

<sup>94</sup>Nb β<sup>-</sup> decay (2.03×10<sup>4</sup> y) 1971He20,1971Ea01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni		NDS 107, 2423 (2006)	1-Jan-2006

Parent: <sup>94</sup>Nb: E=0.0; J<sup>π</sup>=6<sup>+</sup>; T<sub>1/2</sub>=2.03×10<sup>4</sup> y 16; Q(β<sup>-</sup>)=2045.2 20; %β<sup>-</sup> decay=100.0

1971He20: Ge(Li), FWHM≤1 keV at 100 keV and ≤2 keV at 1 MeV. Precision measurement of E<sub>γ</sub>.

1971Ea01: Ge(Li), FWHM=2.0 keV at 1.33 MeV. Precision measurement of E<sub>γ</sub> and I<sub>γ</sub>.

<sup>94</sup>Mo Levels

E(level)	J <sup>π</sup> †
0	0 <sup>+</sup>
871.095 18	2 <sup>+</sup>
1573.72 3	4 <sup>+</sup>

† From Adopted Levels.

β<sup>-</sup> radiations

Measurements of β decay observables: shape factor: 1968Ho10. β<sub>γ</sub>(θ): 1968Ho24.

E(decay)	E(level)	Iβ <sup>-</sup> †	Log ft	Comments
(471.5 20)	1573.72	100	11.95 7	av Eβ=145.79

† Absolute intensity per 100 decays.

γ(<sup>94</sup>Mo)

E <sub>γ</sub> ‡	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult.†	α <sup>@</sup>	I <sub>(γ+ce)</sub> #	Comments
702.65 6	1573.72	4 <sup>+</sup>	871.095	2 <sup>+</sup>	E2	0.00186	100	α=0.00186; α(K)=0.00161 5; α(L)=0.00019 1 E <sub>γ</sub> : other: 702.630 30 (1971Ea01). Mult.: E2 from γγ(θ) and polarization correlation data (1967Ku03).
871.091 18	871.095	2 <sup>+</sup>	0	0 <sup>+</sup>	E2	0.00108	100	α=0.00108; α(K)=0.00094 3; α(L)=0.00011 E <sub>γ</sub> : other: 871.104 35 (1971Ea01).

† From adopted gammas.

‡ From 1971He20.

# Absolute intensity per 100 decays.

@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

${}^{94}\text{Nb} \beta^{-}$  decay ( $2.03 \times 10^4$  y) 1971He20,1971Ea01Decay Scheme