

<sup>128</sup>Te(n,γ),(n,n):resonances **2006MuZX**

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

Measurements:

1973Br29: E=0.5-7000 eV; measured  $\sigma(E)$ , deduced resonances, level-widths.

All data are from 2006MuZX evaluation.

<sup>129</sup>Te Levels

E(level) <sup>†</sup>	J <sup>π</sup>	L	$g\Gamma_n\Gamma_\gamma/\Gamma$ (eV)	Comments
S(n)-0.162?	1/2 <sup>+</sup>	0		$\Gamma_\gamma=(0.0325)$ eV.
S(n)+0.3481 5		[1]	0.00024 10	$g\Gamma_n=0.00024$ eV 10, $\Gamma_\gamma=0.15$ eV 10.
S(n)+0.4240 5	1/2	[0]	0.020 4	$g\Gamma_n=0.0610$ eV 25, $\Gamma_\gamma=0.029$ eV 10.
S(n)+0.4355 5	1/2 <sup>-</sup>	1	0.0126 25	$g\Gamma_n=0.01850$ eV 25, $\Gamma_\gamma=0.158$ eV 20.
S(n)+0.9410 5	1/2 <sup>-</sup>	1	0.0104 21	$g\Gamma_n=0.0147$ eV 2, $\Gamma_\gamma=0.19$ eV 6.
S(n)+1.3205 5		[1]	0.0079 16	$g\Gamma_n=0.0102$ eV 21.
S(n)+1.459 1		[0]	0.032 6	$g\Gamma_n=0.115$ eV 5, $\Gamma_\gamma=0.044$ eV 9.
S(n)+1.583 1		[1]	0.0085 17	$g\Gamma_n=0.0105$ eV 10.
S(n)+1.837 1		[0]	0.035 7	$g\Gamma_n=0.725$ eV 25, $\Gamma_\gamma=0.037$ eV 7.
S(n)+2.971 3		[0]	0.030 6	$g\Gamma_n=2.10$ eV 12, $\Gamma_\gamma=0.030$ eV 6.
S(n)+3.265 3	[3/2]	[1]	0.067 12	$g\Gamma_n=0.095$ eV 15, $\Gamma_\gamma=0.105$ eV.
S(n)+3.544 3		[1]	0.038 8	$g\Gamma_n=0.021$ eV 7.
S(n)+4.080 4		[1]	0.034 7	$g\Gamma_n=0.025$ eV 10.
S(n)+5.330 5		[1]	0.24 10	$g\Gamma_n=0.540$ eV 50.
S(n)+6.108 1	[3/2]	[1]	0.055 22	$g\Gamma_n=0.213$ eV 3, $\Gamma_\gamma=0.037$ eV 15.
S(n)+7.076 7	[1/2]	[1]	0.055 22	$g\Gamma_n=0.89$ eV 10, $\Gamma_\gamma=0.034$ eV 16.
S(n)+7.936 8		[1]		$g\Gamma_n=0.140$ eV.
S(n)+10.012 10		[1]		$g\Gamma_n=0.86$ eV 8.
S(n)+10.355 10		[1]		$g\Gamma_n=0.100$ eV.
S(n)+10.656 10		[0]		$g\Gamma_n=7.45$ eV 13.
S(n)+10.830 11		[1]		$g\Gamma_n=2.0$ eV 1.
S(n)+11.495 15		[0]		$g\Gamma_n=12.40$ eV 13.
S(n)+12.098 15		[1]		$g\Gamma_n=0.300$ eV.
S(n)+12.828 15		[1]		$g\Gamma_n=0.500$ eV.
S(n)+12.893 15		[0]		$g\Gamma_n=4.98$ eV 25.
S(n)+12.960 20		[1]		$g\Gamma_n=0.250$ eV.
S(n)+13.080 20		[1]		$g\Gamma_n=1.36$ eV 13.
S(n)+14.600 20		[1]		$g\Gamma_n=3.2$ eV 3.
S(n)+15.330 20		[1]		$g\Gamma_n=0.500$ eV.
S(n)+16.340 20		[1]		$g\Gamma_n=0.700$ eV.
S(n)+17.010 20		[1]		$g\Gamma_n=4.1$ eV 4.
S(n)+17.520 20		[1]		$g\Gamma_n=2.8$ eV 3.
S(n)+17.990 25		[1]		$g\Gamma_n=1.69$ eV 25.
S(n)+18.900 25		[1]		$g\Gamma_n=1.000$ eV.
S(n)+19.420 25		[1]		$g\Gamma_n=3.5$ eV 4.
S(n)+19.700 25		[1]		$g\Gamma_n=0.500$ eV.
S(n)+20.220 25		[1]		$g\Gamma_n=0.500$ eV.
S(n)+21.025 25		[1]		$g\Gamma_n=0.500$ eV.
S(n)+21.820 25		[0]		$g\Gamma_n=14.2$ eV 5.

<sup>†</sup> S(n)(<sup>129</sup>Te)=6082.41 8 (2012Wa38). Excitation energies are from 6082.25 to 6104.06 keV.