with zero ( <a href="#">1968Be24</a> , <a href="#">1968Ba36</a> , <a href="#">1968Ga26</a> , <a href="#">1974Ba77</a> , <a href="#">1974Wa22</a> ). x-rays studied, isotope shift, and parameters of deformed Fermi charge distribution deduced ( <a href="#">1970Hi03</a> ). E(level): rounded value from Adopted Levels.

$^\dagger$  From Adopted Levels.