^{128}Te(p,p),(p,p′) IAR 1970Bu01,1968Fo08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Janos Timar and Zoltan Elekes, Balraj Singh	NDS 121, 143 (2014)	31-May-2014

1970Bu01; E=7.66-11.87 MeV; Ge, enriched target. θ=90°, 125°, 160°.
1968Fo08; E=7.7-10.9 MeV; Ge, enriched target. θ=90.5°, 120.4°, 150.2°, 170.1°.
1967Jo08; E=7.7-8.3 MeV; enriched target. Measured polarization.

^{129}I Levels

E(level)[†‡]	J$^\pi$	L	S	Comments
14670 *20*	3/2$^+$,5/2$^+$	2	0.23	E(level): IAR of g.s. 3/2$^+$ in ^{129}Te. Γ(total)=40 keV *2*, Γ(p)=4.0 keV *3*. J$^\pi$: from L=2.
14858 *20*	1/2$^+$	0	0.15	E(level): IAR of 181-keV 1/2$^+$ state in ^{129}Te. Γ(total)=42 keV *3*, Γ(p)=7.4 keV *1*. J$^\pi$: from L=0.
15647 *20*	3/2$^+$,5/2$^+$	2	0.045	E(level): IAR of 967-keV 5/2$^+$ state in ^{129}Te. Γ(total)=64 keV *20*, Γ(p)=1.5 keV *5*. J$^\pi$: from L=2.
15973 *20*	3/2$^+$,5/2$^+$	2	0.11	E(level): IAR of 1318-keV 5/2$^+$ state in ^{129}Te. Γ(total)=60 keV *15*. J$^\pi$: from L=2.
16763 *20*	5/2$^-$,7/2$^-$	3	0.11	E(level): IAR of 2108-keV 5/2$^-$, 7/2$^-$ state in ^{129}Te. Γ(total)=50 keV *5*, Γ(p)=3.6 keV *5*. J$^\pi$: from L=3.
16873 *20*	5/2$^-$,7/2$^-$	3	0.11	E(level): IAR of 2221-keV 5/2$^-$, 7/2$^-$ state in ^{129}Te. Γ(total)=47 keV *5*, Γ(p)=3.9 keV *6*. J$^\pi$: from L=3.
16915 *25*	1/2$^-$,3/2$^-$	1	0.02	E(level): IAR of 2261 keV *1*/2$^-$, 3/2$^-$ state in ^{129}Te. Γ(total)=30 keV, Γ(p)=1.0 keV. J$^\pi$: from L=1.
17002 *20*	1/2$^-$,3/2$^-$	1	0.11	E(level): IAR of 2361-keV 1/2$^-$, 3/2$^-$ state in ^{129}Te. Γ(total)=95 keV *10*, Γ(p)=10 keV *15*. J$^\pi$: from L=1.
17348 *20*	1/2$^-$,3/2$^-$	1	0.043	E(level): IAR of 2705-keV 1/2$^-$, 3/2$^-$ state in ^{129}Te. Γ(total)=88 keV *10*, Γ(p)=4.3 keV *7*. J$^\pi$: from L=1.
17626 *20*	(5/2$^-$,7/2$^-$)	(3)	0.020	E(level): IAR of 2975-keV, 5/2$^-$,7/2$^-$ state in ^{129}Te. Γ(total)=35 keV *10*, Γ(p)=1.0 keV *4*. J$^\pi$: from L=(3).
18413 *20*	1/2$^-$,3/2$^-$	1		E(level): IAR of 3793-keV 1/2$^-$, 3/2$^-$ state in ^{129}Te. J$^\pi$: from L=1.

† From 1970Bu01; S(p)(6802 *3*)+E(p)(c.m.); S(p) from 2012Wa38.
‡ Coulomb displacement energy=13.949 MeV.