

Coulomb excitation [2011A125,2012Ku24,2013A110](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	H. Iimura, J. Katakura, S. Ohya		NDS 180, 1 (2022)	1-Oct-2021

[2011A125](#): E=3 MeV/nucleon ^{126}Sn beam from HRIBF, targets= natural ^{12}C and ^{50}Ti (90.5% enriched) targets. Measured E_γ , particle- γ coin. by 11 HpGe γ -rays detectors and array of CsI crystals particle detectors. Deduced quadrupole moments, B(E2) values.

[2012Ku24](#): 378-MeV beam= ^{126}Sn from HRIBF, target= ^{12}C , 1.0 mg/cm² thick. Measured E_γ , particle- γ coin, by four Clover Ge detectors and an array of three solar cells particle detectors. Measured level life time by Doppler shift attenuation method (DSAM) and g factor by transient-field method.

[2013A110](#): Beam= ^{126}Sn , ≈ 3 MeV/nucleon from HRIBF. Target=C and Ti. Measured (Particle) $\gamma(\theta)$. deduced g factor of first 2⁺ state by recoil-in-vacuum technique.

 ^{126}Sn Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0	0 ⁺		
1141	2 ⁺	1.04 ps <i>14</i>	$\mu = -0.24$ 6; B(E2) $\uparrow = 0.127$ 8 μ : from g factor=0.12 3 (2013A110), Sign from g factor=-0.25 21 (2012Ku24). B(E2) \uparrow : from 2011A125 . $T_{1/2}$: from DSAM (2012Ku24). Q=+0.08 11 without including high-lying states; -0.02 11 (positive interference term) and +0.01 11 (negative interference term) with high-lying states included (2011A125).

[†] From Adopted Levels.

 $\gamma(^{126}\text{Sn})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1141	1141	2 ⁺	0	0 ⁺

Coulomb excitation 2011Al25,2012Ku24,2013Al10

Level Scheme

