^{4}**He(^{12}Be,^{12}Be$'\gamma$)**   **2004Sh29,2004Sa32**

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

2002Ma79: ^{4}He(^{12}Be,^{12}Be$'$) E≈60 MeV/nucleon; measured E_γ, I_γ, $\sigma(\theta)$. ^{12}Be deduced levels, J, π.

2004Sa32: ^{4}He(^{12}Be,2^{6}He),(^{12}Be,α^{8}He) E≈60 MeV/nucleon, measured excitation energy spectra, $\sigma(E,\theta)$. ^{12}Be deduced excited states, J, π.

2004Sh24: ^{4}He(^{12}Be,^{12}Be$'$) E=60 MeV/nucleon, analyzed E_γ, $\sigma(E,\theta)$. ^{12}Be deduced excited states features.

2004Sh29: ^{4}He(^{12}Be,^{12}Be$'$) E=50 MeV/nucleon, measured E_γ, I_γ, (particle)γ-coin. ^{12}Be deduced transitions.

^{12}Be Levels

E(level)	J^π	Comments
0	0^+	
2.11×10^3 [†]	2^+	
2.68×10^3 [†]	1^-	
≈10×10^3 [‡]		Decays via $\alpha+^{8}$He.
10.9×10^3 [‡]	0^+	
11.3×10^3 [‡]	2^+	
11.8×10^3 [‡]		Decays via ^{6}He$+^{6}$He.

[†] from (2004Sh24,2004Sh29).
[‡] from (2004Sa32).

$\gamma(^{12}$Be)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
2.11×10^3	2^+	2.11×10^3	100	0	0^+
2.68×10^3	1^-	2.68×10^3	100	0	0^+

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Level Scheme

Intensities: % photon branching from each level

1^-		2680
2^+		2110
0^+		0

2.68×10³ 100

2.11×10³ 100

$^{12}_{4}$Be$_8$

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