Adopted Levels

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	18-March-2022

S(n)=18150 *SY*; S(p)=390 *SY*; Q(α)=−1130 *SY* 2021Wa16

Estimated uncertainties (2021Wa16): 660 for S(n), 580 for S(p), 660 for Q(α) (2021Wa16).

Q(ε)=13170 *560*, Q(εp)=13670 *510*, S(2p)=−1460 *540* (syst, 2021Wa16). S(2n)=33110 (theory,2019Mo01).

2016Bl05, 2020Gi02 (also 2017GoZT): ^{68}Kr produced and identified at RIBF-RIKEN facility in ^{9}Be(^{78}Kr,X) reaction at E=345 MeV/nucleon with beam intensity of up to 250 pnA. Identification of ^{68}Kr 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 using BigRIPS separator and zero degree spectrometer ZDS. The separated nuclei were implanted in a wide range silicon-strip stopper array for ion and β particle detection WAS3ABi, consisting of three highly-segmented 1 mm thick double-sided silicon detectors, a stack of ten segmented 1 mm thick single-sided silicon strip detectors. The γ rays were detected by EURICA array of 84 HPGe detectors surrounding the WAS3ABi system. A total of 348 nuclei of ^{68}Kr were identified at the BigRIPS spectrometer, 82 at the Zero-Degree Spectrometer (ZDS), and finally 36 implanted at the WAS3ABi detection system. 2019Go34 also mentions production of ^{68}Kr.

Theoretical structure calculations: 12 primary references retrieved from the NSR database are listed in document records in this dataset.

Additional information 1.

^{68}Kr Levels

E(level)	J$^{\pi}$	T$_{1/2}$	Comments
0	0^{+}	21.6 ms *33*	%ε+%β^{+}=100; %εp=89 *11* (2020Gi02) A total of 479 events were assigned in 2016Bl05 (also 2020Gi02) to ^{68}Kr. Production σ=33 fb *21* (2016Bl05) in ^{9}Be(^{78}Kr,X), E=345 MeV/nucleon. T$_{1/2}$: measured by 2020Gi02 (also 2017GoZT thesis) from correlated decay curve for ^{68}Kr implants and subsequent decays.