

$^{197}\text{Au}(e^+, \gamma), (e^+, e^{+\prime})$ 1983Vi04, 1988Vi04, 1987Ba75

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong, Zhou Chunmei		NDS 104, 283 (2005)	1-Jan-2002

Others: 1987Am01, 1981Ha51.

1983Vi04: E=1.1, 1.2 MeV from annihilation radiation; x-ray identification.

 ^{197}Au Levels

E(level) [†]	J π [‡]
0	3/2 ⁺
77.3 8	1/2 ⁺
278.8 7	5/2 ⁺
409.4 7	11/2 ⁻
1100.2 8	
1220.2 8	

[†] From 1983Vi04.

[‡] From Adopted Levels.

 $\gamma(^{197}\text{Au})$

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	$\alpha^\#$	Comments
77.34	77.3	1/2 ⁺	0	3/2 ⁺			
130.9	409.4	11/2 ⁻	278.8	5/2 ⁺	E3	29.4	$\alpha(\text{K})=1.021$; $\alpha(\text{L})=20.85$; $\alpha(\text{M})=5.72$; $\alpha(\text{N}+..)=1.830$
201.57	278.8	5/2 ⁺	77.3	1/2 ⁺			
279.01	278.8	5/2 ⁺	0	3/2 ⁺	M1	0.420	$\alpha(\text{K})=0.346$; $\alpha(\text{L})=0.0571$; $\alpha(\text{M})=0.01320$; $\alpha(\text{N}+..)=0.00413$
409.4	409.4	11/2 ⁻	0	3/2 ⁺			
691	1100.2		409.4	11/2 ⁻			
811	1220.2		409.4	11/2 ⁻			
1100	1100.2		0	3/2 ⁺			
1220	1220.2		0	3/2 ⁺			

[†] From level energy in scheme (1983Vi04).

[‡] From ce measurements (1988Vi04).

[#] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

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Level Scheme

