^{32}Cl $\beta^+\alpha$ decay 1979Ho27

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 114, 1189 (2013)	1-Apr-2013

Parent: ^{32}Cl: E=0; $J^\pi=1^+$; $T_{1/2}$=298 ms *1*; Q($\beta^+\alpha$)=5733 *1*; %$\beta^+\alpha$ decay=0.054 *8*

1979Ho27: ^{32}Cl obtained from ^{32}S(p,n)^{32}Cl, E=20 MeV, natural target of ^{32}S; three Si(Au) surface barrier detector; measured E_α, I_α.

^{28}Si Levels

E(level)
0.0

Delayed Alphas (^{28}Si)

E(α)	E(^{28}Si)	I(α)†	E(^{32}S)	E(α)	E(^{28}Si)	I(α)†	E(^{32}S)
1526 *5*	0.0	0.0011 *2*	8690	2927 *5*	0.0	0.0017 *3*	10293.3
1673 *5*	0.0	0.0146 *20*	8861	3072 *5*	0.0	0.00024 *10*	10457
1998 *5*	0.0	0.0002 *1*	9236	3135 *5*	0.0	0.00084 *20*	10528
2201 *5*	0.0	0.030 *4*	9463.9	3364 *5*	0.0	0.00051 *10*	10792.7
2417 *5*	0.0	0.0040 *7*	9711.5	3601 *5*	0.0	0.00006 *3*	11064
2656 *5*	0.0	0.00069 *20*	9983.2				

† Absolute intensity per 100 decays.

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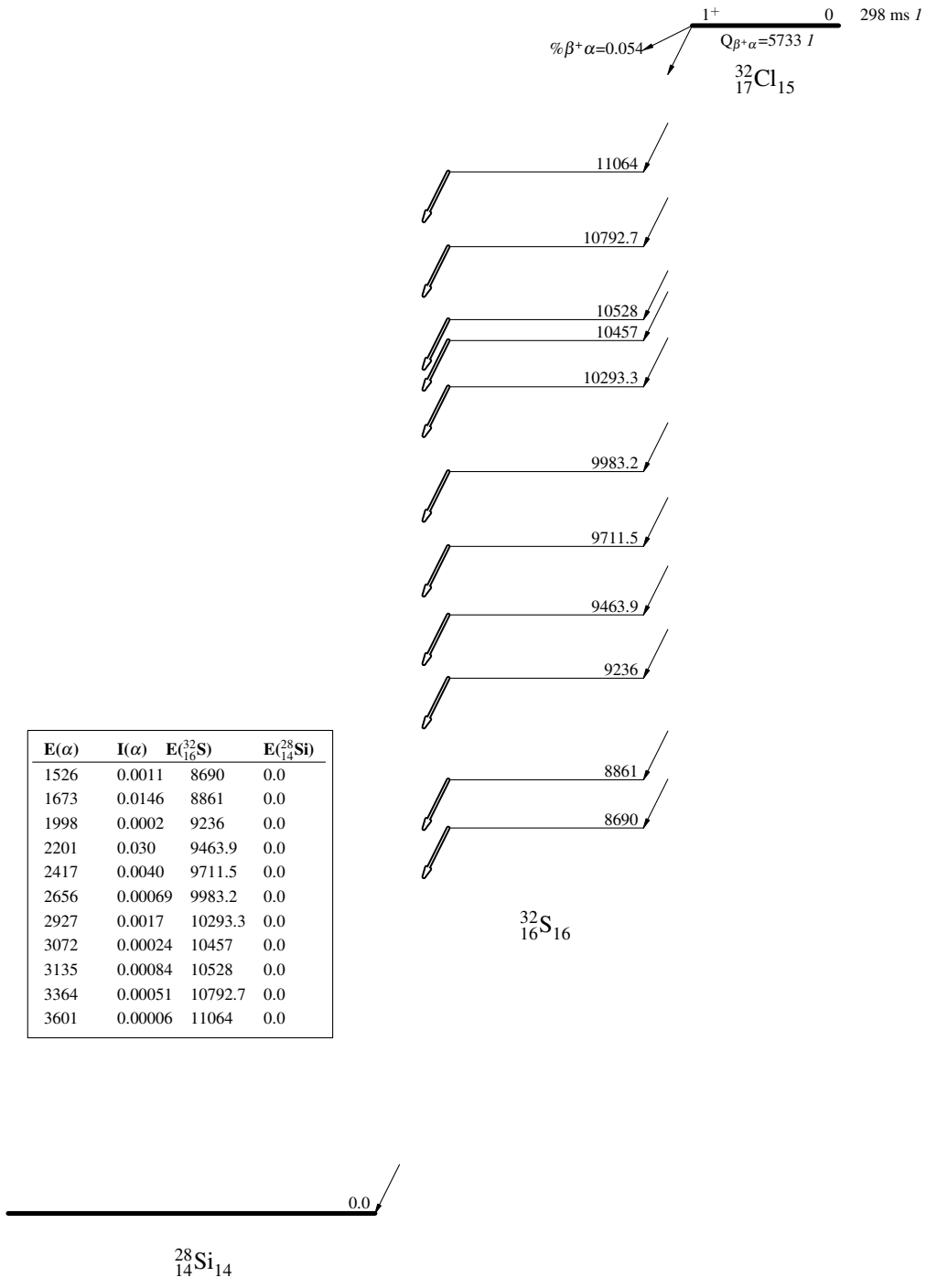
Decay Scheme

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



E(α)	I(α)	E($^{32}_{16}$S)	E($^{28}_{14}$Si)
1526	0.0011	8690	0.0
1673	0.0146	8861	0.0
1998	0.0002	9236	0.0
2201	0.030	9463.9	0.0
2417	0.0040	9711.5	0.0
2656	0.00069	9983.2	0.0
2927	0.0017	10293.3	0.0
3072	0.00024	10457	0.0
3135	0.00084	10528	0.0
3364	0.00051	10792.7	0.0
3601	0.00006	11064	0.0