^{91}Zr(t,α) 1983De27

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, E. A. Mccutchan	NDS 165, 1 (2020)	1-Mar-2020

$J^{\pi}(^{91}Zr)=5/2^{+}$.

1983De27: E=17 MeV. Measured Eα, $\sigma(\theta)$, θ=15° to 50°. Enriched target (89%), Q3D spectrometer, position sensitive detector, FWHM≈18 keV .

L values and spectroscopic factors are from comparison with DWBA calculations, considering $J^{\pi}(^{91}Zr)=5/2^{+}$.

^{90}Y Levels

E(level)	J^{π}†	L	C^2S	E(level)	J^{π}†	L	C^2S	E(level)	J^{π}†	L
0	2^-	1	0.40	1417 *5*	(3^-)	(1,3)		2623 *15*	1^-	
202 *5*	3^-	1	0.63	1566 *5*	(4^-)	1	1.20	2750 *15*	(2)	
682 *5*	7^+	4	0.16	1647 *5*	(4^-)	3	1.94	2820 *15*		
777 *5*	2^+	4	0.10	1761 *5*	(2^-)	3	0.83	2840 *15*	(1)	
953 *5*	3^+	4	0.10	1813 *5*	(3^-)	(1,3)		2905 *15*	(2,3)	
1047 *5*	5^+	4	0.12	1965 *5*				2925 *15*		
1189 *5*	4^+			2030 *15*	(5^-)	3	1.28	2990 *15*	(1)	
1212 *5*	0^-			2090 *15*				3050 *15*	3^-	
1298 *5*	6^+	4	0.12	2290 *15*				3120 *15*		
1371 *5*	1^-			2366 *15*	(0,1)	(1,3)		3130 *15*	(0^-)	(1,3)

† As given by 1983De27. Assignments based on spectroscopic data, decay properties and previously known J^{π}'s. See also the ^{89}Y(n,γ) data set (1993Mi04).