

$^{164}\text{Er}(\text{d},\text{d}')$ **1968Tj02**

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen [#]	NDS 147, 1 (2018)	30-Nov-2017

E=12.1 MeV. Enriched targets. Measured $\sigma(\theta)$ at 60°, 90°, 125°. Deuterons analyzed with a magnetic spectrograph.

 ^{164}Er Levels

$$R(90^\circ/125^\circ) = [(\text{d}\sigma/\text{d}\Omega)(90^\circ)/(\text{d}\sigma/\text{d}\Omega)(125^\circ)].$$

E(level)	J^π [†]	$\text{d}\sigma/\text{d}\Omega \mu\text{b}/\text{sr}$ At 125°	Comments
0	$0^{\pm\ddagger}$	12070	$R(90^\circ/125^\circ)=4.84.$
91	$2^{\pm\ddagger}$	2930	$R(90^\circ/125^\circ)=1.96.$
299	$4^{\pm\ddagger}$	102	$R(90^\circ/125^\circ)=1.04.$
614	$6^{\pm\ddagger}$	11	$R(90^\circ/125^\circ)=0.96.$
858	2^+	68	$B(E2)\uparrow=0.185$ $R(90^\circ/125^\circ)=2.40.$
1057	4^+	37	$R(90^\circ/125^\circ)=0.65.$
1313		3	
1387		7	
1433	3^-	94	$B(E3)\uparrow=0.094$ $R(90^\circ/125^\circ)=1.22.$
1469		6	$R(90^\circ/125^\circ)=0.71.$
1482	(2^+)	10	$R(90^\circ/125^\circ)=2.00.$
1568	3^-	39	$B(E3)\uparrow=0.042$ $R(90^\circ/125^\circ)=1.27.$
1631	(5^-)	3	$R(90^\circ/125^\circ)\approx0.67.$
1798	(5^-)	4	$R(90^\circ/125^\circ)\approx0.50.$
1952		9	$R(90^\circ/125^\circ)=0.75.$
1968	$(3^-, 4^+)$	13	$B(E3)=0.013.$ $R(90^\circ/125^\circ)=1.06.$
2000	$(3^-, 4^+)$	15	$R(90^\circ/125^\circ)=0.86.$
2036		4 [#]	
2067		7 [#]	
2288	$(3^-, 4^+)$	19	$R(90^\circ/125^\circ)\approx0.78.$
2337	(3^-)	7	$B(E3)=0.09.$ $R(90^\circ/125^\circ)=1.35.$

[†] Unless otherwise stated, the assignments are from **1968Tj02** based on the following empirical rules: $R(90^\circ/125^\circ)\approx2$ for E2; ≈1.25 for E3; and <1 for multiple excitation.

[‡] From Adopted Levels.

[#] At 90°.