^{191}Os(n,γ) E=thermal 1978Ca20

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

σ_n=383 *54* (2006MuZX).

Target J^π=9/2$^-$ (g.s.); capture by 3/2$^-$ (74 level) is also possible, but data show no evidence that this occurs (1978Ca20).

The level scheme and all data are from 1978Ca20. Enriched ^{190}Os targets (double neutron capture required to form ^{192}Os); measured Eγ, Iγ for secondary gammas (bent crystal spectrometer), cross sections. Used population systematics to characterize levels.

^{192}Os Levels

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
0.0	0$^+$	580.281 *7*	4$^+$	1069.521 *11*	4$^+$	1361.994 *13*	(5$^+$)
205.79445 *9*	2$^+$	690.371 *6*	3$^+$	1143.507 *13*	5$^+$	1465.18 *10*	6$^+$
489.059 *4*	2$^+$	909.591 *8*	4$^+$	1341.121 *15*	3$^-$		

† From least-squares fit to Eγ.

‡ Adopted values.

γ(^{192}Os)

Eγ‡	Iγ†	E_i(level)	J^π_i	E_f	J^π_f
201.314 *5*	7.9 *8*	690.371	3$^+$	489.059	2$^+$
205.79430# *9*	100	205.79445	2$^+$	0.0	0$^+$
218.488 *14*	0.60 *25*	1361.994	(5$^+$)	1143.507	5$^+$
219.24 *6*	0.8 *4*	909.591	4$^+$	690.371	3$^+$
233.92 *7*	1.1 *5*	1143.507	5$^+$	909.591	4$^+$
271.600 *10*	9.0 *9*	1341.121	3$^-$	1069.521	4$^+$
283.266 *4*	28 *3*	489.059	2$^+$	205.79445	2$^+$
292.478 *8*	6.3 *7*	1361.994	(5$^+$)	1069.521	4$^+$
329.310 *9*	7.9 *8*	909.591	4$^+$	580.281	4$^+$
374.487 *7*	55 *6*	580.281	4$^+$	205.79445	2$^+$
379.154 *10*	19 *2*	1069.521	4$^+$	690.371	3$^+$
420.530 *10*	25 *3*	909.591	4$^+$	489.059	2$^+$
453.10 *3*	18 *2*	1143.507	5$^+$	690.371	3$^+$
484.551 *18*	46 *5*	690.371	3$^+$	205.79445	2$^+$
489.04 *4*	52 *5*	489.059	2$^+$	0.0	0$^+$
555.59 *10*	5.9 *10*	1465.18	6$^+$	909.591	4$^+$
580.39 *10*	26 *6*	1069.521	4$^+$	489.059	2$^+$

† Relative to Iγ(205.8γ)=100.

‡ Authors calibrated spectrometer assuming Eγ=205.79549 *7* for the 206γ; the evaluator has assumed the adopted energy (205.79430 *9*) for this line, and adjusted the energies of all other lines appropriately.

From Adopted Gammas.

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Level Scheme

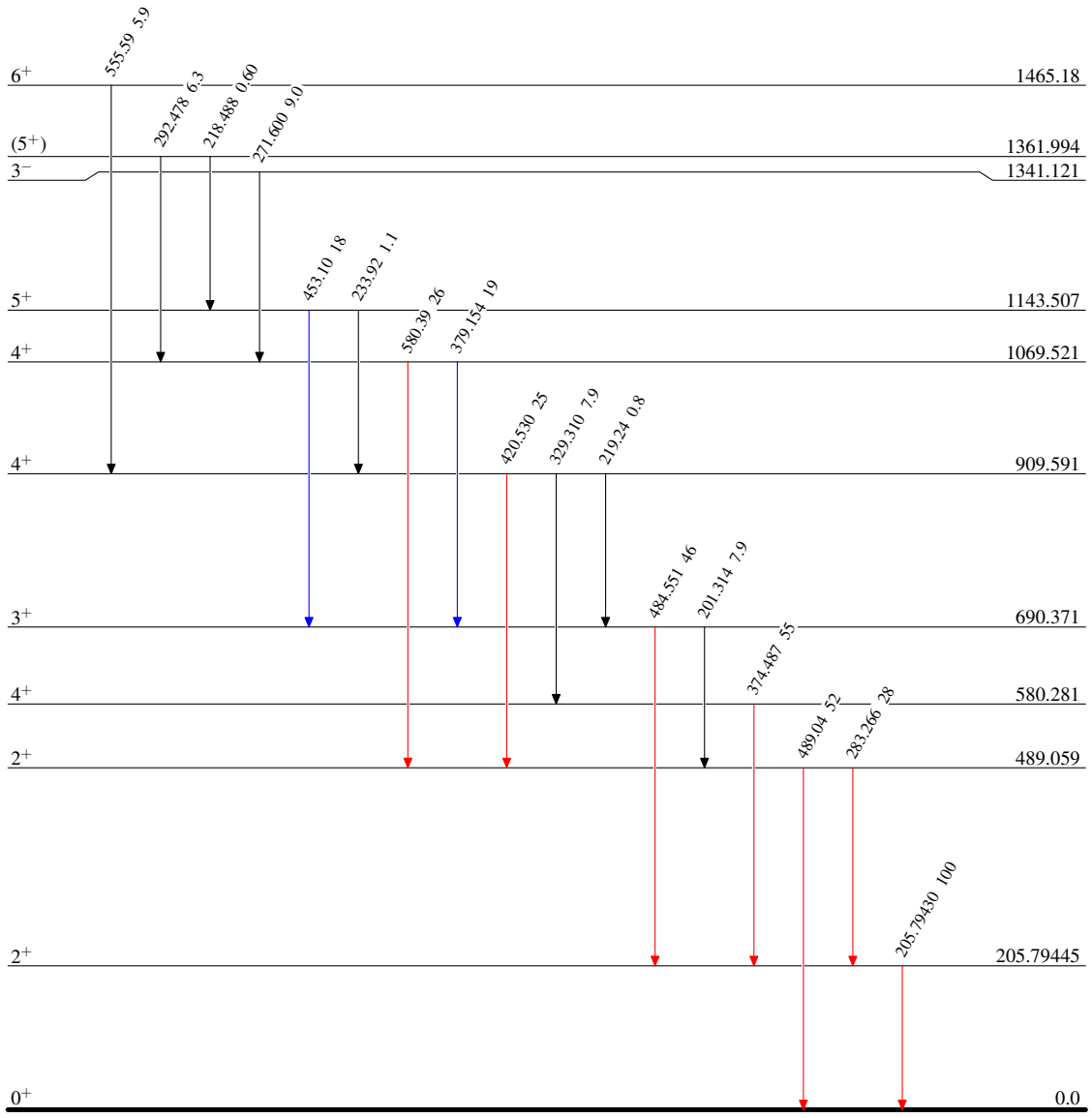
Intensities: Relative I_γ

Legend

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

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

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



$^{192}_{76}Os_{116}$