EXPLANATION OF TABLE (KTUY05)

The nuclides listed in the Table lie in the range $2 \le Z \le 130$, $2 \le N \le 200$ with the following limitation. On the neutron-rich side, we limit to nuclei with $S_{\rm n}(Z,N) > -1.2$ MeV or $S_{\rm n}(Z,N-1) > -1.2$ MeV. We put this rather moderate limitation because there is some uncertainty in the mass formula and, in addition, the mass data of unstable neutron-rich nuclei are often used to study the neutron-emission instability experimentally. On the proton-rich or neutron-deficient side, we limit to nuclei with $S_{\rm p}(Z,N) > -Z/50-1.2$ MeV or $S_{\rm p}(Z-1,N) > -(Z-1)/50-1.2$ MeV. We sometimes need mass data of the nuclei outside the proton-drip line. In order to determine the above limit, we have checked the current experimental data in the proton-emission region. The number of nuclides in this table is 9437, and the number of the "stable" nuclides against particle emission, which are defined by $S_{\rm n} > 0$, $S_{\rm 2n} > 0$, $S_{\rm p} > 0$, $S_{\rm 2p} > 0$, is 6592.

Z	Proton number.
N	Neutron number.
A	Mass number.
El	Element symbol. For element symbols from $Z = 104$ to $Z = 111$ we use those adopted by International Union of Pure and Applied Chemistry (IUPAC) in 1997, 2003, and 2004.[1)–3)]
$M_{\rm cal}$	Calculated mass excess in MeV.
$*$	One-particle-unstable nuclide determined by $S_{\rm n}(Z,N) < 0$ or $S_{\rm p}(Z,N) < 0$
$**$	Two-particle-unstable, but one-particle-stable, nuclide defined by $S_{\rm n}(Z,N) > 0$ and $S_{\rm 2n}(Z,N) < 0$, or $S_{\rm p}(Z,N) > 0$ and $S_{\rm 2p}(Z,N) < 0$
$\diamond$	β-stable nuclide defined by $Q_{\rm EC}(Z,N) < 0$ and $Q_{\beta^-}(Z,N) < 0$
$\alpha_2, \alpha_4, \alpha_6$	Deformation parameters.
$E_{\rm sh}$	Shell energy in MeV.
$S_{\rm n}$	Calculated one-neutron separation energy. (MeV) $S_{\rm n} = M_{\rm cal}(Z,N-1)c^2 - M_{\rm cal}(Z,N)c^2 + 8.071$ MeV
$S_{\rm 2n}$	Calculated two-neutron separation energy. (MeV) $S_{\rm 2n} = M_{\rm cal}(Z,N-2)c^2 - M_{\rm cal}(Z,N)c^2 + 2 \times 8.071$ MeV
$S_{\rm p}$	Calculated one-proton separation energy. (MeV) $S_{\rm p} = M_{\rm cal}(Z-1,N)c^2 - M_{\rm cal}(Z,N)c^2 + 7.289$ MeV
$S_{\rm 2p}$	Calculated two-proton separation energy. (MeV) $S_{\rm 2p} = M_{\rm cal}(Z-2,N)c^2 - M_{\rm cal}(Z,N)c^2 + 2 \times 7.289$ MeV
$M_{\rm exp}$	Experimental mass excess in MeV. We use the masses of Audi-Wapstra-Thibault03[4)] excluding their systematics values. We take the significant figures down to 0.01 MeV in conformity with the list of calculated mass excesses.
$-$	No calculated value, or no experimental value in Ref. 4).

References

1) IUPAC Recommendations 1997, Pure and Applied Chemistry, 69 (1997) 2471.
2) IUPAC Recommendations 2003, Pure and Applied Chemistry, 75 (2003) 1613.
3) IUPAC Recommendations 2004, Pure and Applied Chemistry. URL:http://www.iupac.org/news/archives/2004/naming111.html
4) G. Audi, A.H. Wapstra, and C. Thibault, Nucl. Phys. A **729** (2003), 337.