Explanation of Tables

The explanations below apply to all tables and figures.

All energy units are given in MeV unless otherwise stated.

Energies of emitted particles are reported in the center of mass frame unless otherwise stated.

A blank space in a table indicates the values is unknown.

—– indicates that the value is not energetically possible.

A value of ”obs” indicates the decay has been observed, but a numeric value is not known.

The 8 digit combination of numbers and letters at the start of each reference refers to the Nuclear Science References (NSR) database keynumber for that reference [2011Pr03].

Unless otherwise stated, all Q and S values are taken from [2021Wa16] or deduced from values therein. If values for S_p and $Q_{\varepsilon\alpha}$ calculated using p and α energies are within error bars of the value from [2021Wa16], the latter is used, otherwise the values from particle energy is used and noted.

Unless otherwise stated, all J^π values are taken from ENSDF.

The values for E_{level}(emitter) are deduced from the energy of the emitted particle, the S_p of the emitter and the final level in the daughter.

Energy values in the daughter are rounded to the nearest 0.1 keV, and coincident γ-rays to 1 keV if known to better precision.

The data set with the higher statistics has been preferentially used in the individual nuclide tables unless otherwise stated.

Uncertainities in all cases are defined as $9.0(10) \equiv 9.0 \pm 1.0$.

Hindrance Factors (HF) and nuclear radius parameters (R_0) are calculated using the AlphaHF program written by Jun Chen (part of the ENSDF Analysis and Utility Programs available at https://nds.iaea.org/public/ensdf)

In the figures for each T_z, $T_{1/2}$ amd J^π values are taken from ENSDF.

T_z	(N-Z)/2
J^π	Spin and parity of the parent nucleus
$T_{1/2}$	The half-life of the parent nucleus
Q_ε	Total electron capture energy Q_ε=M(A,Z) - M(A, Z-1)
$Q_{\varepsilon p}$	Total energy available for β^+-p; $Q_{\varepsilon p}$=M(A,Z) - M(A-1, Z-2) - ^{1}H
$Q_{\varepsilon 2p}$	Total energy available for β^+-2p; $Q_{\varepsilon 2p}$=M(A,Z) - M(A-2, Z-3) - 2^{1}H
$Q_{\varepsilon 3p}$	Total energy available for β^+-3p; $Q_{\varepsilon 3p}$=M(A,Z) - M(A-3, Z-4) - 3^{1}H
$Q_{\varepsilon\alpha}$	Total energy available for β^+-α emission; Q_α= M(A,Z) - M(A-4, Z-3) - ^{4}He
S_p	Total energy available for direct one proton emission; S_p= -M(A,Z) + M(A-1, Z-1) - ^{1}H
S_{2p}	Total energy available for direct two proton emission; S_p= -M(A,Z) + M(A-2, Z-2) - 2^{1}H
#	Value from systematics [2021Wa16]
$BR_{\beta p}$	Measured branching ratio for β^+-p emission
$BR_{\beta 2p}$	Measured branching ratio for β^+-delayed two proton emission
$BR_{\beta 3p}$	Measured branching ratio for β^+-delayed three proton emission
BR_α	Measured branching ratio for direct α emission
$BR_{\beta\alpha}$	Measured branching ratio for β^+-delayed α emission
$BR_{\beta F}$	Measured branching ratio for β^+ delayed fission
BR_p	Measured branching ratio for direct one proton emission, not including β-delayed multiple proton emission
BR_{2p}	Measured branching ratio for direct two proton emission
BR_{SF}	Measured branching ratio for spontaneous fission
$E_p(c.m.)$	Energy (MeV) of the emitted proton in the center of mass frame
$E_p(lab)$	Energy (MeV) of the emitted proton in the laboratory frame
E_{2p}	Sum energy (MeV) of the 2 emitted protons in β^+-2p decay in the center of mass frame
E_{3p}	Sum energy (MeV) of the 3 emitted protons in β^+-3p decay in the center of mass frame
E_α(c.m.)	Energy of the emitted α particle in the center of mass frame
E_α (lab)	Energy (MeV) of the emitted α in the laboratory frame
I_p(rel)%	Relative intensity of the direct or β^+-delayed p transition with the largest transition set to 100%
I_p(abs)%	Absolute intensity of the direct or β^+-delayed p transition per 100 decays.
I_{2p}	Intensity of the β^+-2p transition
I_{3p}	Intensity of the β^+-3p transition
I_α(rel)%	Relative intensity of the direct or β^+-delayed α transition with the largest transition set to 100%
I_α(abs)%	Absolute intensity of the direct or β^+-delayed α transition per 100 decays
$E_{emitter}$(nuclide)	Energy (MeV) of the state fed by β^+-decay that emits a proton, the level energy is calculated from the particle energy and the particle separation energy taken from [2021Wa16]. For levels de-excited by more than one proton transition, E_{level} (emitter) is the weighted average.
$E_{daughter}$(nuclide)	Energy (MeV) of the state fed by the charged particle emission
coincident γ-rays	Energies (MeV) of gamma-rays coincident with the emitted heavy charged particles (p,α)
R_0	nuclear radius parameter
HF	Hindrance Factor