

^{165}Er ε decay (10.36 h) 1963Ry01, 1963Zy01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 194,460 (2024)	31-Oct-2022

Parent: ^{165}Er : E=0.0; $J^\pi=5/2^-$; $T_{1/2}=10.36$ h 4; $Q(\varepsilon)=376.7$ 10; % ε decay=100

$^{165}\text{Er}-J^\pi, T_{1/2}$: From ^{165}Er Adopted Levels.

$^{165}\text{Er}-Q(\varepsilon)$: From 2021Wa16.

1963Ry01, 1963Zy01: measured internal-bremsstrahlung spectra, γ .

Other measurements:

γ : 1963Ra15, 1961Gr25, 1961Ab04, 1957Go78, 1950Bu85.

K x ray, L x ray: 1958Gr03, 1952Ku15.

Auger electrons: 1978GrZS.

K x ray-K x ray coin: 1982Va20, 1972Na09.

(K x ray)(L x ray)(t), (K x ray)(L x ray) coin, Coster-Kronig transitions probability: 1980Gn01.

Additional information 1.

No 94.7γ ($I(\gamma+ce)<0.0002\%$), no 361γ ($I(\gamma+ce)<0.00002\%$) (1963Ry01), no 115γ or 135γ (1963Ry01).

No γ : 1963Ra15, 1961Gr25, 1961Ab04, $<0.01\%$ (1958An39), 1957Go78.

 ^{165}Ho Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	$7/2^-$	stable	J^π : from the Adopted Levels.

 ε radiations

E(decay)	E(level)	$I\varepsilon^\ddagger$	Log $f\bar{t}^\dagger$	Comments
(376.7 17)	0.0	100	4.715 5	$\varepsilon K=0.7989$ 4; $\varepsilon L=0.15165$ 20; $\varepsilon M+=0.04946$ 16 E(decay): measured value=371 6 from weighted average of E=371 6 (1963Zy01), and 370 10 (1963Ry01); energies deduced from the shape of internal bremsstrahlung spectrum. $I\beta^+$: no β^+ (1950Bu85).

[†] Additional information 2.

[‡] Absolute intensity per 100 decays.