Coulomb excitation 1971HoYN

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen[#]	NDS 126, 1 (2015)	31-Mar-2015

1971HoYN: (^{32}S,^{32}S′γ) E=45 MeV. Thick calcium fluoride (enriched in ^{43}Ca) target. Measured γ-ray yields, deduced B(E2) values for 373 and 1678 levels, normalized to measured B(E2) for $5/2^+$, 197 level to $1/2^+$, g.s. in ^{19}F.

^{43}Ca Levels

E(level)[‡]	J$^\pi$[†]	Comments
0	$7/2^-$	
373	$5/2^-$	B(E2)↑=0.0065 *5*
593	$3/2^-$	
1678	$11/2^-$	B(E2)↑=0.0115 *28*

[†] From Adopted Levels.
[‡] Rounded values from Adopted Levels.

γ(^{43}Ca)

E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	δ	Comments
221	593	$3/2^-$	373	$5/2^-$			
373	373	$5/2^-$	0	$7/2^-$	(M1+E2)	0.161 *14*	δ: from B(E2)=0.0086 *7* (1971HoYN) and T$_{1/2}$(373)=34 ps *3*.
593	593	$3/2^-$	0	$7/2^-$			B(E2)=0.0071 *3* (1971HoYN), deduced from known lifetime of 593 level and measured (but not quoted) branching ratio.
1678	1678	$11/2^-$	0	$7/2^-$			B(E2)=0.0077 *19* (1971HoYN).

[†] Rounded values from Adopted Gammas.

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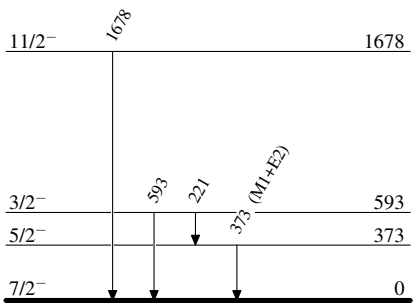
Level Scheme



$^{43}_{20}Ca_{23}$