^{81}Br(p,n) 1987Kr10

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 199,271 (2025)	1-Sep-2024

J^{π}(target)=3/2$^-$.

E(p)=120 MeV, 200 MeV; 97.81% ^{81}Br target, tof, NE102 scin, θ(lab)=0°−5°, FWHM=220-370 keV at 120 MeV and 730 keV at 200 MeV; measured n spectrum and forward angle $\sigma(\theta)$; deduced GT strength distribution for ^{81}Kr excitation energy =0-17 MeV.

Centroid of GT strength observed at ≈13 MeV. Summed GT strength ΣB(GT) for excitation energy ≤17 MeV is 18.5 *26*, 56% *8* of sum rule.

^{81}Kr Levels

E(level)	J^{π}[†]	L	Comments
190	1/2$^-$		B(GT)=0.038 *11*.
457	5/2$^-$		B(GT)=0.017 *7*.
9.70×10^3 *10*	3/2$^-$	0	L: based on sharp forward peak $\sigma(\theta)$. J^{π}: analog of 3/2$^-$ ^{81}Br g.s.; based on L, Γ and excitation strength in high energy (p,n) reaction.

[†] From Adopted Levels.