

Muonic atom [1981Ho22](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

Others: [1967De21](#), [1968Ba36](#), [1971Ba11](#), [1972Ko40](#), [1972Li33](#), [1973BaUA](#), [1973Ik03](#), [1973Me08](#) (calculation only), [1974Ba77](#), [1974En08](#), [1977Ho23](#), [1977Wa12](#).

[1981Ho22](#): osmium targets enriched to 99.06% in ^{192}Os ; measured muonic x-ray spectrum (Ge(Li)); determined Barrett moment, Barrett radii, isotope shift, isomer shift, B(E2), and quadrupole moment values. See ^{192}Os Adopted Levels for Q(205.8 level).

 ^{192}Os Levels

E(level) [†]	J ^π [‡]	Comments
0.0	0 ⁺	
205.805 25	2 ⁺	B(E2)=2.10 2 (1981Ho22). Q is negative (1977Wa12). Q=-0.96 3 (1981Ho22).
489.07 3	2 ⁺	B(E2)(2+(206) to 2+(489))=0.37 5 (1981Ho22); presumed to supersede 0.33 5 in 1977Ho23 .
690.37	3 ⁺	

[†] From least-squares fit to E_γ .

[‡] Adopted values.

 $\gamma(^{192}\text{Os})$

E_γ [†]	I_γ [‡]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
205.805 25	18.6	205.805	2 ⁺	0.0	0 ⁺	
283.26 3	1.5	489.07	2 ⁺	205.805	2 ⁺	
484.58	0.7	690.37	3 ⁺	205.805	2 ⁺	E_γ : adopted value (rounded).
489.07	1.6	489.07	2 ⁺	0.0	0 ⁺	E_γ : from $E_\gamma(206)+E_\gamma(283)$ in 1974Ba77 .

[†] From [1974Ba77](#), except as noted.

[‡] Photon intensity per 100 stopped muons ([1974Ba77](#)). Uncertainty unstated by authors.

Muonic atom 1981Ho22**Level Scheme**Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$

