
 $^{146}\text{Nd}(^{35}\text{Cl},6\text{n})$:isomer [2010Wa02](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jin Wu	NDS 206,1 (2025)	29-Oct-2024

[2010Wa02](#): The measurement was performed with $E(^{35}\text{Cl})=210$ MeV from NLHIRFL facility in China, using a He-jet tape transport system. The γ counting was done using x-ray HPGe detectors, one coaxial GMX, one planar and one Segmented Clover. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin, half-lives of ^{175}Ir activity.

 ^{175}Ir Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0	8.8 s 5	$T_{1/2}$: from timing of 105.6 γ of the decay of ^{175}Ir in 2010Wa02 . $T_{1/2}$ was obtained as 13.7 s 8, but after fitting the decay curve with a double exponential, half-life of 8.8 s was obtained for the shorter-lived component. This activity is known from earlier studies with a half-life of 9 s 2.
0+y	33 s 4	$T_{1/2}$: from timing of 399.0 γ from the decay of ^{175}Ir (2010Wa02). The isomer is suggested by 2010Wa02 decay through 399 γ to ^{175}Os . However, the previous decay dataset of ^{175}Ir to ^{175}Os (1992Sc16) didn't report the decay from an isomer.