Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Alan L. Nichols, Balraj Singh, Jagdish K. Tuli	NDS 113,973 (2012)	15-Apr-2012

Q(β^-)=−1.73×10^4 *syst*; S(n)=1.62×10^4 *syst*; S(p)=2.05×10^3 *syst*; Q(α)=−2.03×10^3 *syst* 2012Wa38

Note: Current evaluation has used the following Q record −17475 syst 16590 syst 2440 syst −2370 syst 2011AuZZ,2003Au03.

ΔQ(β^-)=329, ΔS(n)=330, ΔS(p)=ΔQ(α)=150 (syst,2011AuZZ,2003Au03).

Q(εp)=6810 *140* (syst,2011AuZZ,2003Au03). S(2n)=30776 *240*, S(2p)=2647 *140* (syst,2011AuZZ). 2003Au03 list S(2n)=30620 *270*, S(2p)=2630 *140* from syst.

1991Mo10: ^{62}Ge first identified in fragmentation of ^{78}Kr beam at 65 MeV/nucleon using A1200 spectrometer at NSCL, MSU. Isotopic identification by time-of-flight and energy loss methods.

2002Lo13 (Also 2002Bl17): ^{62}Ge observed in fragmentation of ^{78}Kr beam at 73 MeV/nucleon using LISE3 spectrometer at GANIL facility. Isotopic identification by time-of-flight and energy loss methods. Measured isotopic half-life by decay timing of correlated β^+ (ion implant) events and energy loss vs time-of-flight.

2005St29 (also 2005St34): ^{62}Ge observed in fragmentation of ^{78}Kr beam at 140 MeV/nucleon with a Be target using A1900 spectrometer at NSCL, MSU. Measured cross section=4.8 nb *20*.

2007Bl09: ^{62}Ge observed in fragmentation of ^{70}Ge beam at 71.6 MeV/nucleon with a Ni target using LISE3 spectrometer at GANIL facility.

Structure calculations:

1988Do08: calculated deformation energy vs quadrupole moment, Hartree-Fock method and Skyrme force.

^{62}Ge Levels

Cross Reference (XREF) Flags

A ^{24}Mg(^{40}Ca,2nγ)

E(level)	J$^\pi$	T$_{1/2}$	XREF	Comments
0	0$^+$	129 ms *35*	A	%ε+%β^+=100; %εp=? T$_{1/2}$: from decay curves of (β)(ion implant) correlations (2002Lo13,2002Bl17).
964?	†		A	
2285?	†		A	

† In comparison to low-lying structures in ^{62}Zn and ^{62}Ga, the 964- and 2285-keV levels may be assigned 2$^+$ and 4$^+$, respectively. However as pointed out by 2005Ru06, much better statistics are needed to make definitive assignments.

γ(^{62}Ge)

E$_i$(level)	E$_\gamma$	E$_f$	J$^\pi_f$
964?	964†	0	0$^+$
2285?	1321†	964?	

† Placement of transition in the level scheme is uncertain.

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Level Scheme