

$^9\text{Be}(^{76}\text{Ge}, X\gamma)$ 2008BI05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 111, 2425 (2010)	1-Aug-2009

Additional information 1.

Target is not stated in 2008BI05, ^9Be is assumed by the evaluators.

^{65}Fe produced from fragmentation of E=130 MeV/nucleon ^{76}Ge beam provided at the National Superconducting Cyclotron

Laboratory (NSCL) facility. A1900 fragment separator. The Low-Energy Beam and Ion Trap (LEBIT) at NSCL was used for measuring fragment masses: Penning trap mass spectrometry.

A ($9/2^+$) isomer at 402 keV is reported in this work.

Level scheme is from 2007Lu13, 1998Gr14, and 2006DaZX, except for the 402 keV isomer.

 ^{65}Fe Levels

E(level)	J^π	$T_{1/2}$	Comments
0 [†]	($1/2^-$) [†]	0.81 s 5	$T_{1/2}$: From Adopted Levels. Measured mass excess=-51221.3 keV 33 (2008BI05).
364 [†]	($3/2^+$) [†]	0.43 μs 13	$T_{1/2}$: From Adopted Levels.
397 [†]	($5/2^-$) [†]		
402 5	($9/2^+$)	1.12 ms 15	E(level), J^π , $T_{1/2}$: from 2008BI05. The energy of the isomer is deduced from mass measurements of g.s. and isomer. The half-life is from 2009Pa16. Tentative J^π assignment is from systematics (2008BI05). Measured mass excess=-50819.4 keV 38 (2008BI05).
1174 [‡]	($13/2^+$) [‡]		

[†] Quoted in 2008BI05 (1998Gr14,2006DaZX).

[‡] From 2007Lu13.

 $\gamma(^{65}\text{Fe})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
33 [†]	397	($5/2^-$)	364	($3/2^+$)	E1	Mult.: quoted in 2008BI05 from 2006DaZX.
364 [†]	364	($3/2^+$)	0	($1/2^-$)		
772	1174	($13/2^+$)	402	($9/2^+$)		E_γ : from 2007Lu13.

[†] Quoted in 2008BI05 (1998Gr14,2006DaZX).

${}^9\text{Be}({}^{76}\text{Ge},\text{X}\gamma)$ 2008B105Level Scheme