

<sup>140</sup>Nd IT decay (0.60 ms) **1962Re04,1963Re02,1964Re10**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154, 1 (2018)	20-Nov-2018

Parent: <sup>140</sup>Nd: E=2221.65 9; J<sup>π</sup>=7<sup>-</sup>; T<sub>1/2</sub>=0.60 ms 5; %IT decay=100.0

<sup>140</sup>Nd-from Adopted Levels.

Measured: γ, ce, γ(t).

<sup>140</sup>Nd Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	T <sub>1/2</sub>	Comments
0.0	0 <sup>+</sup>	3.37 d 2	%ε+%β <sup>+</sup> =100 T <sub>1/2</sub> ,%ε: from Adopted Levels.
773.74 6	2 <sup>+</sup>		E(level): 770 (1964Re10).
1801.94 10	4 <sup>+</sup>		E(level): 1770 (1964Re10).
2221.65 9	7 <sup>-</sup>	0.60 ms 5	E(level): 2210 (1964Re10). T <sub>1/2</sub> : from 1962Re04.

<sup>†</sup> From E<sub>γ</sub>.

<sup>‡</sup> Adopted values.

γ(<sup>140</sup>Nd)

E <sub>γ</sub> <sup>‡</sup>	E <sub>i</sub> (level)	J <sub>i</sub> <sup>π</sup>	E <sub>f</sub>	J <sub>f</sub> <sup>π</sup>	Mult. <sup>‡</sup>	α <sup>†</sup>	I <sub>(γ+ce)</sub> <sup>#</sup>	Comments
419.81 1	2221.65	7 <sup>-</sup>	1801.94	4 <sup>+</sup>	E3	0.0598	100	ce(K)/(γ+ce)=0.0413 6; ce(L)/(γ+ce)=0.01185 17; ce(M)/(γ+ce)=0.00266 4 ce(N)/(γ+ce)=0.000584 9; ce(O)/(γ+ce)=8.06×10 <sup>-5</sup> 12; ce(P)/(γ+ce)=2.49×10 <sup>-6</sup> 4 α(K)=0.0437 7; α(L)=0.01256 18; α(M)=0.00282 4 α(N)=0.000619 9; α(O)=8.54×10 <sup>-5</sup> 12; α(P)=2.64×10 <sup>-6</sup> 4 E <sub>γ</sub> : 435 20 (1964Re10).
773.74 6	773.74	2 <sup>+</sup>	0.0	0 <sup>+</sup>	E2	0.00396	100	ce(K)/(γ+ce)=0.00333 5; ce(L)/(γ+ce)=0.000481 7; ce(M)/(γ+ce)=0.0001024 15 ce(N)/(γ+ce)=2.28×10 <sup>-5</sup> 4; ce(O)/(γ+ce)=3.40×10 <sup>-6</sup> 5; ce(P)/(γ+ce)=2.00×10 <sup>-7</sup> 3 α(K)=0.00334 5; α(L)=0.000483 7; α(M)=0.0001028 15 α(N)=2.29×10 <sup>-5</sup> 4; α(O)=3.42×10 <sup>-6</sup> 5; α(P)=2.01×10 <sup>-7</sup> 3 E <sub>γ</sub> : 770 20 (1964Re10).
1028.19 7	1801.94	4 <sup>+</sup>	773.74	2 <sup>+</sup>	E2	0.00211	100	ce(K)/(γ+ce)=0.00180 3; ce(L)/(γ+ce)=0.000246 4; ce(M)/(γ+ce)=5.21×10 <sup>-5</sup> 8 ce(N)/(γ+ce)=1.163×10 <sup>-5</sup> 17; ce(O)/(γ+ce)=1.751×10 <sup>-6</sup> 25; ce(P)/(γ+ce)=1.088×10 <sup>-7</sup> 16 α(K)=0.00180 3; α(L)=0.000247 4; α(M)=5.22×10 <sup>-5</sup> 8 α(N)=1.165×10 <sup>-5</sup> 17; α(O)=1.755×10 <sup>-6</sup> 25; α(P)=1.091×10 <sup>-7</sup> 16 E <sub>γ</sub> : 1000 20 (1964Re10).

Continued on next page (footnotes at end of table)

$^{140}\text{Nd}$  IT decay (0.60 ms) 1962Re04,1963Re02,1964Re10 (continued) $\gamma(^{140}\text{Nd})$  (continued)

† Additional information 1.

‡ Adopted values.

# Absolute intensity per 100 decays.

 $^{140}\text{Nd}$  IT decay (0.60 ms) 1962Re04,1963Re02,1964Re10Decay Scheme

%IT=100.0

