$$^9\text{Be}(^{18}\text{O},^{12}\text{Be}\gamma) \quad \textbf{2003Sh06,2007Sh34}$$

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu	NP A968, 71 (2017)	1-Jan-2017

2003Sh06: $^9\text{Be}(^{18}\text{O},\text{X})^{12}\text{Be}$ E=100 MeV/nucleon, measured delayed E_γ, I_γ, $\gamma\gamma$-coin. ^{12}Be deduced isomeric state energy, J, π, approximate $T_{1/2}$, decay branching.

2007Sh34: XUNDL dataset compiled by McMaster, 2007.
$^9\text{Be}(^{18}\text{O},\text{X})^{12}\text{Be}$ E=100 MeV/nucleon, measured delayed E_γ, I_γ, $\gamma\gamma$-coin. ^{12}Be deduced isomeric state energy J, π, $T_{1/2}$, decay branching, B(E2), B(E0).

^{12}Be Levels

E(level)	J^π	$T_{1/2}$
0	0^+	
2107	2^+	
2251 *1*	0^+	229 ns *8*

$\gamma(^{12}\text{Be})$

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$I_{(\gamma+ce)}$	Comments
2107	2^+	2107		0	0^+			
2251	0^+	144 *1*	21.5 *18*	2107	2^+	E2		B(E2)↓=7.0×10^{-4} *6* (2007Sh34) B(E2)(W.u.)=4.3 *5* (2007Sh34) list B(E2)=(0.87 *7*)×B(E2)(sp), where B(E2)(sp)=Weisskopf single particle unit for a 0^+ to 2^+ E2 transition.
		2251 *1*		0	0^+	E0	100	Annihilation radiation observed from the e^+e^- pair from E0 transition. E0 matrix element (0^+ to 0^+)=0.87 efm^2 *3* (2007Sh34). This value corresponds to about 0.25 Wilkinson unit (2007Sh34).

<u>^{9}Be(^{18}O,^{12}Beγ)</u>   **2003Sh06,2007Sh34**

<u>Level Scheme</u>

Intensities: Relative photon branching from each level

${}^{12}_{4}$Be${}_{8}$

^{9}**Be(^{18}O,^{12}Beγ)   2003Sh06,2007Sh34**