

$^{189}\text{Os}(\text{d,p})$ 1974Ya02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, ¹ and Jun Chen ²		NDS 169,1 (2020)	15-Oct-2020

$J^\pi(^{189}\text{Os g.s.})=3/2^-$.

1974Ya02: E=12 MeV deuteron beam was produced from the Florida State University Tandem Van de Graaff accelerator. Target was isotopically enriched ^{189}Os with a thickness of $\approx 10\text{-}20 \mu\text{g}/\text{cm}^2$ on a carbon backing. Reaction products were momentum-analyzed with a broad-range magnetic spectrograph (FWHM=15-20 keV). Measured $\sigma(\theta)$ (45° to 108°). Deduced levels See also [1973ThZM](#) (thesis) from the same group.

 ^{190}Os Levels

<u>E(level)[†]</u>	<u>$d\sigma/d\Omega$ (rel)[‡]</u>	<u>E(level)[†]</u>	<u>$d\sigma/d\Omega$ (rel)[‡]</u>	<u>E(level)[†]</u>	<u>$d\sigma/d\Omega$ (rel)[‡]</u>	<u>E(level)[†]</u>	<u>$d\sigma/d\Omega$ (rel)[‡]</u>
186.7	152	1870 3	38	2258 5	190	2618 7	290
558 2	69	1912 5	119	2298 5	48	2655 7	282
755 3	45	1965 5	120	2330 5	137	2686 7	167
1113 2	88	1994 3	255	2366 6	155	2717 6	147
1202 4	12 [#]	2068 4	120	2417 6	1273	2770 7	78
1435 3	52	2112 3	114	2450 5	348	2812 8	164
1570 3	36	2150 5	160	2476 6	199	2945 10	299
1685 3	123	2180 3	123	2511 6	232	2992 10	179
1826 4	37	2212 3	116	2541 6	183	3045 10	286

[†] Energies are defined relative to 186.7 keV level ([1974Ya02](#)).

[‡] Quoted values are from 65° in [1974Ya02](#). Cross sections at 45° , 75° , 80° , and 108° are also given by [1974Ya02](#).

[#] At 45° ([1974Ya02](#)).