^{23}Si εp decay 1997Bl04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 127, 69(2015)	1-Apr-2015

Parent: ^{23}Si: E=0.0; $J^\pi=(5/2)^+$; $T_{1/2}$=42.3 ms *4*; Q(εp)=16810 *SY*; %εp decay≈71.0

^{23}Si-%εp decay: Deduced by evaluator from Σ I_p.

Other reference: 1997Cz02.

1997Bl04,1997Cz02: ^{23}Si was produced by ^{58}Ni(^{36}Ar,x), E(^{36}Ar)=95 MeV/nucleon, TOF mass identification, Si particle telescope. Measured E_p, I_p.

^{22}Mg Levels

E(level)†	J^π†	$T_{1/2}$†
0.0	0^+	3.8755 s *12*
1246.3 *6*	2^+	2.0 ps *8*

† From Adopted Levels.

Delayed Protons (^{22}Mg)

E(p)†	E(^{22}Mg)	I(p)‡	E(^{23}Al)
1320 *40*	0.0	10 *1*	1450
2400 *40*	1246.3	32 *2*	3770
2830 *60*	1246.3	14 *1*	4200
3040 *60*	0.0	8 *1*	3170
3650 *60*	0.0	7.2 *6*	3770
10410 *70*	1246.3		11780
11.62×10^3 *10*	0.0		11780

† Corrected for recoil by evaluator (2005Fi16).

‡ Absolute intensity per 100 decays.

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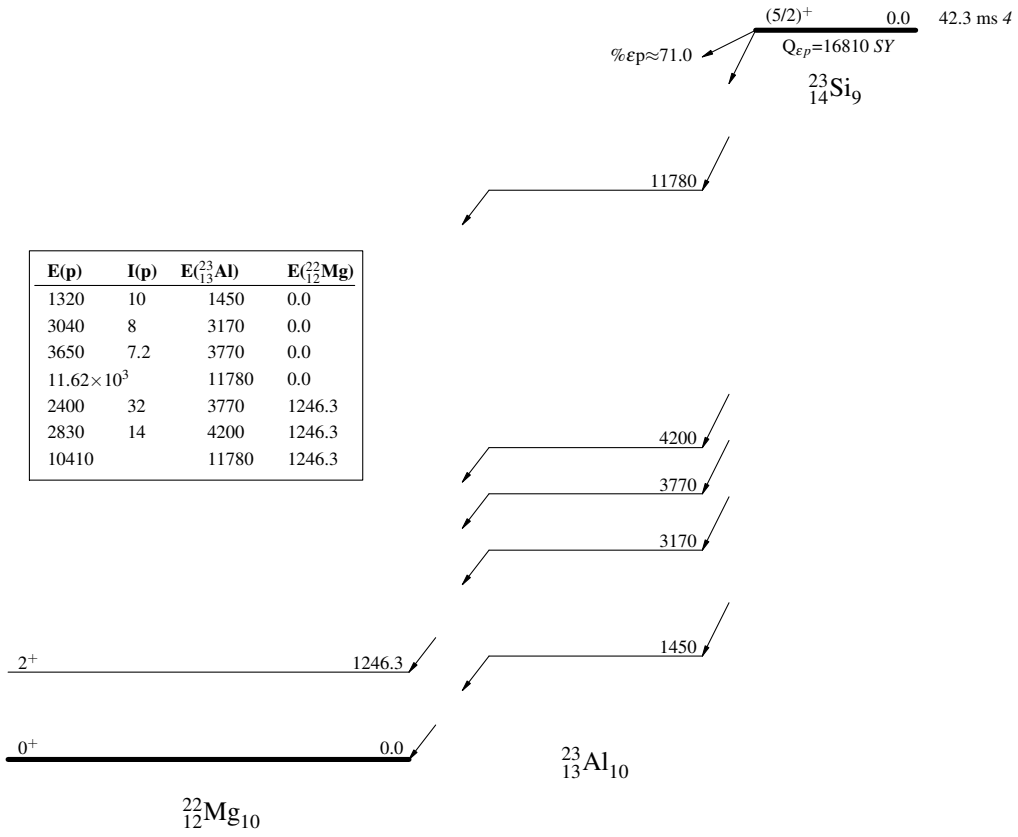
Decay Scheme

I(p) Intensities: I(p) per 100 parent decays



E(p)	I(p)	E($^{23}_{13}$Al)	E($^{22}_{12}$Mg)
1320	10	1450	0.0
3040	8	3170	0.0
3650	7.2	3770	0.0
11.62×10^3		11780	0.0
2400	32	3770	1246.3
2830	14	4200	1246.3
10410		11780	1246.3