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

| Type | Author | History Citation | Literature Cutoff Date |
|---|---|---|---|
| Full Evaluation | F. G. Kondev | NDS 187,355 (2023) | 20-Sep-2022 |

2011St21: $^{201}$Ir nuclide produced by in-flight fragmentation of 1 GeV/A $^{208}$Pb beam at the GSI UNILAC and SIS-18 accelerator complex. Target thickness=2.526 g/cm$^2$, backed by a 0.223 g/cm$^2$ thick $^{93}$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.

### $^{201}$Ir Levels

| E(level) | J$^{\pi}$[†] | T$_{1/2}$[†] | Comments |
|---|---|---|---|
| 0 | (3/2$^+$) | 21 s *5* | |
| 0+x | | 10.5 ns *17* | T$_{1/2}$: From sum of 440,452,681$\gamma$(t) in 2011St21.<br>Experimental isomeric state population ratio ≥3% *2* (2011St21). |

[†] From Adopted Levels, unless otherwise stated.

### $\gamma$($^{201}$Ir)

| E$_\gamma$[†] | I$_\gamma$[†] | E$_i$(level) |
|---|---|---|
| [x]439.6[‡] | 39 *9* | |
| [x]452.0[‡] | 51 *9* | |
| [x]680.9[‡] | 100 *13* | |

[†] From 2011St21.
[‡] observed below the 10.5-ns isomer, but the ordering is unknown.
[x] $\gamma$ ray not placed in level scheme.