Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

Q(β^-)=8.30×10^3 *7*; S(n)=4242 *6*; S(p)=1.822×10^4 *11*; Q(α)=−1.484×10^4 *8* 2012Wa38
S(2n)=1.199×10^4 *50*; S(2p)=3.591×10^4 *90*; Q(β^-n)=4.8×10^2 *30* (2012Wa38).

^{41}S Levels

Cross Reference (XREF) Flags

A ^{41}P β^- decay (101 ms)
B Coulomb excitation
C ^{208}Pb(^{36}S,Xγ)

E(level)†	$T_{1/2}$	XREF	Comments
0.0	1.99 s *5*	BC	%β^-=100; %β^-n=? $T_{1/2}$: from 1998WiZV. Other: 2.6 s *14* (1995ReZZ). J$^\pi$: (7/2$^-$) predicted by particle-rotor model calculations (1999Ib01), (5/2$^-$) predicted by shell model calculations (2011Wa13).
449 *2*		BC	B(E2)↑=0.0167 *65* (1999Ib01) J$^\pi$: (5/2$^-$) predicted by particle-rotor model calculations (1999Ib01), (7/2$^-$) predicted by shell model calculations (2011Wa13). B(E2)↑: assigned as E2 transition by 1999Ib01 based on systematics of transition strengths in this mass region; E1 transition cannot be ruled out.
904 *16*		B	B(E2)↑=0.0232 *56* (1999Ib01) J$^\pi$: (9/2$^-$) proposed in 1999Ib01 based on particle-rotor model calculations. B(E2)↑: assigned as E2 transition by 1999Ib01 based on systematics of transition strengths in this mass region; E1 transition cannot be ruled out.
1087? *3*		C	J$^\pi$: (11/2$^-$) proposed by 2011Wa13 based on population characteristics of multi-nucleon transfer reactions.

† From Eγ.

γ(^{41}S)

E$_i$(level)	E$_\gamma$†	E$_f$	Comments
449	449 *2*	0.0	
904	904 *16*	0.0	Eγ: from Coulomb Excitation. A 903.5γ is reported in ^{41}P β^- decay (1998WiZV).
1087?	638‡ *2*	449	Eγ: placed as yrast transition feeding the 449-keV level, however, possibility that transition feeds the ground state cannot be ruled out.

† From ^{208}Pb(^{36}S,Xγ), except where noted.
‡ Placement of transition in the level scheme is uncertain.

Legend

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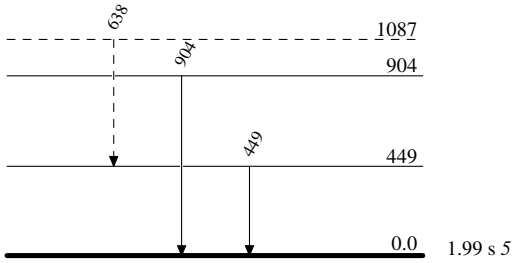
Level Scheme

γ Decay (Uncertain)



$^{41}_{16}S_{25}$