

$^{188}\text{Os}(\text{n},\text{n}'\gamma)$ 1978AhZX

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley		NDS 150, 1 (2018)	1-Feb-2018

1978AhZX: Fast neutrons from a reactor. Natural osmium target.

Others:

1982Po07: E(n)=0.15 to 1 MeV. Excitation cross section for 155 level.

$^{188}\text{Os}(\text{n},\text{n})$: 1985WiZV (E=25-500 eV), 1983He24 (E=60.5 keV, deduced age of universe), 1983CaZV, 1983CaZQ (E=10-70 keV).

$^{188}\text{Os}(\text{n},\text{n}')$: 1974Be78 (E=4-300 eV, deduced resonances), 1993Li04 E=24.4 keV.

 ^{188}Os Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	0 ⁺	790.05 14	3 ⁺	1279.1 2	4 ⁺
155.05 6	2 ⁺	940.34 11	6 ⁺	1305.4 3	2 ⁺
477.96 8	4 ⁺	966.1 10	4 ⁺	1413.5 10	(3 ⁻)
633.06 7	2 ⁺	1086.6 3	0 ⁺	1457.6 4	2 ⁺
				1462.3 3	2 ⁻

[†] From least-squares fit to E γ 's.

[‡] From Adopted Levels.

 $\gamma(^{188}\text{Os})$

E γ [†]	I γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π	E γ [†]	I γ [†]	E _i (level)	J _i ^π	E _f	J _f ^π
155.02 6	183 30	155.05	2 ⁺	0.0	0 ⁺	672.3 2	5.2 6	1462.3	2 ⁻	790.05	3 ⁺
322.91 5	45 3	477.96	4 ⁺	155.05	2 ⁺	811.0 [‡]	<8 [‡]	966.1	4 ⁺	155.05	2 ⁺
462.38 7	11.3 8	940.34	6 ⁺	477.96	4 ⁺	931.5 3	3.3 7	1086.6	0 ⁺	155.05	2 ⁺
477.99 5	29 2	633.06	2 ⁺	155.05	2 ⁺	1124.0 ^{#@} 2	4.4 6	1279.1	4 ⁺	155.05	2 ⁺
623.4 [‡]	<4 [‡]	1413.5	(3 ⁻)	790.05	3 ⁺	1150.3 3	4.2 6	1305.4	2 ⁺	155.05	2 ⁺
633.14 12	33 4	633.06	2 ⁺	0.0	0 ⁺	1301.6 6	1.1 4	1457.6	2 ⁺	155.05	2 ⁺
635.00 12	38 4	790.05	3 ⁺	155.05	2 ⁺	1458.2 5	2.6 5	1457.6	2 ⁺	0.0	0 ⁺
646.0 2	4.1 6	1279.1	4 ⁺	633.06	2 ⁺						

[†] From 1978AhZX.

[‡] Unresolved from an impurity line.

[#] Not reported in other γ -ray studies, so it is treated as uncertain by the evaluators.

[@] Placement of transition in the level scheme is uncertain.

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Level Scheme

Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - - - γ Decay (Uncertain)

