^{197}Au(^{33}Si,^{33}Si$'\gamma$)　**2000Pr09**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 112, 1393 (2011)	31-Mar-2011

Beam=^{33}Si, target=^{197}Au.

2000Pr09 (also 2002Gl01): ^{33}Si particles produced by fragmentation of ^{40}Ar beam at 90 MeV/nucleon hitting a ^{9}Be target. The fragments were separated by A1200 fragment separator. The secondary beam of ^{33}Si at 50.5 MeV/nucleon hit a gold target; time-of-flight method. The γ rays measured with an array of NaI(Tl) detectors surrounding the target.

^{33}Si Levels

E(level)	J$^{\pi \dagger}$	Comments
0	3/2$^+$	
1010	1/2$^+$	B(E2)↑=0.00165 *32*
4300	(5/2$^+$)	B(E2)↑=0.0069 *13*

† From Adopted Levels.

γ(^{33}Si)

E$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Comments
1010	1010	1/2$^+$	0	3/2$^+$	σ=4.1 mb *8*.
4300	4300	(5/2$^+$)	0	3/2$^+$	E$_\gamma$: may also be contributed by 4231γ in ^{32}Si. σ=11.6 mb *22*.

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Level Scheme

$^{33}_{14}$Si$_{19}$