

$^9\text{Be}(^{208}\text{Pb},\text{X}\gamma)$  2011St21

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 192,1 (2023)	1-Aug-2023

**2011St21:**  $^{200}\text{Ir}$  nuclide produced by in-flight fragmentation of 1 GeV/A  $^{208}\text{Pb}$  beam at the GSI UNILAC and SIS-18 accelerator complex. Target thickness=2.526 g/cm<sup>2</sup>, backed by a 0.223 g/cm<sup>2</sup> thick  $^{93}\text{Nb}$  foil. Fragments identified by the Fragment Separator (FRS), based on time of flight,  $B\rho$  and energy loss. The ions were slowed down in Al degraders and stopped in a plastic catcher. The stopper was surrounded by the RISING  $\gamma$ -ray spectrometer. Measured:  $E\gamma$ ,  $I\gamma$ , delayed  $\gamma$  rays, isomer lifetime. Others (same authors): [2009St16](#), [2008StZY](#).

 $^{200}\text{Ir}$  Levels

E(level) <sup>†</sup>	$J^\pi$	$T_{1/2}$	Comments
0	(2 <sup>-</sup> ,3 <sup>-</sup> )	43 s 6	$J^\pi, T_{1/2}$ : From Adopted Levels.
120.0 5		17.1 ns 12	$T_{1/2}$ : From 120.0 $\gamma$ (t) in <a href="#">2011St21</a> . Experimental isomeric state population ratio=22% 12.
126.6 5		28.5 ns 15	$T_{1/2}$ : From 126.6 $\gamma$ (t) in <a href="#">2011St21</a> . Experimental isomeric state population ratio=3.5% 14.

<sup>†</sup> From  $E\gamma$ .

 $\gamma(^{200}\text{Ir})$ 

$E_\gamma$ <sup>†</sup>	$I_\gamma$ <sup>†</sup>	$E_i(\text{level})$	$E_f$	$J_f^\pi$	Comments
120.0 5	30 2	120.0	0	(2 <sup>-</sup> ,3 <sup>-</sup> )	$E_\gamma$ : Not in coincidence with 126.6 $\gamma$ ( <a href="#">2008StZY</a> ).
126.6 5	100 3	126.6	0	(2 <sup>-</sup> ,3 <sup>-</sup> )	$E_\gamma$ : Not in coincidence with 120.0 $\gamma$ ( <a href="#">2008StZY</a> ).




<sup>†</sup> From [2011St21](#).  $\Delta E_\gamma=0.5$  keV communicated by the authors.

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## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

-   $I_\gamma < 2\% \times I_\gamma^{max}$
-   $I_\gamma < 10\% \times I_\gamma^{max}$
-   $I_\gamma > 10\% \times I_\gamma^{max}$

