

$^{122}\text{Te}(n,n'\gamma)$ E=fast **1990BeYR,1990Be50,1991De27**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

See also $^{122}\text{Te}(n,n'\gamma)$ E=1.7,2.8,3.4 MeV.

1990BeYR: Measured: E_γ , I_γ , $I_\gamma(\theta)$, $\theta=90^\circ$, 105° , 120° , 135° , 150° ; $\gamma\gamma$ -coin, linear polarization; Deduced mult., δ , J^π .

1990Be50: E(level \leq 2756 keV) and J^π comparison among $^{122-130}\text{Te}$ isotopes.

1991De27: E(level \leq 3 MeV) and J^π comparison among $^{106-116}\text{Cd}$, $^{114-124}\text{Sn}$ and $^{122-130}\text{Te}$.

 ^{122}Te Levels

E(level) [†]	J^π &	E(level) [†]	J^π &	E(level) [†]	J^π &	E(level) [†]	J^π &
0.0	0 ⁺	2499.47 [‡] 8	(0 ⁺)	2778.13 [‡] 11	1,2,3	3052.5 3	0 ⁺ ,1,2
564.09 3	2 ⁺	2508.66 7	(2 ⁺)	2789.18 12		3061.7 [‡] 3	1 ⁺ ,2 ⁺
1181.27 4	4 ⁺	2535.75 [‡] 8	3,4,5	2796.60 [‡] 12	1,2,3	3070.91 [‡] 8	3,4,5 ⁻
1256.94 3	2 ⁺	2539.00 [‡] 7		2800.60 14	7 ⁻	3075.12 [‡] 15	1,2 ⁺
1357.39 5	0 ⁺	2557.84 [‡] 8	1,2,3	2801.57 [‡] 10	(2,3)	3083.8 [‡] 3	
1747.06 [‡] 4	0 ⁺	2560.73 ^{‡#} 7	+	2809.75 [‡] 11	3,4 ⁺	3086.56 15	
1751.34 6	6 ⁺	2592.32 8	1	2839.80 [‡] 11	3 ⁺	3093.83 [‡] 16	2 ⁺
1752.57 4	2 ⁺	2593.61 7	2 ⁺	2860.56 [‡] 10	4,5	3113.32 [‡] 21	2,3
1909.65 4	4 ⁺	2600.96 7	3 ⁺	2885.58 [‡] 8	1 ⁺ ,2 ⁺ ,3 ⁺	3132.4 [‡] 5	(2 ⁺ ,3 ⁺ ,4 ⁺)
1940.58 5	0 ⁺	2603.77 [‡] 15	3,4,5	2911.26 14	1 ⁺ ,2 ⁺	3139.6 [‡] 3	
1952.02 5	3 ⁺	2636.37 6	1,2,3	2914.02 [‡] 9	(8 ⁺)	3150.20 21	0 ⁺ ,1,2
2041.06 5	4 ⁺	2655.07 [‡] 8	1,2,3	2915.64 [‡] 17	1,2 ⁺	3159.32 [‡] 22	2 ⁺ ,3,4 ⁺
2099.26 7	(2 ⁺)	2669.38 18	8 ⁺	2930.09 [‡] 20	1,2,3	3171.6 [‡] 3	
2196.99 7	3 ⁻	2670.09 [‡] 9	3 ⁺	2958.2 [‡] 5	3,4 ⁺	3198.12 [‡] 21	1,2,3
2203.85 7	1,2 ⁺	2679.50 [‡] 7	4 ⁺	2972.08 19		3224.1 [‡] 5	4 ⁺
2283.97 7	6 ⁺	2693.51 [‡] 10	3 ⁺ ,4 ⁺	2982.83 20	1,2 ⁺	3247.3 [‡] 3	
2287.28 7	2 ⁺	2719.13 8	1,2 ⁺	2993.39 [‡] 14	4 ⁺	3283.50 [‡] 13	
2297.68 ^{‡#} 9	(0 ⁺)	2742.57 [‡] 10	1,2,3	2998.10 [‡] 24	2 ⁺ ,3,4 ⁺	3316.7 [‡] 5	
2311.07 7	(2 ⁺)	2756.16 15	0 ⁺ ,1 ⁺ ,2 ⁺	3013.20 [‡] 16	3	3335.9 [‡] 5	
2407.53 6	5 ⁻	2758.83 [@] 12	(6 ⁻)	3026.31 [‡] 14	2 ⁺ ,3 ⁺	3484.3 [‡] 5	1,2 ⁺
2407.89 8	(2 ⁺)	2758.84 [@] 11	(4,5,6) ⁺	3031.01 [‡] 20		3589.86 11	
2448.59 [‡] 7	(4 ⁺)	2772.13 [‡] 9		3046.51 [‡] 19	(3)		

[†] From **1990BeYR**, unless noted otherwise. Evaluator removed the 2439.8 level, $J^\pi=1,2^+$ (**1990BeYR**) because the 1182.88 γ was suitably placed between 1747 and 564 levels.

[‡] Additional level placed by evaluator by referring to (n,n' γ) E=1.7,2.8,3.4 MeV.

[#] Added in **1990Be50**.

[@] Evaluator modified the level 2758.88 in **1990BeYR** into a doublet of 2758.83 (6⁻) and 2758.84 (4,5,6)⁺ as discussed in **2005Hi04**.

[&] From Adopted Levels; **1990BeYR** discussed J^π dependence of $\gamma(\theta)$ and of net feeding to respective level. Isotropic $\gamma(\theta)$ indicates 0⁺ excitation.

 $\gamma(^{122}\text{Te})$

E_γ [†]	I_γ [‡]	E_i (level)	J_i^π	E_f	J_f^π	Mult.&	Comments
^x 148.39 14	0.070 10						
^x 162.52 14	0.090 13						
^x 330.01	1.11 6						
351.38 [#] 11	0.13 1	2758.83	(6 ⁻)	2407.53	5 ⁻		
^x 380.99 8	0.22 2						
395.18 9	0.19 1	1752.57	2 ⁺	1357.39	0 ⁺	E2	Mult.: $A_2=+0.27$, $A_4=-0.16$; RUL.

$^{122}\text{Te}(n,n'\gamma)$ E=fast 1990BeYR,1990Be50,1991De27 (continued) $\gamma(^{122}\text{Te})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.&	$\delta\&$	Comments
^x 427.95 12	0.13 1							
468.34 ^a 14	0.090 ^a 9	2508.66	(2) ⁺	2041.06	4 ⁺			E_γ : poor fit. Level-energy difference=467.60.
468.34 ^{a#} 14	0.090 ^a 9	3026.31	2 ⁺ ,3 ⁺	2557.84	1,2,3			$A_2=-0.08$ 3, $A_4=-0.03$ 4.
490.25 [#] 5	0.37 2	1747.06	0 ⁺	1256.94	2 ⁺			Mult.: $A_2=-0.13$ 8, $A_4=-0.11$ 12;
495.52 6	0.28 2	1752.57	2 ⁺	1256.94	2 ⁺	M1+E2	-0.6 3	RUL. $\delta: -0.6$ 3 or $1/\delta=-0.24$ +8-25.
532.68 7	0.26 2	2283.97	6 ⁺	1751.34	6 ⁺	M1+E2		Mult.: $A_2=+0.42$ 2, $A_4=+0.04$ 3;
564.10 4	100	564.09	2 ⁺	0.0	0 ⁺	E2		RUL. $\delta: +0.04 < \delta < +0.50$.
570.07 4	2.48 12	1751.34	6 ⁺	1181.27	4 ⁺	(E2)		Mult.: $A_2=+0.198$ 1, $A_4=-0.085$ 14;
^x 575.06	0.11 1							$\Delta\pi$ =no from Adopted Levels.
586.99 [#] 5	0.42 2	2539.00		1952.02	3 ⁺	D(+Q)		Mult.: $A_2=+0.422$ 15, $A_4=+0.011$
617.23 4	19.1 9	1181.27	4 ⁺	564.09	2 ⁺	E2		22; $\Delta\pi$ =no from Adopted Levels.
628.70 [#] 19	0.13 1	2539.00		1909.65	4 ⁺			Mult.: $A_2=-0.26$ 2, $A_4=-0.03$ 3; lin
652.67 6	0.35 2	1909.65	4 ⁺	1256.94	2 ⁺	E2		pol=+2.1 14-8.
683.64 4	0.81 4	1940.58	0 ⁺	1256.94	2 ⁺			Mult.: $A_2=+0.307$ 10, $A_4=-0.070$
692.83 4	17.3 8	1256.94	2 ⁺	564.09	2 ⁺	M1+E2	-3.7 +11-7	14; RUL.
695.29 20	2.33 3	1952.02	3 ⁺	1256.94	2 ⁺			E_γ : poor fit. Level-energy
728.34 4	1.45 7	1909.65	4 ⁺	1181.27	4 ⁺	M1+E2	-0.69 3	difference=629.36.
^x 748.70 10	0.16 1							Mult.: $A_2=+0.29$ 3, $A_4=-0.09$ 5;
770.79 6	0.71 4	1952.02	3 ⁺	1181.27	4 ⁺	M1+E2	-4.3 +8-5	RUL.
793.30 4	4.56 23	1357.39	0 ⁺	564.09	2 ⁺			$A_2=-0.012$ 15, $A_4=-0.040$ 20; lin
^x 811.63 9	0.06 1							pol=+1.4 +6-4.
^x 821.28 10	0.082 8							Mult.: $A_2=-0.137$ 15, $A_4=-0.026$ 20;
^x 833.48 18	0.062 7							RUL.
859.81 4	0.80 4	2041.06	4 ⁺	1181.27	4 ⁺	D(+Q)	+0.4 3	$\delta: -3.7$ +11-7 or -0.81 +0-11.
873.92 [#] 4	0.036 6	3070.91	3,4,5 ⁻	2196.99	3 ⁻			Mult.: $A_2=+0.079$ 11, $A_4=-0.075$ 16;
^x 891.83 15	0.071 7							RUL.
^x 908.75 17	0.097 9							
918.04 17	0.10 1	2669.38	8 ⁺	1751.34	6 ⁺			Mult.: $A_2=+0.01$ 3, $A_4=-0.02$ 4;
939.7 3	0.044 6	2196.99	3 ⁻	1256.94	2 ⁺			RUL; lin pol=+0.25 +15-17 (if
^x 952.90 5	0.068 10							$A_4 \neq 0$).
^x 961.8 3	0.059 9							$A_2=+0.002$ 10, $A_4=-0.015$ 14.
994.25 [#] 21	0.077 11	3093.83	2 ⁺	2099.26	(2) ⁺			
1007.25 21	0.077 10	2758.83	(6 ⁻)	1751.34	6 ⁺			
1037.84 10	0.12 1	2789.18		1751.34	6 ⁺			
^x 1046.19 20	0.059 9							
1049.26 13	0.12 1	2800.60	7 ⁻	1751.34	6 ⁺			

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$^{122}\text{Te}(n,n'\gamma)$ E=fast **1990BeYR,1990Be50,1991De27 (continued)** $\gamma(^{122}\text{Te})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	$\delta^\&$	Comments
1074.80 [#] 28	0.049 8	3026.31	2 ⁺ ,3 ⁺	1952.02	3 ⁺			
1102.63 8	0.27 3	2283.97	6 ⁺	1181.27	4 ⁺			$A_2=+0.57$ 4, $A_4=+0.16$ 5.
^x 1121.1 3	0.053 8							
^x 1128.04 17	0.11 1							
1134.54 ^{a#} 14	0.094 ^a 11	3075.12	1,2 ⁺	1940.58	0 ⁺			
1134.54 ^{a#} 14	0.094 ^a 11	3086.56		1952.02	3 ⁺			
1161.75 ^{a#b} 17	0.14 ^a 2	2914.02	(8 ⁺)	1752.57	2 ⁺			
1161.75 ^{a#b} 17	0.14 ^a 2	3113.32	2,3	1952.02	3 ⁺			
1182.88 [#] 4	0.78 8	1747.06	0 ⁺	564.09	2 ⁺			Originally placed between the levels 2439.8, $J^\pi=1,2^+$ and 1256.9, $J^\pi=2^+$ in 1990BeYR, but evaluator replaced because the present placement is consistent with (n,n' γ) E=1.8,3.7,3.4 MeV in E_γ , I_γ and $\gamma(\theta)$. $A_2=+0.001$ 17, $A_4=-0.028$ 24. Mult.: $A_2=+0.225$ 14, $A_4=-0.019$ 19; RUL; lin pol=+1.9 +19-7 (if $A_4\approx 0$).
1188.47 4	1.30 13	1752.57	2 ⁺	564.09	2 ⁺	D+Q	+0.04 3	
1220.74 18	0.076 10	2972.08		1751.34	6 ⁺			
1226.26 4	0.95 9	2407.53	5 ⁻	1181.27	4 ⁺	E1(+M2)	+0.04 2	Mult.: $A_2=-0.184$ 8, $A_4=-0.013$ 12; lin pol=+2.0 +36-9.
1242.18 [#] 10	0.18 2	2499.47	(0 ⁺)	1256.94	2 ⁺			
1251.54 14	0.10 1	2508.66	(2 ⁺)	1256.94	2 ⁺			
1256.84 4	2.9 3	1256.94	2 ⁺	0.0	0 ⁺	E2		Mult.: $A_2=+0.218$ 12, $A_4=-0.085$ 16; RUL; linear pol=+1.4 +7-4.
1267.31 [#] 5	0.62 6	2448.59	(4 ⁺)	1181.27	4 ⁺	D(+Q)		Mult.: $A_2=+0.27$ 3, $A_4=-0.04$ 4.
1300.86 [#] 7	0.66 7	2557.84	1,2,3	1256.94	2 ⁺	D(+Q)		Mult.: $A_2=+0.216$ 14, $A_4=-0.003$ 19.
^x 1325.7 3	0.063 8							
1336.65 6	0.044 7	2593.61	2 ⁺	1256.94	2 ⁺			
1345.58 6	1.00 10	1909.65	4 ⁺	564.09	2 ⁺	E2		Mult.: $A_2=+0.320$ 8, $A_4=-0.083$ 11; RUL.
1354.47 [#] 7	0.39 4	2535.75	3,4,5	1181.27	4 ⁺			$A_2=-0.66$ 2, $A_4=+0.17$ 3.
1357.94 [#] 12	0.13 1	2539.00		1181.27	4 ⁺			
^x 1364.2 3	0.034 7							
1376.0 3	0.088 11	1940.58	0 ⁺	564.09	2 ⁺			
1379.45 ^{a#} 6	0.94 ^a 9	2560.73	+	1181.27	4 ⁺	D+Q	-0.06 2	Mult.: $A_2=+0.140$ 11, $A_4=-0.020$ 15.
1379.45 ^{a#} 6	0.94 ^a 9	2636.37	1,2,3	1256.94	2 ⁺	D(+Q)	-0.06 2	Mult.: $A_2=+0.140$ 11, $A_4=-0.020$ 15.
1387.88 6	1.10 11	1952.02	3 ⁺	564.09	2 ⁺	M1+E2		Mult.: $A_2=+0.057$ 13, $A_4=+0.132$ 18; RUL; lin pol=+1.2 +11-5 (if $A_4\neq 0$). δ : -70 9-192.
1398.12 [#] 7	0.38 4	2655.07	1,2,3	1256.94	2 ⁺			$A_2=-0.10$ 2, $A_4=-0.02$ 3.
1412.0 3	0.030 6	2593.61	2 ⁺	1181.27	4 ⁺			
1419.67 7	0.32 3	2600.96	3 ⁺	1181.27	4 ⁺	M1(+E2)	+0.50 14	Mult.: $A_2=-0.45$ 6, $A_4=+0.07$ 8; RUL. δ : +0.50 14 or +2.7 +11-7.
1422.40 [#] 7	0.44 4	2679.50	4 ⁺	1256.94	2 ⁺	E2		Mult.: $A_2=+0.39$ 3, $A_4=-0.04$ 3; RUL.
1422.42 [#] 6	0.44 4	2603.77	3,4,5	1181.27	4 ⁺			
^x 1456.80 20	0.057 9							
1462.4 3	0.083 12	2719.13	1,2 ⁺	1256.94	2 ⁺			
1477.07 7	0.85 9	2041.06	4 ⁺	564.09	2 ⁺	E2		Mult.: $A_2=+0.331$ 14, $A_4=-0.081$ 20; RUL.

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$^{122}\text{Te}(n,n'\gamma)$ E=fast **1990BeYR,1990Be50,1991De27 (continued)** $\gamma(^{122}\text{Te})$ (continued)

E_γ †	I_γ ‡	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
1488.90# 8	0.34 3	2670.09	3 ⁺	1181.27	4 ⁺			$A_2=-0.12$ 3, $A_4=-0.06$ 5.
1499.08 20	0.064 9	2756.16	0 ⁺ ,1 ⁺ ,2 ⁺	1256.94	2 ⁺			
1512.23 9	0.33 3	2693.51	3 ⁺ ,4 ⁺	1181.27	4 ⁺			$A_2=+0.29$ 4, $A_4=-0.06$ 5.
1535.13 6	1.60 16	2099.26	(2) ⁺	564.09	2 ⁺	M1+E2	+2.6 2	Mult.: $A_2=+0.169$ 10, $A_4=-0.028$ 14; RUL; lin pol=+1.1 +7-4 (if $A_4 \neq 0$).
1577.55# 11	0.21 2	2758.84	(4,5,6) ⁺	1181.27	4 ⁺			
^x 1583.43 19	0.062 9							
1590.85# 8	0.50 5	2772.13		1181.27	4 ⁺			
1628.47a# 10	0.18 ^a 2	2809.75	3,4 ⁺	1181.27	4 ⁺			
1628.47a# 10	0.18 ^a 2	2885.58	1 ⁺ ,2 ⁺ ,3 ⁺	1256.94	2 ⁺			
1632.90 6	2.08 21	2196.99	3 ⁻	564.09	2 ⁺	E1(+M2)	+0.02 2	Mult.: $A_2=-0.214$ 11, $A_4=-0.025$ 17; lin pol=+2.3 +29-8 (if $A_4 \approx 0$).
1639.76 7	0.66 6	2203.85	1,2 ⁺	564.09	2 ⁺	D(+Q)	-0.05 10	Mult.: $A_2=0.00$ 2, $A_4=0.00$ 3. δ : -0.05 10 or -3 1.
1657.07# 8	0.30 3	2914.02	(8 ⁺)	1256.94	2 ⁺			$A_2=-0.54$ 2, $A_4=-0.04$ 3.
1673.14# 19	0.059 8	2930.09	1,2,3	1256.94	2 ⁺			
1679.27# 9	0.22 2	2860.56	4,5	1181.27	4 ⁺			$A_2=-0.25$ 5, $A_4=-0.02$ 8.
1723.19 7	0.96 9	2287.28	2 ⁺	564.09	2 ⁺	M1+E2	+0.11 6	Mult.: $A_2=+0.26$ 3, $A_4=-0.01$ 4; RUL; lin pol=+1.1 +18-7. δ : +0.11 6 or +1.7 2.
1733.57# 8	0.35 3	2297.68	(0 ⁺)	564.09	2 ⁺			$A_2=-0.04$ 4, $A_4=-0.05$ 7.
1746.96 6	1.03 10	2311.07	(2) ⁺	564.09	2 ⁺			$A_2=+0.014$ 13, $A_4=-0.019$ 18.
1752.67 6	2.79 28	1752.57	2 ⁺	0.0	0 ⁺	E2		Mult.: $A_2=+0.287$ 12, $A_4=-0.144$ 16; RUL.
^x 1764.49 14	0.106 4							
^x 1771.03 15	0.088 11							
1777.30@#	0.19 2	2958.2	3,4 ⁺	1181.27	4 ⁺			
1795.5 3	0.063 8	3052.5	0 ⁺ ,1,2	1256.94	2 ⁺			
1812.10# 13	0.18 2	2993.39	4 ⁺	1181.27	4 ⁺			
1816.81# 23	0.17 2	2998.10	2 ⁺ ,3,4 ⁺	1181.27	4 ⁺			
1831.91# 15	0.10 1	3013.20	3	1181.27	4 ⁺			
1837.02a# 27	0.060 ^a 7	3093.83	2 ⁺	1256.94	2 ⁺			
1837.02 ^a 27	0.060 ^a 7	3589.86		1752.57	2 ⁺			
1843.78 7	0.75 8	2407.89	(2) ⁺	564.09	2 ⁺	M1+E2		Mult.: $A_2=+0.31$ 2, $A_4=+0.11$ 3; RUL. δ : +5.5 6 (if $J^\pi=3^+$) (1990BeYR).
1849.72# 19	0.085 10	3031.01		1181.27	4 ⁺			
^x 1860.91 18	0.062 8							
1865.22# 18	0.062 9	3046.51	(3)	1181.27	4 ⁺			
1888.33@#	0.26 3	3070.91	3,4,5 ⁻	1181.27	4 ⁺			
1902.5a# 3	0.035 ^a 6	3083.8		1181.27	4 ⁺			
1902.5a# 3	0.035 ^a 6	3159.32	2 ⁺ ,3,4 ⁺	1256.94	2 ⁺			
1935.86# 12	0.12 1	2499.47	(0 ⁺)	564.09	2 ⁺			
1944.41 7	0.48 5	2508.66	(2) ⁺	564.09	2 ⁺	M1+E2	-0.05 2	Mult.: $A_2=+0.217$ 14, $A_4=+0.025$ 19; RUL. δ : -0.05 2 (if J=2), +0.36 3 (if J=3).
^x 1952.0 3	0.055 8							
1958.3# 3	0.070 9	3139.6		1181.27	4 ⁺			
1977.9 3	0.045 7	3159.32	2 ⁺ ,3,4 ⁺	1181.27	4 ⁺			
1990.3a# 3	0.014 ^a 2	3171.6		1181.27	4 ⁺			
1990.3 ^a 3	0.014 ^a 2	3247.3		1256.94	2 ⁺			

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$^{122}\text{Te}(n,n'\gamma)$ E=fast **1990BeYR,1990Be50,1991De27 (continued)**

$\gamma(^{122}\text{Te})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
2028.10 20	0.098 11	2592.32	1	564.09	2 ⁺	
2029.75 20	0.15 2	2593.61	2 ⁺	564.09	2 ⁺	
2036.87 9	0.20 2	2600.96	3 ⁺	564.09	2 ⁺	
2072.19 10	0.19 2	2636.37	1,2,3	564.09	2 ⁺	
2099.3 3	0.082 10	2099.26	(2) ⁺	0.0	0 ⁺	
2104.7 3	0.14 2	2670.09	3 ⁺	564.09	2 ⁺	E_γ : poor fit. Level-energy difference=2105.89.
2115.77# 11	0.17 2	2679.50	4 ⁺	564.09	2 ⁺	
2154.84 9	0.13 1	2719.13	1,2 ⁺	564.09	2 ⁺	
2178.46# 9	0.26 3	2742.57	1,2,3	564.09	2 ⁺	$A_2=+0.10$ 2, $A_4=+0.02$ 3.
2192.18 20	0.095 11	2756.16	0 ⁺ ,1 ⁺ ,2 ⁺	564.09	2 ⁺	
2203.79 11	0.19 2	2203.85	1,2 ⁺	0.0	0 ⁺	$A_2=-0.16$ 4, $A_4=-0.14$ 5.
2214.02# 10	0.25 3	2778.13	1,2,3	564.09	2 ⁺	$A_2=+0.20$ 4, $A_4=+0.03$ 6.
2232.49a# 11	0.21 ^a 2	2796.60	1,2,3	564.09	2 ⁺	$A_2=+0.11$ 5, $A_4=+0.01$ 8.
2232.49a 11	0.21 ^a 2	3589.86		1357.39	0 ⁺	Mult.: $A_2=+0.11$ 5, $A_4=+0.01$ 8.
2237.46# 9	0.22 2	2801.57	(2,3)	564.09	2 ⁺	$A_2=-0.31$ 4, $A_4=-0.04$ 5.
2275.69# 10	0.17 2	2839.80	3 ⁺	564.09	2 ⁺	$A_2=-0.53$ 4, $A_4=+0.08$ 5.
2287.16 20	0.096 11	2287.28	2 ⁺	0.0	0 ⁺	
2321.62# 10	0.17 2	2885.58	1 ⁺ ,2 ⁺ ,3 ⁺	564.09	2 ⁺	$A_2=+0.27$ 4, $A_4=0.00$ 5.
2347.14 13	0.13 1	2911.26	1 ⁺ ,2 ⁺	564.09	2 ⁺	
2351.52# 16	0.096 11	2915.64	1,2 ⁺	564.09	2 ⁺	
^x 2366.06 19	0.086 10					$A_2=-0.19$ 13, $A_4=+0.13$ 14.
^x 2374.64 13	0.16 2					$A_2=+0.30$ 5, $A_4=+0.06$ 6.
^x 2385.88 28	0.025 5					
2394.0 5	0.062 9	2958.2	3,4 ⁺	564.09	2 ⁺	
^x 2407.40	0.046 7					
2549.20# 20	0.052 7	3113.32	2,3	564.09	2 ⁺	
2568.3# 5	0.045 7	3132.4	(2 ⁺ ,3 ⁺ ,4 ⁺)	564.09	2 ⁺	
2586.08 20	0.11 1	3150.20	0 ⁺ ,1,2	564.09	2 ⁺	
2592.31 8	0.50 5	2592.32	1	0.0	0 ⁺	$A_2=-0.11$ 2, $A_4=-0.06$ 3.
2634.00# 20	0.11 1	3198.12	1,2,3	564.09	2 ⁺	
2660.0# 5	0.099 12	3224.1	4 ⁺	564.09	2 ⁺	
2719.38a 12	0.17 ^a 2	2719.13	1,2 ⁺	0.0	0 ⁺	$A_2=-0.05$ 3, $A_4=-0.05$ 3.
2719.38a# 12	0.17 ^a 2	3283.50		564.09	2 ⁺	$A_2=-0.05$ 3, $A_4=-0.05$ 3.
^x 2734.2 5	0.056 7					
2752.6# 5	0.039 7	3316.7		564.09	2 ⁺	
2771.8# 5	0.039 6	3335.9		564.09	2 ⁺	
^x 2797.0 4	0.051 7					
^x 2883.8 5	0.059 8					
2920.2# 5	0.11 1	3484.3	1,2 ⁺	564.09	2 ⁺	
^x 2935.1 5	0.020 5					
^x 2945.4 5	0.043 6					
2982.79 20	0.10 1	2982.83	1,2 ⁺	0.0	0 ⁺	
3061.7# 3	0.08 9	3061.7	1 ⁺ ,2 ⁺	0.0	0 ⁺	
3094.6# 4	0.037 6	3093.83	2 ⁺	0.0	0 ⁺	

[†] From 1990BeYR.

[‡] Relative to $I_\gamma(564.10\gamma)=100$ for reactor neutron spectra (1990BeYR).

γ placed by evaluator referring to E(level) and γ 's in (n,n' γ) E=1.7,2.8,3.4 MeV from the energy fit to the unplaced γ 's listed in

$^{122}\text{Te}(\text{n},\text{n}'\gamma)$ E=fast **1990BeYR,1990Be50,1991De27 (continued)**

$\gamma(^{122}\text{Te})$ (continued)

1990BeYR.

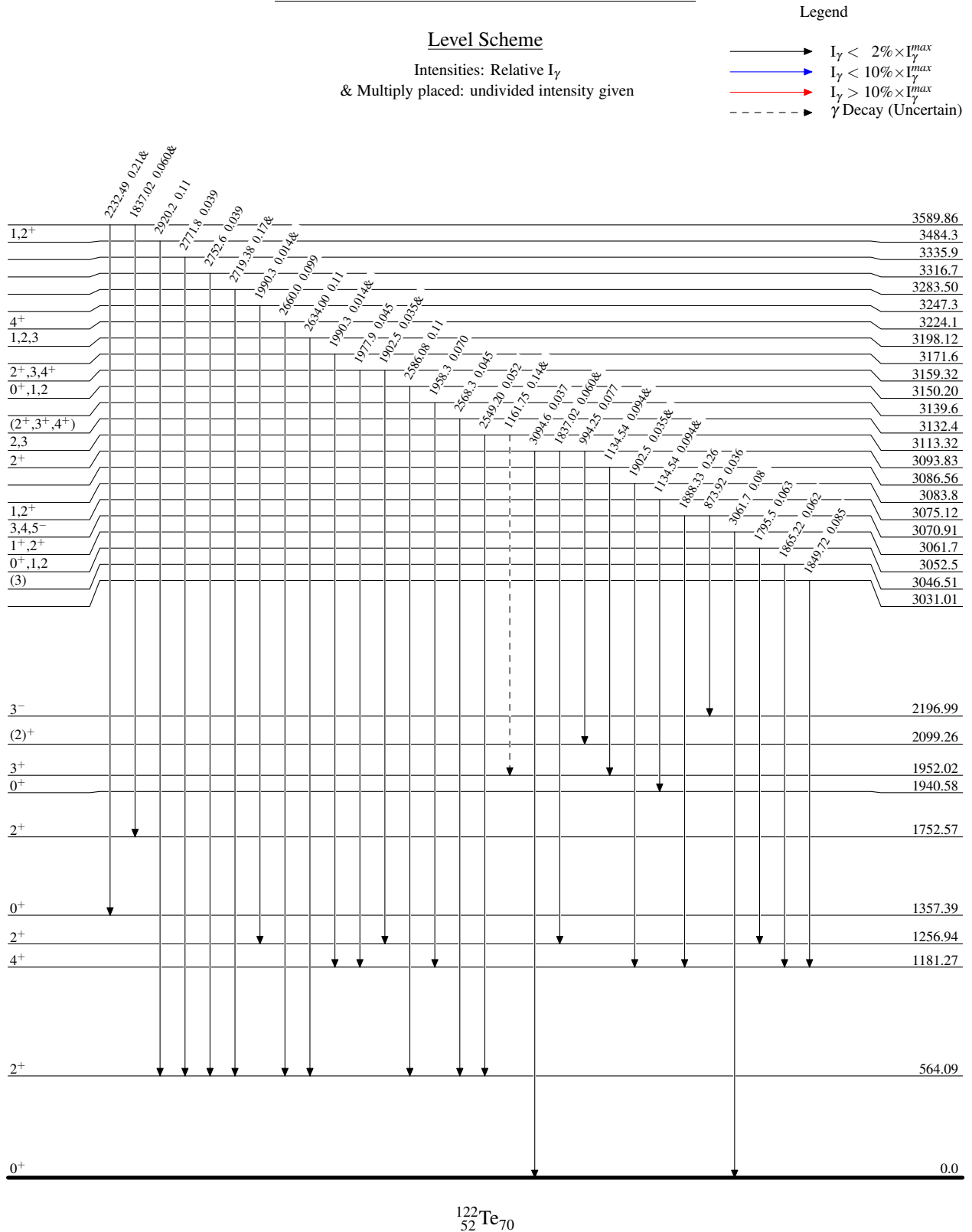
@ Composite peak.

& From $\gamma(\theta)$, $\gamma(\text{lin pol})$ and RUL: transitions with $A_2 \approx +0.3$ and $A_4 \approx -0.1$ are assigned as stretched Q, further applying RUL conditions from known $T_{1/2}$, mult.=E2 are deduced; D(+Q) transitions with large δ are assigned as M1(+E2) using RUL conditions. If the J^π of parent level is known, ΔJ and/or $\Delta\pi$ change(s) are used for the mult. assignments.

^a Multiply placed with undivided intensity.

^b Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

$^{122}\text{Te}(n,n'\gamma)$ E=fast 1990BeYR,1990Be50,1991De27 $^{122}_{52}\text{Te}_{70}$

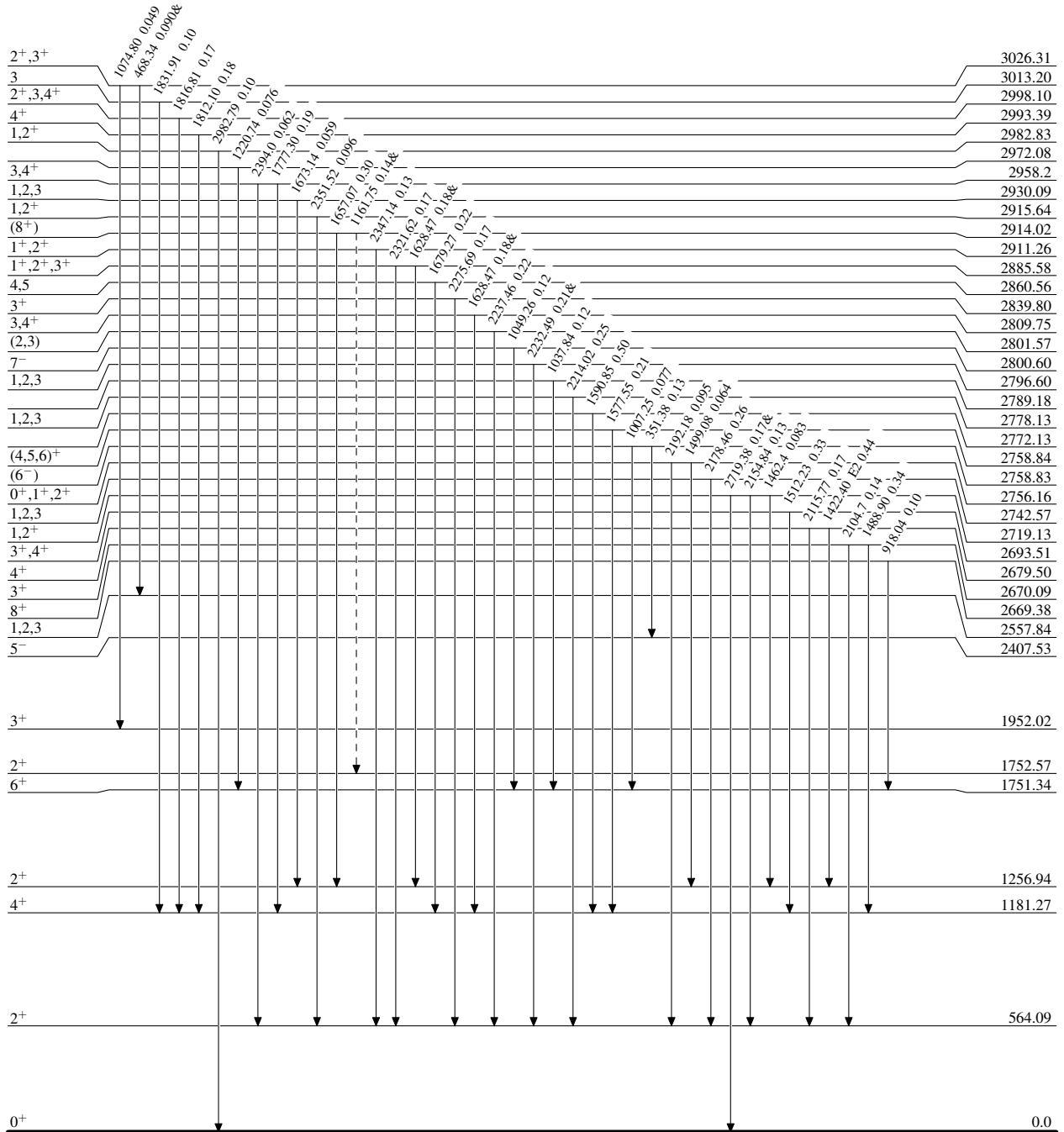
$^{122}\text{Te}(n,n'\gamma)$ E=fast 1990BeYR,1990Be50,1991De27

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

Legend

- ▶ $I_\gamma < 2\% \times I_\gamma^{max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{max}$
- - - - -▶ γ Decay (Uncertain)

 $^{122}_{52}\text{Te}_{70}$

¹²²Te(n,γ) E=fast ¹⁹⁹⁰BeYR,¹⁹⁹⁰Bc50,¹⁹⁹¹Dc27

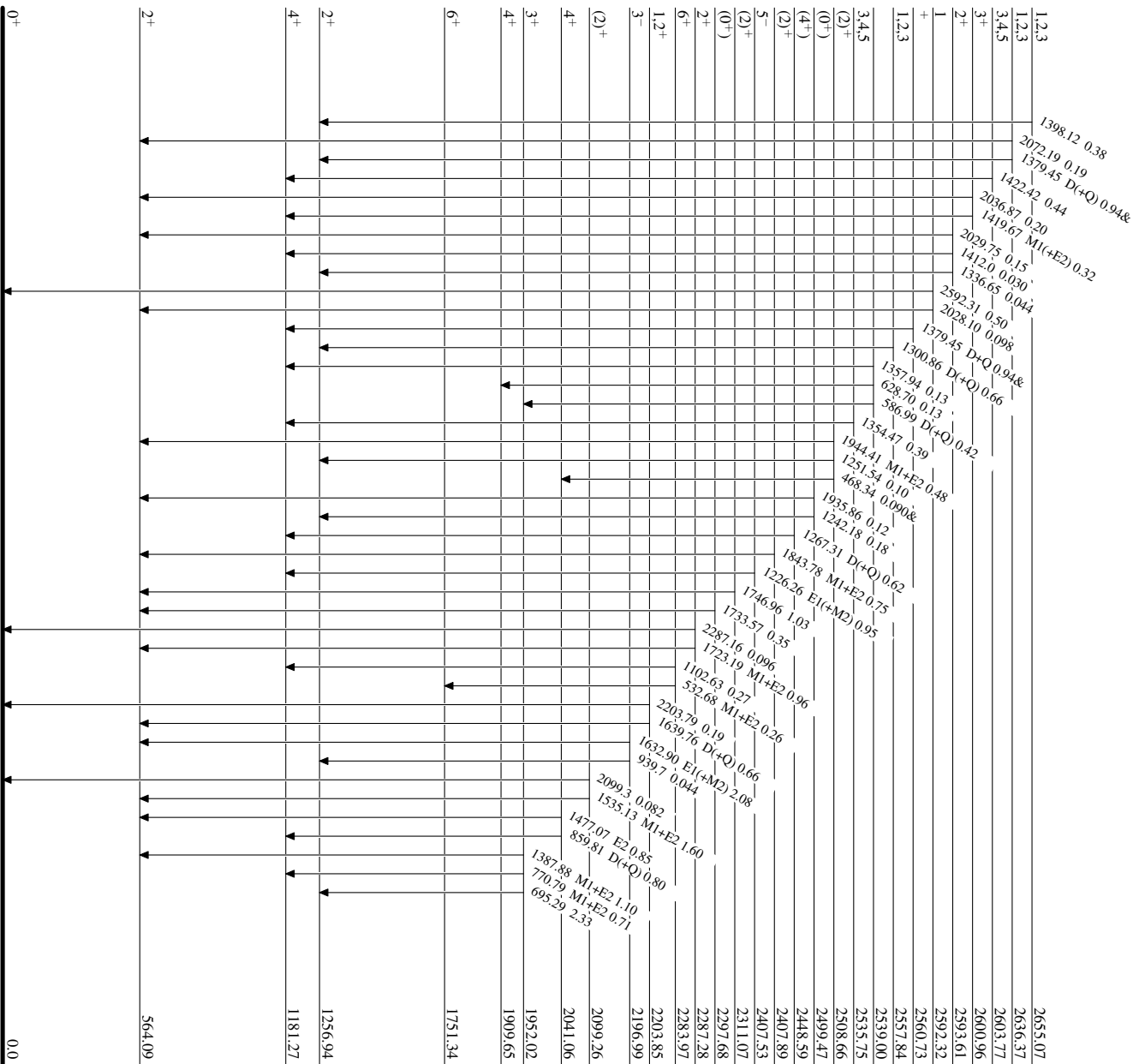
Level Scheme (continued)

Intensities: Relative I_γ

& Multiply placed: undivided intensity given

Legend

- I_γ < 2% × I_{max}
- I_γ < 10% × I_{max}
- I_γ > 10% × I_{max}



¹²²Te₇₀

$^{122}\text{Te}(n,n'\gamma)$ E=fast 1990BeYR,1990Be50,1991De27

Level Scheme (continued)

Intensities: Relative I_γ
 & Multiply placed: undivided intensity given

Legend

- \longrightarrow $I_\gamma < 2\% \times I_\gamma^{\max}$
 \longrightarrow $I_\gamma < 10\% \times I_\gamma^{\max}$
 \longrightarrow $I_\gamma > 10\% \times I_\gamma^{\max}$

