

$^9\text{Be}(^{208}\text{Pb},\text{X}\gamma)$ [2005Ca02,2007KuZW](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Balraj Singh	NDS 108, 79 (2007)	15-Oct-2006

[2005Ca02](#): Projectile fragmentation of ^{208}Pb beam at 1 GeV/nucleon. Fragment Recoil separator (FRS) used to identify ^{199}Ir nuclide. Measured $E\gamma$, $I\gamma$, and $\gamma\gamma$, $\gamma\gamma(t)$ using four “Clover” type Ge detectors (providing 16 independent Ge crystals). The experimental setup also included two multi-wire proportional counters for position measurements; two scintillation detectors providing time-of-flight and position information; and additional two scintillators and an ionization chamber (MUSIC) for energy loss measurements.

[2007KuZW](#): ^{199}Ir was produced by the in-flight fragmentation of relativistic heavy projectiles. The beam was ^{208}Pb at 1 GeV/A impinging on a ^9Be target. Fragment Recoil Separator (FRS) was used to identify ^{199}Ir residues. The ^{199}Ir nuclei were implanted into an array of four double-sided silicon strip detectors with a surface of 25 cm^2 , 1 mm thickness each. The half-life was deduced from position-time correlations between the implanted fragments and the subsequent β decay.

 ^{199}Ir Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0	6 s +5-4	$T_{1/2}$: From implant- β time differences (2007KuZW).
0+x?	$0.16\text{ }\mu\text{s} +23-8$	$T_{1/2}$: 80-390 ns quoted by 2005Ca02 . The counting statistics did not permit the quantitative determination of decay half-lives. However, the recording time ranges provide constraints on the isomer half-life.

 $\gamma(^{199}\text{Ir})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>
$^x104^\dagger$	
$^x112^\dagger$	
$^x122^\dagger$	
$^x162^\dagger$	

† Delayed γ from figure 16 of [2005Ca02](#).

x γ ray not placed in level scheme.