Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 141, 327 (2017)	22-Mar-2017

Q(β^-)=−3920 *80*; S(n)=7056 *17*; S(p)=4310 *10*; Q(α)=8582 *5* 2017Wa10
S(2n)=13044 *12*, S(2p)=7659 *8* (2017Wa10).
1963Do12, 1964Do10: ^{256}No produced in ^{238}U(^{22}Ne,4n) reaction and assigned as parent of ^{252}Fm from α-decay study, measured half-life. Later studies: 1966Ku15, 1967Dr02, 1967Gh01, 1990Ho03.
Theoretical calculations: consult the Nuclear Science References (NSR) database for about 134 theory references.
2016Ro28, 2014Li15, 2013Af01, 2013Pr08, 2012Jo05: nuclear structure theory references.

^{256}No Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	2.91 s *5*	%α=99.47 *6*; %SF=0.53 *6* %α(^{256}No) is obtained from SF/α=0.0053 *+6−3*, measured by 1990Ho03. Any possible ε decay branch is taken as negligible: calculations of transition probability for an electron-capture branch from ^{256}Md g.s. to the ^{256}Fm g.s. yield I(ε)≤0.001% by requiring its log *ft* value to be ≥5.8. From calculation of r_0 parameters as a function of α branching, a probable ε branch can be estimated only with large uncertainty: the expected r_0 value of 1.477 *10* corresponds to %α=100, with a lower limit of 75%. Calculations by 1997Mo25 give $T_{1/2}(\beta^+)$>100 s (with respect to Gamow-Teller β decay) and $T_{1/2}(\alpha)$=2.75 s. %SF was deduced by 1968Fl05 as ≤0.25; %SF=0.25 was also obtained by 1967Gh01; however, isotopic assignment was uncertain. $T_{1/2}$: from measurement by 1990Ho03. Others: 3.3 s *2* (1967Gh01), 3.7 s *5* (1968Fl05), 6 s *2* (1967Dr02), 8.2 s *10* (1966Ku15), ≈8 s (1964Do10,1963Do12).