

$^{31}\text{Ar}$   $\beta^+$  2p decay 1998Ax02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 113, 909 (2012)	1-Jan-2012

Parent:  $^{31}\text{Ar}$ :  $E=0.0$ ;  $J^\pi=5/2^+$ ;  $T_{1/2}=14.4$  ms 6;  $Q(\beta^+2p)=13670$  SY;  $\% \beta^+2p$  decay= $7.2$  II

Others: 2000Fy01, 1999Fy01, 1992Ba01, 1991Bo32.

$^{31}\text{Ar}$  was obtained from 1 GeV protons bombardment on a CaO target at the ISOLDE-PSB facility at CERN; Four detectors (an HPGe, an annular, and two particle telescopes of one  $\Delta E$ -E Si and other gas-E) were used for detecting the decay of  $^{31}\text{Ar}$  and its daughters; Measured proton energy and intensity; summed proton energies. Additional unassigned 2p intensity= $5.1\%$ .

 $^{29}\text{P}$  Levels

E(level)	$J^\pi$	$T_{1/2}$
0	$1/2^+$	4.142 s 15
1383.55 7	$3/2^+$	166 fs 21
1953.91 17	$5/2^+$	277 fs 28

Delayed Protons ( $^{29}\text{P}$ )

E(2p)	E( $^{29}\text{P}$ )	I(p) <sup>†</sup>	E( $^{30}\text{S}$ )
5680 20	1953.91	0.61 11	12313
6230 20	1383.55	0.71 12	12313
7635 25	0	1.26 20	12313

<sup>†</sup> For absolute intensity per 100 decays, multiply by 0.072 II.

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## Decay Scheme

I(p) Intensities: Relative I(p)

