

$^{189}\text{Os}(\gamma,\gamma)$:Mossbauer

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|-----------------------------|---------|-------------------|------------------------|
| Full Evaluation | T. D. Johnson, Balraj Singh | | NDS 142, 1 (2017) | 15-Apr-2017 |

[1972Wa24](#), [1969Wa02](#): $^{189}\text{Os}(\gamma,\gamma)$, E=36, 69 keV; measured Mossbauer effect in OsO₂, OsP₂. ^{189}Os levels deduced g-ratio, γ -mixing ratio, T_{1/2}. Levels deduced quadrupole moment. See also, [1974Wa05](#), [1970Bo11](#).

[1969Gr10](#): $^{189}\text{Os}(\gamma,\gamma)$, E=69.6, 95.3 keV; measured Mossbauer effect. ^{189}Os level T_{1/2}, μ , γ -mixing. Ge(Li), Si(Li) detectors.

[1968Pe09](#): $^{189}\text{Os}(\gamma,\gamma)$, E=69.6 keV; measured Mossbauer effect. ^{189}Os level T_{1/2}, μ , γ -multipolarity.

 ^{189}Os Levels

| E(level) | T _{1/2} | Comments |
|----------|------------------|---|
| 0.0 | | |
| 36.2 | 0.50 ns 3 | T _{1/2} : from 1969Wa02 . |
| 69.6 | 1.8 ns 2 | T _{1/2} : from 1968Pe09 . Other: >0.95 ns (1967Jh02). |
| 95 | 0.20 ns 8 | T _{1/2} : from 1969Gr10 . The authors indicate that T _{1/2} =0.13 to 0.28 ns. |

 $\gamma(^{189}\text{Os})$

| E _{γ} | E _i (level) | E _f | Mult. | δ | Comments |
|----------------------------------|------------------------|----------------|-------|-----------|---|
| 36.2 | 36.2 | 0.0 | | | |
| 69.6 | 69.6 | 0.0 | M1+E2 | +0.685 25 | Mult., δ : from 1972Wa24 . |

 $^{189}\text{Os}(\gamma,\gamma)$:MossbauerLevel Scheme