Coulomb excitation 1963Al31,1988Ku01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	B. Singh, A. Negret, and K. Zuber	NDS 110,2815 (2009)	30-Sep-2009

1963Al31: ^{84}Sr(^{14}N,^{14}N′γ). E=44 MeV. γ detected with NaI(Tl) detectors in coincidence with outgoing ^{14}N (silicone detectors at 135°).

1988Ku01: ^{84}Sr(^{28}Si,^{28}Si′γ),(^{30}Si,^{30}Si′γ) E=90 MeV; ^{84}Sr(^{32}S,^{32}S′γ) E=100 MeV. Measured g-factor using thin-foil transient field method. (particle)γ coin.

^{84}Sr Levels

E(level)	J^{π}[†]	Comments
0	0^+	
793	2^+	g=+0.419 *47* (1988Ku01) B(E2)↑=0.34 *10* (1963Al31) B(E2)↑: a Comparison of measured B(E2) values for ^{84}Sr, ^{86}Sr and ^{88}Sr in 1963Al31 and those deduced from adopted lifetimes shows (see table below) that values in 1963Al31 are consistently too high.

Nuclide	B(E2) (1963Al31)	B(E2) (from adopted $T_{1/2}$).
^{84}Sr	0.34 *10*	0.17 *+6−5*.
^{86}Sr	0.19 *6*	0.12.
^{88}Sr	0.20 *7*	0.09.

[†] From Adopted Levels.

$\gamma(^{84}Sr)$

E_γ	E_i(level)	J_i^π	E_f	J_f^π	Comments
793	793	2^+	0	0^+	E_γ: from 1988Ku01. Other: 800 *15* (1963Al31).

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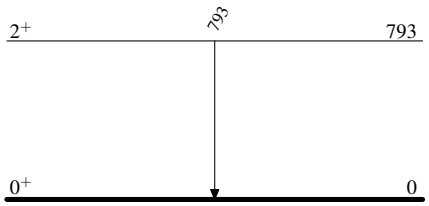
Level Scheme



$^{84}_{38}Sr_{46}$