A. Pape and M.S. Anthony Masses

† Nuclide is unstable to one-particle emission
‡ Nuclide is unstable to two-particle, but not one particle emission

Isotope	Mass Excess	
^{8}C	35.890±0.440	†
^{9}C	28.880±0.330	
^{10}C	15.680±0.220	
^{11}C	10.420±0.110	
^{10}N	39.980±0.510	†
^{11}N	25.440±0.330	†
^{12}N	17.300±0.220	
^{13}N	5.300±0.110	
^{11}O	49.670±0.560	†
^{12}O	32.950±0.440	†
^{13}O	23.080±0.330	
^{14}O	7.770±0.220	
^{15}O	2.670±0.110	
^{13}F	45.870±0.740	†
^{14}F	33.170±0.440	†
^{15}F	17.590±0.330	†
^{16}F	11.210±0.220	†
^{17}F	2.140±0.110	
^{14}Ne	54.360±0.670	†
^{15}Ne	41.830±0.550	†
^{16}Ne	24.760±0.440	‡
^{17}Ne	16.730±0.330	
^{18}Ne	5.500±0.220	
^{19}Ne	1.830±0.110	
^{17}Na	35.810±0.550	†
^{18}Na	25.670±0.440	†
^{19}Na	13.290±0.330	†
^{20}Na	6.980±0.180	
^{21}Na	-2.060±0.090	
^{18}Mg	43.760±0.660	†
^{19}Mg	32.480±0.550	‡
^{20}Mg	17.790±0.360	
^{21}Mg	10.980±0.270	
^{22}Mg	-0.330±0.180	
^{23}Mg	-5.510±0.090	
^{21}Al	26.440±0.450	†
^{22}Al	18.220±0.360	
^{23}Al	6.900±0.270	
^{24}Al	-0.050±0.180	
^{25}Al	-8.840±0.090	
^{22}Si	32.520±0.550	‡
^{23}Si	23.440±0.480	
^{24}Si	10.790±0.360	
^{25}Si	3.690±0.270	
^{26}Si	-7.190±0.180	
^{27}Si	-12.520±0.090	
^{25}P	19.690±0.450	†
^{26}P	11.150±0.360	†
^{27}P	-0.560±0.270	
^{28}P	-7.180±0.180	
^{29}P	-16.900±0.090	
^{26}S	27.520±0.540	†
^{27}S	17.770±0.450	
^{28}S	4.320±0.360	
^{29}S	-3.240±0.270	
^{30}S	-14.140±0.140	
^{31}S	-19.140±0.070	
^{28}Cl	27.860±0.560	†
^{29}Cl	14.300±0.450	†
^{30}Cl	4.700±0.280	†
^{31}Cl	-7.050±0.210	
^{32}Cl	-13.400±0.140	
^{33}Cl	-20.980±0.070	
^{29}Ar	37.590±0.650	†
^{30}Ar	21.780±0.470	†
^{31}Ar	11.450±0.360	‡
^{32}Ar	-2.270±0.280	
^{33}Ar	-9.530±0.210	
^{34}Ar	-18.430±0.140	
^{35}Ar	-23.110±0.070	
^{30}K	49.380±0.610	†
^{33}K	7.520±0.350	†
^{34}K	-1.550±0.280	†
^{35}K	-11.150±0.210	
^{36}K	-17.430±0.140	
^{37}K	-24.760±0.070	
^{31}Ca	59.530±0.860	†
^{32}Ca	41.870±1.680	
^{34}Ca	14.550±0.420	‡
^{35}Ca	4.640±0.350	
^{36}Ca	-6.480±0.280	
^{37}Ca	-13.190±0.210	
^{38}Ca	-22.050±0.140	
^{39}Ca	-27.330±0.070	
^{35}Sc	26.980±0.490	†
^{36}Sc	16.020±0.420	†
^{37}Sc	4.060±0.350	†
^{38}Sc	-4.460±0.280	†
^{39}Sc	-13.810±0.210	†
^{40}Sc	-20.300±0.100	
^{41}Sc	-28.380±0.050	
^{33}Ti	83.100±1.380	†
^{38}Ti	11.140±0.420	‡
^{39}Ti	2.580±0.350	‡
^{40}Ti	-8.570±0.200	
^{41}Ti	-15.290±0.150	
^{42}Ti	-24.750±0.100	
^{43}Ti	-29.150±0.050	
^{40}V	12.170±0.300	†
^{41}V	0.720±0.250	†
^{42}V	-7.440±0.200	†
^{43}V	-17.310±0.150	†
^{44}V	-23.480±0.100	
^{45}V	-31.700±0.050	
^{40}Cr	30.420±0.400	†
^{41}Cr	19.900±0.380	†
^{42}Cr	6.950±0.300	‡
^{43}Cr	-1.430±0.250	
^{44}Cr	-12.790±0.200	
^{45}Cr	-19.150±0.150	
^{46}Cr	-29.240±0.100	
^{47}Cr	-34.430±0.050	
^{43}Mn	17.250±0.360	†
^{44}Mn	7.210±0.300	†
^{45}Mn	-4.280±0.250	†
^{46}Mn	-12.000±0.200	
^{47}Mn	-22.210±0.150	
^{48}Mn	-29.060±0.100	
^{49}Mn	-37.490±0.050	
^{43}Fe	40.170±0.450	†
^{44}Fe	25.100±0.400	†
^{45}Fe	14.520±0.350	†
^{46}Fe	1.500±0.300	
^{47}Fe	-6.460±0.250	
^{48}Fe	-17.660±0.200	
^{49}Fe	-24.440±0.150	
^{50}Fe	-34.320±0.060	
^{51}Fe	-40.140±0.030	
^{45}Co	36.030±0.450	†
^{46}Co	24.100±0.400	†
^{47}Co	10.670±0.350	†
^{48}Co	1.740±0.300	†
^{49}Co	-9.370±0.250	†
^{50}Co	-17.340±0.120	
^{51}Co	-27.150±0.090	
^{52}Co	-34.250±0.060	
^{53}Co	-42.590±0.030	
^{46}Ni	44.680±0.500	†
^{47}Ni	32.470±0.450	†
^{48}Ni	17.440±0.400	‡
^{49}Ni	8.310±0.350	‡
^{50}Ni	-3.610±0.180	
^{51}Ni	-11.710±0.150	
^{52}Ni	-22.500±0.120	
^{53}Ni	-29.620±0.090	
^{54}Ni	-39.280±0.060	
^{55}Ni	-45.410±0.030	
^{48}Cu	44.940±0.500	†
^{49}Cu	29.250±0.450	†
^{50}Cu	19.210±0.240	†
^{51}Cu	6.960±0.210	†
^{52}Cu	-2.070±0.180	†
^{53}Cu	-13.500±0.150	†
^{54}Cu	-21.620±0.120	†
^{55}Cu	-31.650±0.090	†
^{56}Cu	-38.570±0.060	
^{57}Cu	-47.220±0.030	
^{49}Zn	55.450±0.630	†
^{50}Zn	40.120±0.300	†
^{51}Zn	29.670±0.270	†
^{52}Zn	16.360±0.240	†
^{53}Zn	6.650±0.210	†
^{54}Zn	-6.030±0.180	†
^{55}Zn	-14.660±0.150	‡
^{56}Zn	-25.660±0.120	
^{57}Zn	-32.760±0.090	
^{58}Zn	-42.250±0.060	
^{59}Zn	-47.240±0.030	
^{54}Ga	17.980±0.240	†
^{55}Ga	5.170±0.210	†
^{56}Ga	-4.490±0.180	†
^{57}Ga	-15.870±0.150	†
^{58}Ga	-23.900±0.120	†
^{59}Ga	-33.830±0.090	†
^{60}Ga	-39.880±0.060	†
^{61}Ga	-47.010±0.030	
^{55}Ge	28.340±0.290	†
^{56}Ge	14.600±0.240	†
^{57}Ge	4.540±0.210	†
^{58}Ge	-8.240±0.180	†
^{59}Ge	-16.680±0.150	‡
^{60}Ge	-27.540±0.120	‡
^{61}Ge	-33.990±0.090	
^{62}Ge	-42.270±0.060	
^{63}Ge	-47.120±0.100	
^{59}As	3.100±0.210	†
^{60}As	-6.250±0.180	†
^{61}As	-17.560±0.150	†
^{62}As	-25.000±0.120	†
^{63}As	-33.500±0.090	†
^{64}As	-39.460±0.060	†
^{65}As	-46.610±0.100	†
^{59}Se	26.510±0.270	†
^{60}Se	12.450±0.240	†
^{61}Se	2.420±0.210	†
^{62}Se	-10.040±0.180	†
^{63}Se	-17.730±0.150	‡
^{64}Se	-27.250±0.120	‡
^{65}Se	-33.240±0.090	
^{66}Se	-41.780±0.070	
^{67}Se	-46.610±0.100	
^{62}Br	14.180±0.240	†
^{63}Br	1.470±0.210	†
^{64}Br	-7.300±0.180	†
^{65}Br	-16.890±0.150	†
^{66}Br	-24.040±0.120	†
^{67}Br	-32.550±0.090	†
^{68}Br	-38.570±0.120	†
^{69}Br	-46.030±0.040	
^{62}Kr	35.610±0.300	†
^{63}Kr	24.280±0.270	†
^{64}Kr	10.400±0.240	†
^{65}Kr	1.370±0.210	†
^{66}Kr	-9.380±0.180	†
^{67}Kr	-16.690±0.150	†
^{68}Kr	-26.370±0.120	‡
^{69}Kr	-32.280±0.090	
^{64}Rb	37.080±0.300	†
^{65}Rb	23.110±0.270	†
^{66}Rb	13.110±0.240	†
^{67}Rb	2.380±0.210	†
^{68}Rb	-6.170±0.180	†
^{69}Rb	-15.760±0.150	†
^{70}Rb	-22.810±0.130	†
^{73}Rb	-46.170±0.140	
^{65}Sr	48.680±0.330	†
^{66}Sr	33.180±0.300	†
^{67}Sr	23.030±0.270	†
^{68}Sr	11.210±0.240	†
^{69}Sr	2.550±0.210	†
^{70}Sr	-8.270±0.180	†
^{71}Sr	-15.420±0.150	†
^{72}Sr	-25.460±0.120	‡
^{73}Sr	-31.430±0.250	
^{74}Sr	-40.460±0.080	
^{75}Sr	-46.260±0.100	
^{67}Y	46.660±0.330	†
^{68}Y	35.980±0.300	†
^{69}Y	23.990±0.270	†
^{70}Y	14.150±0.240	†
^{71}Y	3.560±0.210	†
^{72}Y	-4.570±0.180	†
^{73}Y	-14.610±0.150	†
^{74}Y	-21.970±0.120	†
^{75}Y	-31.380±0.090	†
^{76}Y	-38.420±0.080	†
^{77}Y	-46.710±0.150	
^{68}Zr	58.340±0.360	†
^{69}Zr	47.200±0.330	†
^{70}Zr	34.250±0.300	†
^{71}Zr	24.320±0.270	†
^{72}Zr	12.290±0.240	†
^{73}Zr	4.100±0.210	†
^{74}Zr	-7.210±0.180	†
^{75}Zr	-14.410±0.150	†
^{76}Zr	-24.740±0.120	‡
^{77}Zr	-31.410±0.090	‡
^{71}Nb	48.130±0.330	†
^{72}Nb	37.500±0.300	†
^{73}Nb	25.200±0.270	†
^{74}Nb	15.810±0.240	†
^{75}Nb	4.450±0.210	†
^{76}Nb	-3.950±0.180	†
^{77}Nb	-14.350±0.150	†
^{78}Nb	-21.870±0.120	†
^{81}Nb	-47.180±0.300	
^{72}Mo	59.170±0.360	†
^{73}Mo	48.230±0.330	†
^{74}Mo	34.910±0.300	†
^{75}Mo	25.470±0.270	†
^{76}Mo	13.200±0.240	†
^{77}Mo	4.940±0.210	†
^{78}Mo	-6.480±0.180	†
^{79}Mo	-13.900±0.150	†
^{80}Mo	-24.200±0.120	
^{81}Mo	-31.130±0.110	
^{82}Mo	-40.750±0.510	
^{75}Tc	48.540±0.330	†
^{76}Tc	38.280±0.300	†
^{77}Tc	25.910±0.270	†
^{78}Tc	16.770±0.240	†
^{79}Tc	5.270±0.210	†
^{80}Tc	-3.190±0.180	†
^{81}Tc	-13.440±0.160	†
^{82}Tc	-21.320±0.160	†
^{83}Tc	-30.880±0.130	†
^{74}Ru	85.970±0.420	†
^{75}Ru	73.830±0.390	†
^{76}Ru	59.470±0.360	†
^{77}Ru	48.930±0.330	†
^{78}Ru	35.750±0.300	†
^{79}Ru	26.420±0.270	†
^{80}Ru	14.080±0.240	†
^{81}Ru	5.780±0.210	†
^{82}Ru	-5.710±0.180	†
^{83}Ru	-13.260±0.160	†
^{79}Rh	49.350±0.330	†
^{80}Rh	39.080±0.300	†
^{81}Rh	26.760±0.270	†
^{82}Rh	17.510±0.240	†
^{83}Rh	5.980±0.210	†
^{84}Rh	-2.650±0.250	†
^{85}Rh	-12.960±0.180	†
^{87}Rh	-30.690±0.320	
^{78}Pd	86.030±0.420	†
^{79}Pd	74.400±0.390	†
^{80}Pd	60.200±0.360	†
^{81}Pd	49.690±0.330	†
^{82}Pd	36.550±0.300	†
^{83}Pd	27.350±0.270	†
^{84}Pd	14.800±0.240	†
^{85}Pd	6.420±0.210	†
^{87}Pd	-12.930±0.160	†
^{84}Ag	39.550±0.300	†
^{85}Ag	27.240±0.270	†
^{86}Ag	17.880±0.240	†
^{87}Ag	6.410±0.210	†
^{89}Ag	-12.690±0.150	†
^{81}Cd	101.560±0.450	†
^{82}Cd	86.410±0.420	†
^{83}Cd	74.680±0.390	†
^{84}Cd	60.730±0.360	†
^{85}Cd	50.250±0.330	†
^{86}Cd	36.920±0.300	†
^{87}Cd	27.240±0.270	†
^{88}Cd	15.230±0.240	†
^{89}Cd	6.650±0.210	†
^{90}Cd	-4.770±0.180	†
^{91}Cd	-12.630±0.250	
^{87}In	49.880±0.330	†
^{88}In	39.270±0.300	†
^{89}In	27.290±0.270	†
^{90}In	17.880±0.240	†
^{91}In	6.500±0.210	†
^{92}In	-2.280±0.180	†
^{93}In	-12.870±0.170	†
^{94}In	-21.000±0.470	†
^{85}Sn	101.960±0.450	†
^{86}Sn	86.760±0.420	†
^{87}Sn	74.660±0.390	†
^{88}Sn	60.360±0.360	†
^{89}Sn	49.380±0.330	†
^{90}Sn	36.900±0.300	†
^{91}Sn	27.410±0.270	†
^{92}Sn	15.400±0.240	†
^{93}Sn	6.560±0.210	†
^{94}Sn	-4.660±0.180	†
^{95}Sn	-12.900±0.210	†
^{96}Sn	-23.420±0.190	
^{94}Sb	19.710±0.240	†
^{95}Sb	8.160±0.210	†
^{96}Sb	-0.480±0.180	†
^{97}Sb	-11.340±0.340	†
^{95}Te	31.770±0.270	†
^{96}Te	19.450±0.240	†
^{97}Te	10.460±0.210	†
^{98}Te	-0.930±0.180	†
^{99}Te	-9.280±0.210	†
^{98}I	23.990±0.240	†
^{99}I	12.280±0.210	†
^{100}I	3.420±0.200	†
^{101}I	-7.160±0.230	†
^{99}Xe	35.950±0.270	†
^{100}Xe	23.560±0.240	†
^{101}Xe	14.710±0.240	†
^{103}Xe	-5.100±0.150	†
^{103}Cs	16.650±0.210	†
^{105}Cs	-2.740±0.170	†
^{103}Ba	40.320±0.270	†
^{104}Ba	28.030±0.240	†
^{105}Ba	19.210±0.210	†
^{106}Ba	7.750±0.190	†
^{109}La	4.860±0.170	†
^{107}Ce	45.130±0.270	†
^{108}Ce	33.140±0.240	†
^{109}Ce	25.230±0.210	†
^{110}Ce	15.270±0.190	†
^{113}Pr	12.350±0.170	†
^{112}Nd	41.060±0.290	†
^{113}Nd	33.100±0.220	†
^{117}Sm	40.670±0.280	†