Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	31-May-2015

Q(β^-)=11260 *SY*; S(n)=4250 *SY*; S(p)=18380 *CA*; Q(α)=−12230 *CA* 2012Wa38,1997Mo25
Estimated uncertainties (2012Wa38): 780 for Q(β^-) and S(n). Q(β^-) and S(n) from 2012Wa38. S(p) and Q(α) from 1997Mo25.
S(2n)=6830 *670*, Q(β^-n)=7960 *780* (syst,2012Wa38). S(2p)=34550 (theory,1997Mo25).
2010Oh02: ^{106}Sr nuclide identified in Be(^{238}U,F) and Pb(^{238}U,F) reactions with a $^{238}U^{86+}$ beam energy of 345 MeV/nucleon produced by the cascade operation of the RBIF accelerator complex of the linear accelerator RILAC and four cyclotrons RRC, fRC, IRC and SRC. Identification of ^{106}Sr nuclei was made on the basis of magnetic rigidity, time-of-flight and energy loss of the fragments using BigRIPS fragment separator. Experiments performed at RIKEN facility. Based on A/Q spectrum and Z versus A/Q plot, 22 counts were assigned to ^{106}Sr isotope. (Q=charge state).
2015Lo04: ^{106}Sr nuclide produced at RIBF-RIKEN facility in ^{9}Be(^{238}U,F) reaction at E=345 MeV/nucleon with an average intensity of 6×10^{10} ions/s. Identification of ^{106}Sr was made by determining atomic Z and mass-to-charge ratio A/Q, where Q=charge state of the ions. The selectivity of ions was based on magnetic rigidity, time-of-flight and energy loss. The separated nuclei were implanted at a rate of 50 ions/s in a stack of eight double-sided silicon-strip detector (WAS3ABi), surrounded by EURICA array of 84 HPGe detectors. Correlations were recorded between the implanted ions and β rays. The half-life of ^{106}Sr isotope was measured from the correlated ion-β decay curves and maximum likelihood analysis technique as described in 2014Xu07. Comparison of measured half-lives with FRDM+QRPA, KTUY+GT2 and DF3+CQRPA theoretical calculations.
Theoretical calculations:
2014Mi23: calculated β-delayed-neutron emission probabilities.
2009Ch42: calculated yrast spectra, B(E2), quadrupole deformation.
Additional information 1.

^{106}Sr Levels

E(level)	J$^\pi$	T$_{1/2}$	Comments
0	0$^+$	20 ms +8−7	%β^-=100; %β^-n=?; %β^-2n=? Theoretical %β^-n=11.1, %β^-2n=0.03 (1997Mo25). Measured σ=15 pb (2010Oh02), systematic uncertainty≈40%. Probability of misidentification of ^{106}Sr isotope<0.001% (2010Oh02). T$_{1/2}$: measured by 2015Lo04 from (implanted ions)β correlated curves in time and position using maximum likelihood method. See 2015Lo04 for comparison of their experimental value with several theoretical calculations.