

$^1\text{H}(^{101}\text{Rb},2\text{p}\gamma)$ 2017FI03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 172, 1 (2021)	31-Jan-2021

2017FI03: ^{101}Rb beam of ≈ 220 MeV/nucleon produced in $^9\text{Be}(^{238}\text{U},\text{f})$ reaction at $E=345$ MeV/nucleon at RIBF-RIKEN complex using 3-mm thick ^9Be target. Reaction target=99 mm l thick, with a density of 73.22 kg/m^3 and cooled to 20 K. Identification of projectiles and reaction residues was made through the determination of atomic number Z and A/Q (mass/charge) ratio by tof- $B\rho$ - ΔE method using the BigRIPS and ZeroDegree spectrometers. Measured proton spectra using MINOS time-projection chamber and Doppler corrected γ -ray spectra using DALI2 array of 186 NaI(Tl) detectors. Deduced level, J^π . Comparison with beyond mean-field calculations using Gogny-D1S interaction with five-dimensional Hamiltonian (5DCH), and symmetry-conserving configuration mixing method (SCCM).

 ^{100}Kr Levels

<u>E(level)</u>	<u>J^π</u>	<u>Comments</u>
0	0^+	
309 10	2^+	J^π : from 2017FI03.

 $\gamma(^{100}\text{Kr})$

$I_\gamma(\text{for } \gamma \text{ from unobserved } (0^+, 2^+) \text{ level})/I_\gamma(329) < 0.40$ (2017FI03).

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
309 10	309	2^+	0	0^+

 $^1\text{H}(^{101}\text{Rb},2\text{p}\gamma)$ 2017FI03Level Scheme