CIAAW

0.2.0

Chapter 1

CIAAW Fortran and C API

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Main module for CIAAW.

5.1.1 Detailed Description

Main module for CIAAW.

5.2 ciaaw__saw Module Reference

CIAAW Standard Atomic Weights.

5.2.1 Detailed Description

CIAAW Standard Atomic Weights.

5.3 ciaaw__saw_2021 Module Reference

CIAAW Standard Atomic Weights 2021 - autogenerated.

Data Types

- type capi_element_t_2021

    Object representing an element.
- type element_t_2021

    Object representing an element.

Variables

- integer(int32), parameter, public **year_2021** = 2021

    Year of saw.

- integer(c_int), bind(C, name="YEAR_2021"), public, protected **capi_year_2021** = YEAR_2021

    C API Year of saw.

- type([element_t_2021](#)), parameter, public **h_2021** =[element_t_2021](#)("hydrogen", "H", 1, 1.00784d0, 1.↩
00811d0, 1.00798d0, 0.00008d0, 1.0080d0, 0.0002d0)

    hydrogen.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_H_2021"), public, protected **capi_h_2021** =[capi_element_t_2021](#)(["h","y","d","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H",c_null_char, " "," "," "," "," "," "], H_2021%z, H_2021%saw_max, H_2021%saw_min, H_↩
2021%saw, H_2021%saw_u, H_2021%asaw, H_2021%asaw_u)

    C API hydrogen.

- type([element_t_2021](#)), parameter, public **he_2021** =[element_t_2021](#)("helium", "He", 2, nan, nan, 4.↩
002602d0, 0.000002d0, 4.0026d0, 0.0001d0)

    helium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_He_2021"), public, protected **capi_he_2021** =[capi_element_t_2021](#)(["h","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","e",c_null_char, " "," "," "," "," "], He_2021%z, He_2021%saw_max, He_2021%saw_min, He_2021%saw, He_2021%saw_u, He_2021%asaw, He_2021%asaw_u)

    C API helium.

- type([element_t_2021](#)), parameter, public **li_2021** =[element_t_2021](#)("lithium", "Li", 3, 6.938d0, 6.997d0, 6.↩
97d0, 0.02d0, 6.94d0, 0.06d0)

    lithium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Li_2021"), public, protected **capi_li_2021** =[capi_element_t_2021](#)(["l","i","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","i",c_null_char, " "," "," "," "," "], Li_2021%z, Li_2021%saw_max, Li_2021%saw_min, Li_↩
2021%saw, Li_2021%saw_u, Li_2021%asaw, Li_2021%asaw_u)

    C API lithium.

- type([element_t_2021](#)), parameter, public **be_2021** =[element_t_2021](#)("beryllium", "Be", 4, nan, nan, 9.↩
0121831d0, 0.0000005d0, 9.0122d0, 0.00001d0)

    beryllium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Be_2021"), public, protected **capi_be_2021** =[capi_element_t_2021](#)(["b","e","r","y","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","e",c_null_char, " "," "," "," "," "], Be_2021%z, Be_2021%saw_max, Be_2021%saw_min, Be_2021%saw, Be_2021%saw_u, Be_2021%asaw, Be_2021%asaw_u)

    C API beryllium.

- type([element_t_2021](#)), parameter, public **b_2021** =[element_t_2021](#)("boron", "B", 5, 10.806d0, 10.821d0, 10.813d0, 0.005d0, 10.81d0, 0.02d0)

    boron.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_B_2021"), public, protected **capi_b_2021** =[capi_element_t_2021](#)(["b","o","r","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B",c_null_char, " "," "," "," "," "," "], B_2021%z, B_2021%saw_max, B_2021%saw_min, B_2021%saw, B_2021%saw_u, B_2021%asaw, B_2021%asaw_u)

    C API boron.

- type([element_t_2021](#)), parameter, public **c_2021** =[element_t_2021](#)("carbon", "C", 6, 12.0096d0, 12.0116d0, 12.0106d0, 0.0006d0, 12.011d0, 0.002d0)

    carbon.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_C_2021"), public, protected **capi_c_2021** =[capi_element_t_2021](#)(["c","a","r","b","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C",c_null_char, " "," "," "," "," "," "], C_2021%z, C_2021%saw_max, C_2021%saw_min, C_↩
2021%saw, C_2021%saw_u, C_2021%asaw, C_2021%asaw_u)

    C API carbon.

- type(element_t_2021), parameter, public **n_2021** =element_t_2021("nitrogen", "N", 7, 14.00643d0, 14.↩
00728d0, 14.0069d0, 0.0003d0, 14.007d0, 0.001d0)

    nitrogen.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_N_2021"), public, protected **capi_n_2021**
=capi_element_t_2021(["n","i","t","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"], ["N",c_null_char, " "," "," "," "," "," "," "], N_2021%z, N_2021%saw_max, N_2021%saw_min, N_2021%saw,
N_2021%saw_u, N_2021%asaw, N_2021%asaw_u)

    C API nitrogen.
- type(element_t_2021), parameter, public **o_2021** =element_t_2021("oxygen", "O", 8, 15.99903d0, 15.↩
99977d0, 15.9994d0, 0.0003d0, 15.999d0, 0.001d0)

    oxygen.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_O_2021"), public, protected **capi_o_2021**
=capi_element_t_2021(["o","x","y","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["O",c_null_char, " "," "," "," "," "," "], O_2021%z, O_2021%saw_max, O_2021%saw_min,
O_2021%saw, O_2021%saw_u, O_2021%asaw, O_2021%asaw_u)

    C API oxygen.
- type(element_t_2021), parameter, public **f_2021** =element_t_2021("fluorine", "F", 9, nan, nan, 18.↩
998403162d0, 0.000000005d0, 18.998d0, 0.001d0)

    fluorine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_F_2021"), public, protected **capi_f_2021**
=capi_element_t_2021(["f","l","u","o","r","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"], ["F",c_null_char, " "," "," "," "," "," "," "], F_2021%z, F_2021%saw_max, F_2021%saw_min, F_2021%saw,
F_2021%saw_u, F_2021%asaw, F_2021%asaw_u)

    C API fluorine.
- type(element_t_2021), parameter, public **ne_2021** =element_t_2021("neon", "Ne", 10, nan, nan, 20.1797d0,
0.0006d0, 20.180d0, 0.001d0)

    neon.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ne_2021"), public, protected **capi_ne_2021**
=capi_element_t_2021(["n","e","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["N","e",c_null_char, " "," "," "," "," "," "], Ne_2021%z, Ne_2021%saw_max, Ne_2021%saw_min,
Ne_2021%saw, Ne_2021%saw_u, Ne_2021%asaw, Ne_2021%asaw_u)

    C API neon.
- type(element_t_2021), parameter, public **na_2021** =element_t_2021("sodium", "Na", 11, nan, nan, 22.↩
98976928d0, 0.00000002d0, 22.990d0, 0.001d0)

    sodium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Na_2021"), public, protected **capi_na_2021**
=capi_element_t_2021(["s","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["N","a",c_null_char, " "," "," "," "," "," "], Na_2021%z, Na_2021%saw_max, Na_2021%saw_min,
Na_2021%saw, Na_2021%saw_u, Na_2021%asaw, Na_2021%asaw_u)

    C API sodium.
- type(element_t_2021), parameter, public **mg_2021** =element_t_2021("magnesium", "Mg", 12, 24.304d0,
24.307d0, 24.3055d0, 0.0009d0, 24.305d0, 0.002d0)

    magnesium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mg_2021"), public, protected **capi_mg_2021**
=capi_element_t_2021(["m","a","g","n","e","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "
"," "," "," "], ["M","g",c_null_char, " "," "," "," "," "," "], Mg_2021%z, Mg_2021%saw_max, Mg_2021%saw_min,
Mg_2021%saw, Mg_2021%saw_u, Mg_2021%asaw, Mg_2021%asaw_u)

    C API magnesium.
- type(element_t_2021), parameter, public **al_2021** =element_t_2021("aluminium", "Al", 13, nan, nan, 26.↩
9815384d0, 0.0000003d0, 26.982d0, 0.001d0)

    aluminium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Al_2021"), public, protected **capi_al_2021**
=capi_element_t_2021(["a","l","u","m","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["A","l",c_null_char, " "," "," "," "," "," "], Al_2021%z, Al_2021%saw_max, Al_2021%saw_min,
Al_2021%saw, Al_2021%saw_u, Al_2021%asaw, Al_2021%asaw_u)

C API aluminium.

- type(element_t_2021), parameter, public **si_2021** =element_t_2021("silicon", "Si", 14, 28.084d0, 28.086d0, 28.0850d0, 0.0006d0, 28.085d0, 0.001d0)

  silicon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Si_2021"), public, protected **capi_si_2021** =capi_element_t_2021(["s","i","l","i","c","o","n",c_null_char, " "," "], ["S","i",c_null_char, " "," "," "," "," "," "], Si_2021%z, Si_2021%saw_max, Si_2021%saw_min, Si_←2021%saw, Si_2021%saw_u, Si_2021%asaw, Si_2021%asaw_u)

  C API silicon.

- type(element_t_2021), parameter, public **p_2021** =element_t_2021("phosphorus", "P", 15, nan, nan, 30.←973761998d0, 0.000000005d0, 30.974d0, 0.001d0)

  phosphorus.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_P_2021"), public, protected **capi_p_2021** =capi_element_t_2021(["p","h","o","s","p","h","o","r","u","s",c_null_char, " "," "], ["P",c_null_char, " "," "," "," "," "," "," "], P_2021%z, P_2021%saw_max, P_2021%saw_min, P_←2021%saw, P_2021%saw_u, P_2021%asaw, P_2021%asaw_u)

  C API phosphorus.

- type(element_t_2021), parameter, public **s_2021** =element_t_2021("sulfur", "S", 16, 32.059d0, 32.076d0, 32.067d0, 0.005d0, 32.06d0, 0.02d0)

  sulfur.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_S_2021"), public, protected **capi_s_2021** =capi_element_t_2021(["s","u","l","f","u","r",c_null_char, " "," "], ["S",c_null_char, " "," "," "," "," "," "], S_2021%z, S_2021%saw_max, S_2021%saw_min, S_←2021%saw, S_2021%saw_u, S_2021%asaw, S_2021%asaw_u)

  C API sulfur.

- type(element_t_2021), parameter, public **cl_2021** =element_t_2021("chlorine", "Cl", 17, 35.446d0, 35.457d0, 35.451d0, 0.004d0, 35.45d0, 0.01d0)

  chlorine.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cl_2021"), public, protected **capi_cl_2021** =capi_element_t_2021(["c","h","l","o","r","i","n","e",c_null_char, " "," "], ["C","l",c_null_char, " "," "," "," "," "," "], Cl_2021%z, Cl_2021%saw_max, Cl_2021%saw_min, Cl_2021%saw, Cl_2021%saw_u, Cl_2021%asaw, Cl_2021%asaw_u)

  C API chlorine.

- type(element_t_2021), parameter, public **ar_2021** =element_t_2021("argon", "Ar", 18, 39.792d0, 39.963d0, 39.88d0, 0.05d0, 39.95d0, 0.16d0)

  argon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ar_2021"), public, protected **capi_ar_2021** =capi_element_t_2021(["a","r","g","o","n",c_null_char, " "," "], ["A","r",c_null_char, " "," "," "," "," "," "], Ar_2021%z, Ar_2021%saw_max, Ar_2021%saw_min, Ar_2021%saw, Ar_2021%saw_u, Ar_2021%asaw, Ar_2021%asaw_u)

  C API argon.

- type(element_t_2021), parameter, public **k_2021** =element_t_2021("potassium", "K", 19, nan, nan, 39.←0983d0, 0.0001d0, 39.098d0, 0.001d0)

  potassium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_K_2021"), public, protected **capi_k_2021** =capi_element_t_2021(["p","o","t","a","s","s","i","u","m",c_null_char, " "," "], ["K",c_null_char, " "," "," "," "," "," "], K_2021%z, K_2021%saw_max, K_2021%saw_min, K_←2021%saw, K_2021%saw_u, K_2021%asaw, K_2021%asaw_u)

  C API potassium.

- type(element_t_2021), parameter, public **ca_2021** =element_t_2021("calcium", "Ca", 20, nan, nan, 40.078d0, 0.004d0, 40.078d0, 0.004d0)

  calcium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ca_2021"), public, protected **capi_ca_2021** =capi_element_t_2021(["c","a","l","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","a",c_null_char, " "," "," "," "," "," "], Ca_2021%z, Ca_2021%saw_max, Ca_2021%saw_min, Ca_2021%saw, Ca_2021%saw_u, Ca_2021%asaw, Ca_2021%asaw_u)

    C API calcium.
- type(element_t_2021), parameter, public **sc_2021** =element_t_2021("scandium", "Sc", 21, nan, nan, 44.↩ 955907d0, 0.000004d0, 44.956d0, 0.001d0)

    scandium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sc_2021"), public, protected **capi_sc_2021** =capi_element_t_2021(["s","c","a","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","c",c_null_char, " "," "," "," "," "," "], Sc_2021%z, Sc_2021%saw_max, Sc_2021%saw_min, Sc_2021%saw, Sc_2021%saw_u, Sc_2021%asaw, Sc_2021%asaw_u)

    C API scandium.
- type(element_t_2021), parameter, public **ti_2021** =element_t_2021("titanium", "Ti", 22, nan, nan, 47.867d0, 0.001d0, 47.867d0, 0.001d0)

    titanium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ti_2021"), public, protected **capi_ti_2021** =capi_element_t_2021(["t","i","t","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","i",c_null_char, " "," "," "," "," "," "], Ti_2021%z, Ti_2021%saw_max, Ti_2021%saw_min, Ti_2021%saw, Ti_2021%saw_u, Ti_2021%asaw, Ti_2021%asaw_u)

    C API titanium.
- type(element_t_2021), parameter, public **v_2021** =element_t_2021("vanadium", "V", 23, nan, nan, 50.↩ 9415d0, 0.0001d0, 50.942d0, 0.001d0)

    vanadium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_V_2021"), public, protected **capi_v_2021** =capi_element_t_2021(["v","a","n","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["V",c_null_char, " "," "," "," "," "," "," "], V_2021%z, V_2021%saw_max, V_2021%saw_min, V_↩ 2021%saw, V_2021%saw_u, V_2021%asaw, V_2021%asaw_u)

    C API vanadium.
- type(element_t_2021), parameter, public **cr_2021** =element_t_2021("chromium", "Cr", 24, nan, nan, 51.↩ 9961d0, 0.0006d0, 51.996d0, 0.001d0)

    chromium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cr_2021"), public, protected **capi_cr_2021** =capi_element_t_2021(["c","h","r","o","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","r",c_null_char, " "," "," "," "," "," "], Cr_2021%z, Cr_2021%saw_max, Cr_2021%saw_min, Cr_2021%saw, Cr_2021%saw_u, Cr_2021%asaw, Cr_2021%asaw_u)

    C API chromium.
- type(element_t_2021), parameter, public **mn_2021** =element_t_2021("manganese", "Mn", 25, nan, nan, 54.938043d0, 0.000002d0, 54.938d0, 0.001d0)

    manganese.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mn_2021"), public, protected **capi_mn_2021** =capi_element_t_2021(["m","a","n","g","a","n","e","s","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","n",c_null_char, " "," "," "," "," "," "], Mn_2021%z, Mn_2021%saw_max, Mn_2021%saw_min, Mn_2021%saw, Mn_2021%saw_u, Mn_2021%asaw, Mn_2021%asaw_u)

    C API manganese.
- type(element_t_2021), parameter, public **fe_2021** =element_t_2021("iron", "Fe", 26, nan, nan, 55.845d0, 0.002d0, 55.845d0, 0.002d0)

    iron.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fe_2021"), public, protected **capi_fe_2021** =capi_element_t_2021(["i","r","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","e",c_null_char, " "," "," "," "," "," "], Fe_2021%z, Fe_2021%saw_max, Fe_2021%saw_min, Fe_2021%saw, Fe_2021%saw_u, Fe_2021%asaw, Fe_2021%asaw_u)

    C API iron.
- type(element_t_2021), parameter, public **co_2021** =element_t_2021("cobalt", "Co", 27, nan, nan, 58.↩ 933194d0, 0.000003d0, 58.933d0, 0.001d0)

cobalt.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Co_2021"), public, protected **capi_co_2021** =[capi_element_t_2021](#)(["c","o","b","a","l","t",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","o",c_null_char, " "," "," "," "," "," "], Co_2021%z, Co_2021%saw_max, Co_2021%saw_min, Co_2021%saw, Co_2021%saw_u, Co_2021%asaw, Co_2021%asaw_u)

    C API cobalt.

- type([element_t_2021](#)), parameter, public **ni_2021** =[element_t_2021](#)("nickel", "Ni", 28, nan, nan, 58.6934d0, 0.0004d0, 58.693d0, 0.001d0)

    nickel.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ni_2021"), public, protected **capi_ni_2021** =[capi_element_t_2021](#)(["n","i","c","k","e","l",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","i",c_null_char, " "," "," "," "," "," "], Ni_2021%z, Ni_2021%saw_max, Ni_2021%saw_min, Ni_2021%saw, Ni_2021%saw_u, Ni_2021%asaw, Ni_2021%asaw_u)

    C API nickel.

- type([element_t_2021](#)), parameter, public **cu_2021** =[element_t_2021](#)("copper", "Cu", 29, nan, nan, 63.546d0, 0.003d0, 63.546d0, 0.003d0)

    copper.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Cu_2021"), public, protected **capi_cu_2021** =[capi_element_t_2021](#)(["c","o","p","p","e","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","u",c_null_char, " "," "," "," "," "," "], Cu_2021%z, Cu_2021%saw_max, Cu_2021%saw_min, Cu_2021%saw, Cu_2021%saw_u, Cu_2021%asaw, Cu_2021%asaw_u)

    C API copper.

- type([element_t_2021](#)), parameter, public **zn_2021** =[element_t_2021](#)("zinc", "Zn", 30, nan, nan, 65.38d0, 0.↩02d0, 65.38d0, 0.02d0)

    zinc.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Zn_2021"), public, protected **capi_zn_2021** =[capi_element_t_2021](#)(["z","i","n","c",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Z","n",c_null_char, " "," "," "," "," "," "], Zn_2021%z, Zn_2021%saw_max, Zn_2021%saw_min, Zn_2021%saw, Zn_2021%saw_u, Zn_2021%asaw, Zn_2021%asaw_u)

    C API zinc.

- type([element_t_2021](#)), parameter, public **ga_2021** =[element_t_2021](#)("gallium", "Ga", 31, nan, nan, 69.723d0, 0.001d0, 69.723d0, 0.001d0)

    gallium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ga_2021"), public, protected **capi_ga_2021** =[capi_element_t_2021](#)(["g","a","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","a",c_null_char, " "," "," "," "," "," "], Ga_2021%z, Ga_2021%saw_max, Ga_2021%saw_min, Ga_2021%saw, Ga_2021%saw_u, Ga_2021%asaw, Ga_2021%asaw_u)

    C API gallium.

- type([element_t_2021](#)), parameter, public **ge_2021** =[element_t_2021](#)("germanium", "Ge", 32, nan, nan, 72.↩630d0, 0.008d0, 72.630d0, 0.008d0)

    germanium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ge_2021"), public, protected **capi_ge_2021** =[capi_element_t_2021](#)(["g","e","r","m","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","e",c_null_char, " "," "," "," "," "," "], Ge_2021%z, Ge_2021%saw_max, Ge_2021%saw_min, Ge_2021%saw, Ge_2021%saw_u, Ge_2021%asaw, Ge_2021%asaw_u)

    C API germanium.

- type([element_t_2021](#)), parameter, public **as_2021** =[element_t_2021](#)("arsenic", "As", 33, nan, nan, 74.↩921595d0, 0.000006d0, 74.922d0, 0.001d0)

    arsenic.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_As_2021"), public, protected **capi_as_2021** =[capi_element_t_2021](#)(["a","r","s","e","n","i","c",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","s",c_null_char, " "," "," "," "," "," "], As_2021%z, As_2021%saw_max, As_2021%saw_min, As_2021%saw, As_2021%saw_u, As_2021%asaw, As_2021%asaw_u)

    C API arsenic.

- type(element_t_2021), parameter, public **se_2021** =element_t_2021("selenium", "Se", 34, nan, nan, 78.↩
971d0, 0.008d0, 78.971d0, 0.008d0)

    selenium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Se_2021"), public, protected **capi_se_2021**
=capi_element_t_2021(["s","e","l","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["S","e",c_null_char, " "," "," "," "," "], Se_2021%z, Se_2021%saw_max, Se_2021%saw_min,
Se_2021%saw, Se_2021%saw_u, Se_2021%asaw, Se_2021%asaw_u)

    C API selenium.
- type(element_t_2021), parameter, public **br_2021** =element_t_2021("bromine", "Br", 35, 79.901d0, 79.↩
907d0, 79.904d0, 0.002d0, 79.904d0, 0.003d0)

    bromine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Br_2021"), public, protected **capi_br_2021**
=capi_element_t_2021(["b","r","o","m","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["B","r",c_null_char, " "," "," "," "," "], Br_2021%z, Br_2021%saw_max, Br_2021%saw_min,
Br_2021%saw, Br_2021%saw_u, Br_2021%asaw, Br_2021%asaw_u)

    C API bromine.
- type(element_t_2021), parameter, public **kr_2021** =element_t_2021("krypton", "Kr", 36, nan, nan, 83.798d0,
0.002d0, 83.798d0, 0.002d0)

    krypton.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Kr_2021"), public, protected **capi_kr_2021**
=capi_element_t_2021(["k","r","y","p","t","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["K","r",c_null_char, " "," "," "," "," "], Kr_2021%z, Kr_2021%saw_max, Kr_2021%saw_min,
Kr_2021%saw, Kr_2021%saw_u, Kr_2021%asaw, Kr_2021%asaw_u)

    C API krypton.
- type(element_t_2021), parameter, public **rb_2021** =element_t_2021("rubidium", "Rb", 37, nan, nan, 85.↩
4678d0, 0.0003d0, 85.468d0, 0.001d0)

    rubidium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rb_2021"), public, protected **capi_rb_2021**
=capi_element_t_2021(["r","u","b","i","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["R","b",c_null_char, " "," "," "," "," "], Rb_2021%z, Rb_2021%saw_max, Rb_2021%saw_min,
Rb_2021%saw, Rb_2021%saw_u, Rb_2021%asaw, Rb_2021%asaw_u)

    C API rubidium.
- type(element_t_2021), parameter, public **sr_2021** =element_t_2021("strontium", "Sr", 38, nan, nan, 87.62d0,
0.01d0, 87.62d0, 0.01d0)

    strontium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sr_2021"), public, protected **capi_sr_2021**
=capi_element_t_2021(["s","t","r","o","n","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["S","r",c_null_char, " "," "," "," "," "], Sr_2021%z, Sr_2021%saw_max, Sr_2021%saw_min,
Sr_2021%saw, Sr_2021%saw_u, Sr_2021%asaw, Sr_2021%asaw_u)

    C API strontium.
- type(element_t_2021), parameter, public **y_2021** =element_t_2021("yttrium", "Y", 39, nan, nan, 88.↩
905838d0, 0.000002d0, 88.906d0, 0.001d0)

    yttrium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Y_2021"), public, protected **capi_y_2021**
=capi_element_t_2021(["y","t","t","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"], ["Y",c_null_char, " "," "," "," "," "," "], Y_2021%z, Y_2021%saw_max, Y_2021%saw_min, Y_2021%saw,
Y_2021%saw_u, Y_2021%asaw, Y_2021%asaw_u)

    C API yttrium.
- type(element_t_2021), parameter, public **zr_2021** =element_t_2021("zirconium", "Zr", 40, nan, nan, 91.↩
224d0, 0.002d0, 91.224d0, 0.002d0)

    zirconium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Zr_2021"), public, protected **capi_zr_2021**
=capi_element_t_2021(["z","i","r","c","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "
"," "," "], ["Z","r",c_null_char, " "," "," "," "," "], Zr_2021%z, Zr_2021%saw_max, Zr_2021%saw_min,
Zr_2021%saw, Zr_2021%saw_u, Zr_2021%asaw, Zr_2021%asaw_u)

C API zirconium.

- type([element_t_2021](#)), parameter, public **nb_2021** =[element_t_2021](#)("nobium", "Nb", 41, nan, nan, 92.↩
  90637d0, 0.00001d0, 92.906d0, 0.001d0)

  nobium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Nb_2021"), public, protected **capi_nb_2021**
  =[capi_element_t_2021](#)(["n","o","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "], ["N","b",c_null_char, " "," "," "," "," "," "], Nb_2021%z, Nb_2021%saw_max, Nb_2021%saw_min,
  Nb_2021%saw, Nb_2021%saw_u, Nb_2021%asaw, Nb_2021%asaw_u)

  C API nobium.

- type([element_t_2021](#)), parameter, public **mo_2021** =[element_t_2021](#)("molybdenum", "Mo", 42, nan, nan,
  95.95d0, 0.01d0, 95.95d0, 0.01d0)

  molybdenum.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Mo_2021"), public, protected **capi_mo_2021**
  =[capi_element_t_2021](#)(["m","o","l","y","b","d","e","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  "," "," "], ["M","o",c_null_char, " "," "," "," "," "," "], Mo_2021%z, Mo_2021%saw_max, Mo_2021%saw_min,
  Mo_2021%saw, Mo_2021%saw_u, Mo_2021%asaw, Mo_2021%asaw_u)

  C API molybdenum.

- type([element_t_2021](#)), parameter, public **tc_2021** =[element_t_2021](#)("technetium", "Tc", 43, nan, nan, nan,
  nan, nan, nan)

  technetium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Tc_2021"), public, protected **capi_tc_2021**
  =[capi_element_t_2021](#)(["t","e","c","h","n","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  "," "," "], ["T","c",c_null_char, " "," "," "," "," "," "], Tc_2021%z, Tc_2021%saw_max, Tc_2021%saw_min,
  Tc_2021%saw, Tc_2021%saw_u, Tc_2021%asaw, Tc_2021%asaw_u)

  C API technetium.

- type([element_t_2021](#)), parameter, public **ru_2021** =[element_t_2021](#)("ruthenium", "Ru", 44, nan, nan, 101.↩
  07d0, 0.02d0, 101.07d0, 0.02d0)

  ruthenium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ru_2021"), public, protected **capi_ru_2021**
  =[capi_element_t_2021](#)(["r","u","t","h","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ","
  "," "," "], ["R","u",c_null_char, " "," "," "," "," "," "], Ru_2021%z, Ru_2021%saw_max, Ru_2021%saw_min,
  Ru_2021%saw, Ru_2021%saw_u, Ru_2021%asaw, Ru_2021%asaw_u)

  C API ruthenium.

- type([element_t_2021](#)), parameter, public **rh_2021** =[element_t_2021](#)("rhodium", "Rh", 45, nan, nan, 102.↩
  90549d0, 0.00002d0, 102.91d0, 0.01d0)

  rhodium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Rh_2021"), public, protected **capi_rh_2021**
  =[capi_element_t_2021](#)(["r","h","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "], ["R","h",c_null_char, " "," "," "," "," "," "], Rh_2021%z, Rh_2021%saw_max, Rh_2021%saw_min,
  Rh_2021%saw, Rh_2021%saw_u, Rh_2021%asaw, Rh_2021%asaw_u)

  C API rhodium.

- type([element_t_2021](#)), parameter, public **pd_2021** =[element_t_2021](#)("palladium", "Pd", 46, nan, nan, 106.↩
  42d0, 0.01d0, 106.42d0, 0.01d0)

  palladium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Pd_2021"), public, protected **capi_pd_2021**
  =[capi_element_t_2021](#)(["p","a","l","l","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ","
  "," "," "], ["P","d",c_null_char, " "," "," "," "," "," "], Pd_2021%z, Pd_2021%saw_max, Pd_2021%saw_min,
  Pd_2021%saw, Pd_2021%saw_u, Pd_2021%asaw, Pd_2021%asaw_u)

  C API palladium.

- type([element_t_2021](#)), parameter, public **ag_2021** =[element_t_2021](#)("silver", "Ag", 47, nan, nan, 107.8682d0,
  0.0002d0, 107.87d0, 0.01d0)

  silver.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ag_2021"), public, protected **capi_ag_2021** =capi_element_t_2021(["s","i","l","v","e","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","g",c_null_char, " "," "," "," "," "," "], Ag_2021%z, Ag_2021%saw_max, Ag_2021%saw_min, Ag_2021%saw, Ag_2021%saw_u, Ag_2021%asaw, Ag_2021%asaw_u)

    C API silver.
- type(element_t_2021), parameter, public **cd_2021** =element_t_2021("cadmium", "Cd", 48, nan, nan, 112.↩ 414d0, 0.004d0, 112.41d0, 0.01d0)

    cadmium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cd_2021"), public, protected **capi_cd_2021** =capi_element_t_2021(["c","a","d","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " " "," "," "], ["C","d",c_null_char, " "," "," "," "," "," "], Cd_2021%z, Cd_2021%saw_max, Cd_2021%saw_min, Cd_2021%saw, Cd_2021%saw_u, Cd_2021%asaw, Cd_2021%asaw_u)

    C API cadmium.
- type(element_t_2021), parameter, public **in_2021** =element_t_2021("indium", "In", 49, nan, nan, 114.818d0, 0.001d0, 114.82d0, 0.01d0)

    indium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_In_2021"), public, protected **capi_in_2021** =capi_element_t_2021(["i","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["I","n",c_null_char, " "," "," "," "," "," "], In_2021%z, In_2021%saw_max, In_2021%saw_min, In_↩ 2021%saw, In_2021%saw_u, In_2021%asaw, In_2021%asaw_u)

    C API indium.
- type(element_t_2021), parameter, public **sn_2021** =element_t_2021("tin", "Sn", 50, nan, nan, 118.70d0, 0.↩ 007d0, 118.71d0, 0.01d0)

    tin.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sn_2021"), public, protected **capi_sn_2021** =capi_element_t_2021(["t","i","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","n",c_null_char, " "," "," "," "," "," "], Sn_2021%z, Sn_2021%saw_max, Sn_2021%saw_min, Sn_2021%saw, Sn_2021%saw_u, Sn_2021%asaw, Sn_2021%asaw_u)

    C API tin.
- type(element_t_2021), parameter, public **sb_2021** =element_t_2021("antimony", "Sb", 51, nan, nan, 121.↩ 760d0, 0.001d0, 121.76d0, 0.01d0)

    antimony.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sb_2021"), public, protected **capi_sb_2021** =capi_element_t_2021(["a","n","t","i","m","o","n","y",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","b",c_null_char, " "," "," "," "," "," "], Sb_2021%z, Sb_2021%saw_max, Sb_2021%saw_min, Sb_2021%saw, Sb_2021%saw_u, Sb_2021%asaw, Sb_2021%asaw_u)

    C API antimony.
- type(element_t_2021), parameter, public **te_2021** =element_t_2021("tellurium", "Te", 52, nan, nan, 127.60d0, 0.03d0, 127.60d0, 0.03d0)

    tellurium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Te_2021"), public, protected **capi_te_2021** =capi_element_t_2021(["t","e","l","l","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "], ["T","e",c_null_char, " "," "," "," "," "," "], Te_2021%z, Te_2021%saw_max, Te_2021%saw_min, Te_2021%saw, Te_2021%saw_u, Te_2021%asaw, Te_2021%asaw_u)

    C API tellurium.
- type(element_t_2021), parameter, public **i_2021** =element_t_2021("iodine", "I", 53, nan, nan, 126.90447d0, 0.00003d0, 126.90d0, 0.01d0)

    iodine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_I_2021"), public, protected **capi_i_2021** =capi_element_t_2021(["i","o" _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["I",c_null_char, " "," "," "," "," "," "," " "], I_2021%z, I_2021%saw_max, I_2021%saw_min, I_2021%saw, I_2021%saw_u, I_2021%asaw, I_↩ 2021%asaw_u)

    C API iodine.
- type(element_t_2021), parameter, public **xe_2021** =element_t_2021("xenon", "Xe", 54, nan, nan, 131.293d0, 0.006d0, 131.29d0, 0.01d0)

xenon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Xe_2021"), public, protected **capi_xe_2021** =capi_element_t_2021(["x","e","n","o","n",c_null_char, " "," "], ["X","e",c_null_char, " "," "," "," "," "], Xe_2021%z, Xe_2021%saw_max, Xe_2021%saw_min, Xe_2021%saw, Xe_2021%saw_u, Xe_2021%asaw, Xe_2021%asaw_u)

    C API xenon.

- type(element_t_2021), parameter, public **cs_2021** =element_t_2021("caesium", "Cs", 55, nan, nan, 132.↩ 90545196d0, 0.00000006d0, 132.91d0, 0.01d0)

    caesium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cs_2021"), public, protected **capi_cs_2021** =capi_element_t_2021(["c","a","e","s","i","u","m",c_null_char, " "," "], ["C","s",c_null_char, " "," "," "," "," "], Cs_2021%z, Cs_2021%saw_max, Cs_2021%saw_min, Cs_2021%saw, Cs_2021%saw_u, Cs_2021%asaw, Cs_2021%asaw_u)

    C API caesium.

- type(element_t_2021), parameter, public **ba_2021** =element_t_2021("barium", "Ba", 56, nan, nan, 137.↩ 327d0, 0.007d0, 137.33d0, 0.01d0)

    barium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ba_2021"), public, protected **capi_ba_2021** =capi_element_t_2021(["b","a","r","i","u","m",c_null_char, " "," "], ["B","a",c_null_char, " "," "," "," "," "], Ba_2021%z, Ba_2021%saw_max, Ba_2021%saw_min, Ba_2021%saw, Ba_2021%saw_u, Ba_2021%asaw, Ba_2021%asaw_u)

    C API barium.

- type(element_t_2021), parameter, public **la_2021** =element_t_2021("lanthanum", "La", 57, nan, nan, 138.↩ 90547d0, 0.00007d0, 138.91d0, 0.01d0)

    lanthanum.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_La_2021"), public, protected **capi_la_2021** =capi_element_t_2021(["l","a","n","t","h","a","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","a",c_null_char, " "," "," "," "," "], La_2021%z, La_2021%saw_max, La_2021%saw_min, La_2021%saw, La_2021%saw_u, La_2021%asaw, La_2021%asaw_u)

    C API lanthanum.

- type(element_t_2021), parameter, public **ce_2021** =element_t_2021("cerium", "Ce", 58, nan, nan, 140.↩ 116d0, 0.001d0, 140.12d0, 0.01d0)

    cerium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ce_2021"), public, protected **capi_ce_2021** =capi_element_t_2021(["c","e","r","i","u","m",c_null_char, " "," "], ["C","e",c_null_char, " "," "," "," "," "], Ce_2021%z, Ce_2021%saw_max, Ce_2021%saw_min, Ce_2021%saw, Ce_2021%saw_u, Ce_2021%asaw, Ce_2021%asaw_u)

    C API cerium.

- type(element_t_2021), parameter, public **pr_2021** =element_t_2021("praseodymium", "Pr", 59, nan, nan, 140.90766d0, 0.00001d0, 140.91d0, 0.01d0)

    praseodymium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pr_2021"), public, protected **capi_pr_2021** =capi_element_t_2021(["p","r","a","s","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","r",c_null_char, " "," "," "," "," "], Pr_2021%z, Pr_2021%saw_max, Pr_2021%saw_min, Pr_2021%saw, Pr_2021%saw_u, Pr_2021%asaw, Pr_2021%asaw_u)

    C API praseodymium.

- type(element_t_2021), parameter, public **nd_2021** =element_t_2021("neodymium", "Nd", 60, nan, nan, 144.242d0, 0.003d0, 144.24d0, 0.01d0)

    neodymium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Nd_2021"), public, protected **capi_nd_2021** =capi_element_t_2021(["n","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","d",c_null_char, " "," "," "," "," "], Nd_2021%z, Nd_2021%saw_max, Nd_2021%saw_min, Nd_2021%saw, Nd_2021%saw_u, Nd_2021%asaw, Nd_2021%asaw_u)

    C API neodymium.

- type(element_t_2021), parameter, public **pm_2021** =element_t_2021("promethium", "Pm", 61, nan, nan, nan, nan, nan, nan)

    promethium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pm_2021"), public, protected **capi_pm_2021** =capi_element_t_2021(["p","r","o","m","e","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","m",c_null_char, " "," "," "," "," "," "], Pm_2021%z, Pm_2021%saw_max, Pm_2021%saw_min, Pm_2021%saw, Pm_2021%saw_u, Pm_2021%asaw, Pm_2021%asaw_u)

    C API promethium.
- type(element_t_2021), parameter, public **sm_2021** =element_t_2021("samarium", "Sm", 62, nan, nan, 150.↩ 36d0, 0.02d0, 150.36d0, 0.02d0)

    samarium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sm_2021"), public, protected **capi_sm_2021** =capi_element_t_2021(["s","a","m","a","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","m",c_null_char, " "," "," "," "," "," "], Sm_2021%z, Sm_2021%saw_max, Sm_2021%saw_min, Sm_2021%saw, Sm_2021%saw_u, Sm_2021%asaw, Sm_2021%asaw_u)

    C API samarium.
- type(element_t_2021), parameter, public **eu_2021** =element_t_2021("europium", "Eu", 63, nan, nan, 151.↩ 964d0, 0.001d0, 151.96d0, 0.01d0)

    europium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Eu_2021"), public, protected **capi_eu_2021** =capi_element_t_2021(["e","u","r","o","p","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","u",c_null_char, " "," "," "," "," "," "], Eu_2021%z, Eu_2021%saw_max, Eu_2021%saw_min, Eu_2021%saw, Eu_2021%saw_u, Eu_2021%asaw, Eu_2021%asaw_u)

    C API europium.
- type(element_t_2021), parameter, public **gd_2021** =element_t_2021("gadolinium", "Gd", 64, nan, nan, 157.25d0, 0.03d0, 157.25d0, 0.03d0)

    gadolinium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Gd_2021"), public, protected **capi_gd_2021** =capi_element_t_2021(["g","a","d","o","l","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","d",c_null_char, " "," "," "," "," "," "], Gd_2021%z, Gd_2021%saw_max, Gd_2021%saw_min, Gd_2021%saw, Gd_2021%saw_u, Gd_2021%asaw, Gd_2021%asaw_u)

    C API gadolinium.
- type(element_t_2021), parameter, public **tb_2021** =element_t_2021("terbium", "Tb", 65, nan, nan, 158.↩ 925354d0, 0.000007d0, 158.93d0, 0.01d0)

    terbium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tb_2021"), public, protected **capi_tb_2021** =capi_element_t_2021(["t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","b",c_null_char, " "," "," "," "," "," "], Tb_2021%z, Tb_2021%saw_max, Tb_2021%saw_min, Tb_2021%saw, Tb_2021%saw_u, Tb_2021%asaw, Tb_2021%asaw_u)

    C API terbium.
- type(element_t_2021), parameter, public **dy_2021** =element_t_2021("dysprosium", "Dy", 66, nan, nan, 162.500d0, 0.001d0, 162.50d0, 0.01d0)

    dysprosium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Dy_2021"), public, protected **capi_dy_2021** =capi_element_t_2021(["d","y","s","p","r","o","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","y",c_null_char, " "," "," "," "," "," "], Dy_2021%z, Dy_2021%saw_max, Dy_2021%saw_min, Dy_2021%saw, Dy_2021%saw_u, Dy_2021%asaw, Dy_2021%asaw_u)

    C API dysprosium.
- type(element_t_2021), parameter, public **ho_2021** =element_t_2021("holmium", "Ho", 67, nan, nan, 164.↩ 930329d0, 0.000005d0, 164.93d0, 0.01d0)

    holmium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ho_2021"), public, protected **capi_ho_2021** =capi_element_t_2021(["h","o","l","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","o",c_null_char, " "," "," "," "," "," "], Ho_2021%z, Ho_2021%saw_max, Ho_2021%saw_min, Ho_2021%saw, Ho_2021%saw_u, Ho_2021%asaw, Ho_2021%asaw_u)

C API holmium.

- type(element_t_2021), parameter, public **er_2021** =element_t_2021("erbium", "Er", 68, nan, nan, 167.259d0, 0.003d0, 167.26d0, 0.01d0)

    erbium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Er_2021"), public, protected **capi_er_2021** =capi_element_t_2021(["e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","r",c_null_char, " "," "," "," "," "], Er_2021%z, Er_2021%saw_max, Er_2021%saw_min, Er_2021%saw, Er_2021%saw_u, Er_2021%asaw, Er_2021%asaw_u)

    C API erbium.

- type(element_t_2021), parameter, public **tm_2021** =element_t_2021("thulium", "Tm", 69, nan, nan, 168.↩ 934219d0, 0.000005d0, 168.93d0, 0.01d0)

    thulium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tm_2021"), public, protected **capi_tm_2021** =capi_element_t_2021(["t","h","u","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","m",c_null_char, " "," "," "," "," "], Tm_2021%z, Tm_2021%saw_max, Tm_2021%saw_min, Tm_2021%saw, Tm_2021%saw_u, Tm_2021%asaw, Tm_2021%asaw_u)

    C API thulium.

- type(element_t_2021), parameter, public **yb_2021** =element_t_2021("ytterbium", "Yb", 70, nan, nan, 173.↩ 045d0, 0.010d0, 173.05d0, 0.02d0)

    ytterbium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Yb_2021"), public, protected **capi_yb_2021** =capi_element_t_2021(["y","t","t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Y","b",c_null_char, " "," "," "," "," "], Yb_2021%z, Yb_2021%saw_max, Yb_2021%saw_min, Yb_2021%saw, Yb_2021%saw_u, Yb_2021%asaw, Yb_2021%asaw_u)

    C API ytterbium.

- type(element_t_2021), parameter, public **lu_2021** =element_t_2021("lutetium", "Lu", 71, nan, nan, 174.↩ 9668d0, 0.0001d0, 174.97d0, 0.01d0)

    lutetium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Lu_2021"), public, protected **capi_lu_2021** =capi_element_t_2021(["l","u","t","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","u",c_null_char, " "," "," "," "," "], Lu_2021%z, Lu_2021%saw_max, Lu_2021%saw_min, Lu_2021%saw, Lu_2021%saw_u, Lu_2021%asaw, Lu_2021%asaw_u)

    C API lutetium.

- type(element_t_2021), parameter, public **hf_2021** =element_t_2021("hafnium", "Hf", 72, nan, nan, 178.↩ 486d0, 0.006d0, 178.49d0, 0.01d0)

    hafnium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hf_2021"), public, protected **capi_hf_2021** =capi_element_t_2021(["h","a","f","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","f",c_null_char, " "," "," "," "," "], Hf_2021%z, Hf_2021%saw_max, Hf_2021%saw_min, Hf_2021%saw, Hf_2021%saw_u, Hf_2021%asaw, Hf_2021%asaw_u)

    C API hafnium.

- type(element_t_2021), parameter, public **ta_2021** =element_t_2021("tantalum", "Ta", 73, nan, nan, 180.↩ 94788d0, 0.00002d0, 180.95d0, 0.01d0)

    tantalum.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ta_2021"), public, protected **capi_ta_2021** =capi_element_t_2021(["t","a","n","t","a","l","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","a",c_null_char, " "," "," "," "," "], Ta_2021%z, Ta_2021%saw_max, Ta_2021%saw_min, Ta_2021%saw, Ta_2021%saw_u, Ta_2021%asaw, Ta_2021%asaw_u)

    C API tantalum.

- type(element_t_2021), parameter, public **w_2021** =element_t_2021("tungsten", "W", 74, nan, nan, 183.84d0, 0.01d0, 183.84d0, 0.01d0)

    tungsten.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_W_2021"), public, protected **capi_w_2021** =capi_element_t_2021(["t","u","n","g","s","t","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["W",c_null_char, " "," "," "," "," "," " "], W_2021%z, W_2021%saw_max, W_2021%saw_min, W_2021%saw, W_2021%saw_u, W_2021%asaw, W_2021%asaw_u)

    C API tungsten.
- type(element_t_2021), parameter, public **re_2021** =element_t_2021("rhenium", "Re", 75, nan, nan, 186.↩ 207d0, 0.001d0, 186.21d0, 0.01d0)

    rhenium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Re_2021"), public, protected **capi_re_2021** =capi_element_t_2021(["r","h","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["R","e",c_null_char, " "," "," "," "," " "], Re_2021%z, Re_2021%saw_max, Re_2021%saw_min, Re_2021%saw, Re_2021%saw_u, Re_2021%asaw, Re_2021%asaw_u)

    C API rhenium.
- type(element_t_2021), parameter, public **os_2021** =element_t_2021("osmium", "Os", 76, nan, nan, 190.↩ 23d0, 0.03d0, 190.23d0, 0.03d0)

    osmium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Os_2021"), public, protected **capi_os_2021** =capi_element_t_2021(["o","s","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["O","s",c_null_char, " "," "," "," "," " "], Os_2021%z, Os_2021%saw_max, Os_2021%saw_min, Os_2021%saw, Os_2021%saw_u, Os_2021%asaw, Os_2021%asaw_u)

    C API osmium.
- type(element_t_2021), parameter, public **ir_2021** =element_t_2021("iridium", "Ir", 77, nan, nan, 192.217d0, 0.002d0, 192.22d0, 0.01d0)

    iridium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ir_2021"), public, protected **capi_ir_2021** =capi_element_t_2021(["i","r","i","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["I","r",c_null_char, " "," "," "," "," " "], Ir_2021%z, Ir_2021%saw_max, Ir_2021%saw_min, Ir_2021%saw, Ir_2021%saw_u, Ir_2021%asaw, Ir_2021%asaw_u)

    C API iridium.
- type(element_t_2021), parameter, public **pt_2021** =element_t_2021("platinum", "Pt", 78, nan, nan, 195.↩ 084d0, 0.009d0, 195.08d0, 0.02d0)

    platinum.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pt_2021"), public, protected **capi_pt_2021** =capi_element_t_2021(["p","l","a","t","i","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["P","t",c_null_char, " "," "," "," "," " "], Pt_2021%z, Pt_2021%saw_max, Pt_2021%saw_min, Pt_2021%saw, Pt_2021%saw_u, Pt_2021%asaw, Pt_2021%asaw_u)

    C API platinum.
- type(element_t_2021), parameter, public **au_2021** =element_t_2021("gold", "Au", 79, nan, nan, 196.↩ 966570d0, 0.000004d0, 196.97d0, 0.01d0)

    gold.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Au_2021"), public, protected **capi_au_2021** =capi_element_t_2021(["g","o","l","d",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["A","u",c_null_char, " "," "," "," "," " "], Au_2021%z, Au_2021%saw_max, Au_2021%saw_min, Au_2021%saw, Au_2021%saw_u, Au_2021%asaw, Au_2021%asaw_u)

    C API gold.
- type(element_t_2021), parameter, public **hg_2021** =element_t_2021("mercury", "Hg", 80, nan, nan, 200.↩ 592d0, 0.003d0, 200.59d0, 0.01d0)

    mercury.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hg_2021"), public, protected **capi_hg_2021** =capi_element_t_2021(["m","e","r","c","u","r","y",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," " "], ["H","g",c_null_char, " "," "," "," "," " "], Hg_2021%z, Hg_2021%saw_max, Hg_2021%saw_min, Hg_2021%saw, Hg_2021%saw_u, Hg_2021%asaw, Hg_2021%asaw_u)

    C API mercury.
- type(element_t_2021), parameter, public **tl_2021** =element_t_2021("thallium", "Tl", 81, 204.382d0, 204.↩ 385d0, 204.3835d0, 0.0009d0, 204.38d0, 0.01d0)

thallium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tl_2021"), public, protected **capi_tl_2021** =capi_element_t_2021(["t","h","a","l","l","i","u","m",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","l",c_null_char," "," "," "," "," "," "], Tl_2021%z, Tl_2021%saw_max, Tl_2021%saw_min, Tl_2021%saw, Tl_2021%saw_u, Tl_2021%asaw, Tl_2021%asaw_u)

    C API thallium.

- type(element_t_2021), parameter, public **pb_2021** =element_t_2021("lead", "Pb", 82, 206.14d0, 207.94d0, 207.0d0, 0.6d0, 207.2d0, 1.1d0)

    lead.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pb_2021"), public, protected **capi_pb_2021** =capi_element_t_2021(["l","e","a","d",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","b",c_null_char," "," "," "," "," "," "], Pb_2021%z, Pb_2021%saw_max, Pb_2021%saw_min, Pb_2021%saw, Pb_2021%saw_u, Pb_2021%asaw, Pb_2021%asaw_u)

    C API lead.

- type(element_t_2021), parameter, public **bi_2021** =element_t_2021("bismuth", "Bi", 83, nan, nan, 208.↵ 98040d0, 0.00001d0, 208.98d0, 0.01d0)

    bismuth.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Bi_2021"), public, protected **capi_bi_2021** =capi_element_t_2021(["b","i","s","m","u","t","h",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","i",c_null_char," "," "," "," "," "," "], Bi_2021%z, Bi_2021%saw_max, Bi_2021%saw_min, Bi_2021%saw, Bi_2021%saw_u, Bi_2021%asaw, Bi_2021%asaw_u)

    C API bismuth.

- type(element_t_2021), parameter, public **po_2021** =element_t_2021("polonium", "Po", 84, nan, nan, nan, nan, nan, nan)

    polonium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Po_2021"), public, protected **capi_po_2021** =capi_element_t_2021(["p","o","l","o","n","i","u","m",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","o",c_null_char," "," "," "," "," "," "], Po_2021%z, Po_2021%saw_max, Po_2021%saw_min, Po_2021%saw, Po_2021%saw_u, Po_2021%asaw, Po_2021%asaw_u)

    C API polonium.

- type(element_t_2021), parameter, public **at_2021** =element_t_2021("astatine", "At", 85, nan, nan, nan, nan, nan, nan)

    astatine.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_At_2021"), public, protected **capi_at_2021** =capi_element_t_2021(["a","s","t","a","t","i","n","e",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","t",c_null_char," "," "," "," "," "," "], At_2021%z, At_2021%saw_max, At_2021%saw_min, At_2021%saw, At_2021%saw_u, At_2021%asaw, At_2021%asaw_u)

    C API astatine.

- type(element_t_2021), parameter, public **rn_2021** =element_t_2021("radon", "Rn", 86, nan, nan, nan, nan, nan, nan)

    radon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rn_2021"), public, protected **capi_rn_2021** =capi_element_t_2021(["r","a","d","o","n",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","n",c_null_char," "," "," "," "," "," "], Rn_2021%z, Rn_2021%saw_max, Rn_2021%saw_min, Rn_2021%saw, Rn_2021%saw_u, Rn_2021%asaw, Rn_2021%asaw_u)

    C API radon.

- type(element_t_2021), parameter, public **fr_2021** =element_t_2021("francium", "Fr", 87, nan, nan, nan, nan, nan, nan)

    francium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fr_2021"), public, protected **capi_fr_2021** =capi_element_t_2021(["f","r","a","n","c","i","u","m",c_null_char," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","r",c_null_char," "," "," "," "," "," "], Fr_2021%z, Fr_2021%saw_max, Fr_2021%saw_min, Fr_2021%saw, Fr_2021%saw_u, Fr_2021%asaw, Fr_2021%asaw_u)

    C API francium.

- type(element_t_2021), parameter, public **ra_2021** =element_t_2021("radium", "Ra", 88, nan, nan, nan, nan, nan, nan)

  radium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ra_2021"), public, protected **capi_ra_2021** =capi_element_t_2021(["r","a","d","i","u","m",c_null_char, " "," "], ["R","a",c_null_char, " "," "," "," "," "," "], Ra_2021%z, Ra_2021%saw_max, Ra_2021%saw_min, Ra_2021%saw, Ra_2021%saw_u, Ra_2021%asaw, Ra_2021%asaw_u)

  C API radium.
- type(element_t_2021), parameter, public **ac_2021** =element_t_2021("actinium", "Ac", 89, nan, nan, nan, nan, nan, nan)

  actinium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ac_2021"), public, protected **capi_ac_2021** =capi_element_t_2021(["a","c","t","i","n","i","u","m",c_null_char, " "," "], ["A","c",c_null_char, " "," "," "," "," "," "], Ac_2021%z, Ac_2021%saw_max, Ac_2021%saw_min, Ac_2021%saw, Ac_2021%saw_u, Ac_2021%asaw, Ac_2021%asaw_u)

  C API actinium.
- type(element_t_2021), parameter, public **th_2021** =element_t_2021("thorium", "Th", 90, nan, nan, 232.↩ 0377d0, 0.0004d0, 232.04d0, 0.01d0)

  thorium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Th_2021"), public, protected **capi_th_2021** =capi_element_t_2021(["t","h","o","r","i","u","m",c_null_char, " "," "], ["T","h",c_null_char, " "," "," "," "," "," "], Th_2021%z, Th_2021%saw_max, Th_2021%saw_min, Th_2021%saw, Th_2021%saw_u, Th_2021%asaw, Th_2021%asaw_u)

  C API thorium.
- type(element_t_2021), parameter, public **pa_2021** =element_t_2021("protactinium", "Pa", 91, nan, nan, 231.03588d0, 0.00001d0, 231.04d0, 0.01d0)

  protactinium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pa_2021"), public, protected **capi_pa_2021** =capi_element_t_2021(["p","r","o","t","a","c","t","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","a",c_null_char, " "," "," "," "," "," "], Pa_2021%z, Pa_2021%saw_max, Pa_2021%saw_min, Pa_2021%saw, Pa_2021%saw_u, Pa_2021%asaw, Pa_2021%asaw_u)

  C API protactinium.
- type(element_t_2021), parameter, public **u_2021** =element_t_2021("uranium", "U", 92, nan, nan, 238.↩ 02891d0, 0.00003d0, 238.03d0, 0.01d0)

  uranium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_U_2021"), public, protected **capi_u_2021** =capi_element_t_2021(["u","r","a","n","i","u","m",c_null_char, " "," "], ["U",c_null_char, " "," "," "," "," "," "," "], U_2021%z, U_2021%saw_max, U_2021%saw_min, U_↩ 2021%saw, U_2021%saw_u, U_2021%asaw, U_2021%asaw_u)

  C API uranium.
- type(element_t_2021), parameter, public **np_2021** =element_t_2021("neptunium", "Np", 93, nan, nan, nan, nan, nan, nan)

  neptunium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Np_2021"), public, protected **capi_np_2021** =capi_element_t_2021(["n","e","p","t","u","n","i","u","m",c_null_char, " "," "], ["N","p",c_null_char, " "," "," "," "," "," "], Np_2021%z, Np_2021%saw_max, Np_2021%saw_min, Np_2021%saw, Np_2021%saw_u, Np_2021%asaw, Np_2021%asaw_u)

  C API neptunium.
- type(element_t_2021), parameter, public **pu_2021** =element_t_2021("plutonium", "Pu", 94, nan, nan, nan, nan, nan, nan)

  plutonium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pu_2021"), public, protected **capi_pu_2021** =capi_element_t_2021(["p","l","u","t","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","u",c_null_char, " "," "," "," "," "," "], Pu_2021%z, Pu_2021%saw_max, Pu_2021%saw_min, Pu_2021%saw, Pu_2021%saw_u, Pu_2021%asaw, Pu_2021%asaw_u)

C API plutonium.

- type([element_t_2021](#)), parameter, public **am_2021** =[element_t_2021](#)("americium", "Am", 95, nan, nan, nan, nan, nan, nan)

    americium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Am_2021"), public, protected **capi_am_2021** =[capi_element_t_2021](#)(["a","m","e","r","i","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","m",c_null_char, " "," "," "," "," "," "], Am_2021%z, Am_2021%saw_max, Am_2021%saw_min, Am_2021%saw, Am_2021%saw_u, Am_2021%asaw, Am_2021%asaw_u)

    C API americium.

- type([element_t_2021](#)), parameter, public **cm_2021** =[element_t_2021](#)("curium", "Cm", 96, nan, nan, nan, nan, nan)

    curium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Cm_2021"), public, protected **capi_cm_2021** =[capi_element_t_2021](#)(["c","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","m",c_null_char, " "," "," "," "," "," "], Cm_2021%z, Cm_2021%saw_max, Cm_2021%saw_min, Cm_2021%saw, Cm_2021%saw_u, Cm_2021%asaw, Cm_2021%asaw_u)

    C API curium.

- type([element_t_2021](#)), parameter, public **bk_2021** =[element_t_2021](#)("berkelium", "Bk", 97, nan, nan, nan, nan, nan, nan)

    berkelium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Bk_2021"), public, protected **capi_bk_2021** =[capi_element_t_2021](#)(["b","e","r","k","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","k",c_null_char, " "," "," "," "," "," "], Bk_2021%z, Bk_2021%saw_max, Bk_2021%saw_min, Bk_2021%saw, Bk_2021%saw_u, Bk_2021%asaw, Bk_2021%asaw_u)

    C API berkelium.

- type([element_t_2021](#)), parameter, public **cf_2021** =[element_t_2021](#)("californium", "Cf", 98, nan, nan, nan, nan, nan, nan)

    californium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Cf_2021"), public, protected **capi_cf_2021** =[capi_element_t_2021](#)(["c","a","l","i","f","o","r","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","f",c_null_char, " "," "," "," "," "," "], Cf_2021%z, Cf_2021%saw_max, Cf_2021%saw_min, Cf_2021%saw, Cf_2021%saw_u, Cf_2021%asaw, Cf_2021%asaw_u)

    C API californium.

- type([element_t_2021](#)), parameter, public **es_2021** =[element_t_2021](#)("einsteinium", "Es", 99, nan, nan, nan, nan, nan, nan)

    einsteinium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Es_2021"), public, protected **capi_es_2021** =[capi_element_t_2021](#)(["e","i","n","s","t","e","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","s",c_null_char, " "," "," "," "," "," "], Es_2021%z, Es_2021%saw_max, Es_2021%saw_min, Es_2021%saw, Es_2021%saw_u, Es_2021%asaw, Es_2021%asaw_u)

    C API einsteinium.

- type([element_t_2021](#)), parameter, public **fm_2021** =[element_t_2021](#)("fermium", "Fm", 100, nan, nan, nan, nan, nan, nan)

    fermium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Fm_2021"), public, protected **capi_fm_2021** =[capi_element_t_2021](#)(["f","e","r","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","m",c_null_char, " "," "," "," "," "," "], Fm_2021%z, Fm_2021%saw_max, Fm_2021%saw_min, Fm_2021%saw, Fm_2021%saw_u, Fm_2021%asaw, Fm_2021%asaw_u)

    C API fermium.

- type([element_t_2021](#)), parameter, public **md_2021** =[element_t_2021](#)("mendelevium", "Md", 101, nan, nan, nan, nan, nan, nan)

    mendelevium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Md_2021"), public, protected **capi_md_2021** =capi_element_t_2021(["m","e","n","d","e","l","e","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","d",c_null_char, " "," "," "," "," "," "], Md_2021%z, Md_2021%saw_max, Md_2021%saw_min, Md_2021%saw, Md_2021%saw_u, Md_2021%asaw, Md_2021%asaw_u)

    C API mendelevium.

- type(element_t_2021), parameter, public **no_2021** =element_t_2021("nobelium", "No", 102, nan, nan, nan, nan, nan, nan)

    nobelium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_No_2021"), public, protected **capi_no_2021** =capi_element_t_2021(["n","o","b","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","o",c_null_char, " "," "," "," "," "," "], No_2021%z, No_2021%saw_max, No_2021%saw_min, No_2021%saw, No_2021%saw_u, No_2021%asaw, No_2021%asaw_u)

    C API nobelium.

- type(element_t_2021), parameter, public **lr_2021** =element_t_2021("lawrencium", "Lr", 103, nan, nan, nan, nan, nan, nan)

    lawrencium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Lr_2021"), public, protected **capi_lr_2021** =capi_element_t_2021(["l","a","w","r","e","n","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","r",c_null_char, " "," "," "," "," "," "], Lr_2021%z, Lr_2021%saw_max, Lr_2021%saw_min, Lr_2021%saw, Lr_2021%saw_u, Lr_2021%asaw, Lr_2021%asaw_u)

    C API lawrencium.

- type(element_t_2021), parameter, public **rf_2021** =element_t_2021("rutherfordium", "Rf", 104, nan, nan, nan, nan, nan, nan)

    rutherfordium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rf_2021"), public, protected **capi_rf_2021** =capi_element_t_2021(["r","u","t","h","e","r","f","o","r","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "], ["R","f",c_null_char, " "," "," "," "," "," "], Rf_2021%z, Rf_2021%saw_max, Rf_2021%saw_min, Rf_2021%saw, Rf_2021%saw_u, Rf_2021%asaw, Rf_2021%asaw_u)

    C API rutherfordium.

- type(element_t_2021), parameter, public **db_2021** =element_t_2021("dubnium", "Db", 105, nan, nan, nan, nan, nan, nan)

    dubnium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Db_2021"), public, protected **capi_db_2021** =capi_element_t_2021(["d","u","b","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","b",c_null_char, " "," "," "," "," "," "], Db_2021%z, Db_2021%saw_max, Db_2021%saw_min, Db_2021%saw, Db_2021%saw_u, Db_2021%asaw, Db_2021%asaw_u)

    C API dubnium.

- type(element_t_2021), parameter, public **sg_2021** =element_t_2021("seaborgium", "Sg", 106, nan, nan, nan, nan, nan, nan)

    seaborgium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sg_2021"), public, protected **capi_sg_2021** =capi_element_t_2021(["s","e","a","b","o","r","g","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","g",c_null_char, " "," "," "," "," "," "], Sg_2021%z, Sg_2021%saw_max, Sg_2021%saw_min, Sg_2021%saw, Sg_2021%saw_u, Sg_2021%asaw, Sg_2021%asaw_u)

    C API seaborgium.

- type(element_t_2021), parameter, public **bh_2021** =element_t_2021("bohrium", "Bh", 107, nan, nan, nan, nan, nan, nan)

    bohrium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Bh_2021"), public, protected **capi_bh_2021** =capi_element_t_2021(["b","o","h","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","h",c_null_char, " "," "," "," "," "," "], Bh_2021%z, Bh_2021%saw_max, Bh_2021%saw_min, Bh_2021%saw, Bh_2021%saw_u, Bh_2021%asaw, Bh_2021%asaw_u)

    C API bohrium.

- type(element_t_2021), parameter, public **hs_2021** =element_t_2021("hassium", "Hs", 108, nan, nan, nan, nan, nan, nan)

hassium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hs_2021"), public, protected **capi_hs_2021** =capi_element_t_2021(["h","a","s","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","s",c_null_char, " "," "," "," "," "," "], Hs_2021%z, Hs_2021%saw_max, Hs_2021%saw_min, Hs_2021%saw, Hs_2021%saw_u, Hs_2021%asaw, Hs_2021%asaw_u)

    C API hassium.

- type(element_t_2021), parameter, public **mt_2021** =element_t_2021("meitnerium", "Mt", 109, nan, nan, nan, nan, nan, nan)

    meitnerium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mt_2021"), public, protected **capi_mt_2021** =capi_element_t_2021(["m","e","i","t","n","e","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","t",c_null_char, " "," "," "," "," "," "], Mt_2021%z, Mt_2021%saw_max, Mt_2021%saw_min, Mt_2021%saw, Mt_2021%saw_u, Mt_2021%asaw, Mt_2021%asaw_u)

    C API meitnerium.

- type(element_t_2021), parameter, public **ds_2021** =element_t_2021("darmstadtium", "Ds", 110, nan, nan, nan, nan, nan, nan)

    darmstadtium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ds_2021"), public, protected **capi_ds_2021** =capi_element_t_2021(["d","a","r","m","s","t","a","d","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","s",c_null_char, " "," "," "," "," "," "], Ds_2021%z, Ds_2021%saw_max, Ds_2021%saw_min, Ds_2021%saw, Ds_2021%saw_u, Ds_2021%asaw, Ds_2021%asaw_u)

    C API darmstadtium.

- type(element_t_2021), parameter, public **rg_2021** =element_t_2021("roentgenium", "Rg", 111, nan, nan, nan, nan, nan, nan)

    roentgenium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rg_2021"), public, protected **capi_rg_2021** =capi_element_t_2021(["r","o","e","n","t","g","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","g",c_null_char, " "," "," "," "," "," "], Rg_2021%z, Rg_2021%saw_max, Rg_2021%saw_min, Rg_2021%saw, Rg_2021%saw_u, Rg_2021%asaw, Rg_2021%asaw_u)

    C API roentgenium.

- type(element_t_2021), parameter, public **cn_2021** =element_t_2021("copernicium", "Cn", 112, nan, nan, nan, nan, nan, nan)

    copernicium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cn_2021"), public, protected **capi_cn_2021** =capi_element_t_2021(["c","o","p","e","r","n","i","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","n",c_null_char, " "," "," "," "," "," "], Cn_2021%z, Cn_2021%saw_max, Cn_2021%saw_min, Cn_2021%saw, Cn_2021%saw_u, Cn_2021%asaw, Cn_2021%asaw_u)

    C API copernicium.

- type(element_t_2021), parameter, public **nh_2021** =element_t_2021("nihonium", "Nh", 113, nan, nan, nan, nan, nan, nan)

    nihonium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Nh_2021"), public, protected **capi_nh_2021** =capi_element_t_2021(["n","i","h","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","h",c_null_char, " "," "," "," "," "," "], Nh_2021%z, Nh_2021%saw_max, Nh_2021%saw_min, Nh_2021%saw, Nh_2021%saw_u, Nh_2021%asaw, Nh_2021%asaw_u)

    C API nihonium.

- type(element_t_2021), parameter, public **fl_2021** =element_t_2021("flerovium", "Fl", 114, nan, nan, nan, nan, nan, nan)

    flerovium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fl_2021"), public, protected **capi_fl_2021** =capi_element_t_2021(["f","l","e","r","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","l",c_null_char, " "," "," "," "," "," "], Fl_2021%z, Fl_2021%saw_max, Fl_2021%saw_min, Fl_2021%saw, Fl_2021%saw_u, Fl_2021%asaw, Fl_2021%asaw_u)

    C API flerovium.

- type(element_t_2021), parameter, public **mc_2021** =element_t_2021("moscovium", "Mc", 115, nan, nan, nan, nan, nan, nan)

    moscovium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mc_2021"), public, protected **capi_mc_2021** =capi_element_t_2021(["m","o","s","c","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","c",c_null_char, " "," "," "," "," "," "], Mc_2021%z, Mc_2021%saw_max, Mc_2021%saw_min, Mc_2021%saw, Mc_2021%saw_u, Mc_2021%asaw, Mc_2021%asaw_u)

    C API moscovium.
- type(element_t_2021), parameter, public **lv_2021** =element_t_2021("livermorium", "Lv", 116, nan, nan, nan, nan, nan, nan)

    livermorium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Lv_2021"), public, protected **capi_lv_2021** =capi_element_t_2021(["l","i","v","e","r","m","o","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","v",c_null_char, " "," "," "," "," "," "], Lv_2021%z, Lv_2021%saw_max, Lv_2021%saw_min, Lv_2021%saw, Lv_2021%saw_u, Lv_2021%asaw, Lv_2021%asaw_u)

    C API livermorium.
- type(element_t_2021), parameter, public **ts_2021** =element_t_2021("tennesine", "Ts", 117, nan, nan, nan, nan, nan, nan)

    tennesine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ts_2021"), public, protected **capi_ts_2021** =capi_element_t_2021(["t","e","n","n","e","s","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","s",c_null_char, " "," "," "," "," "," "], Ts_2021%z, Ts_2021%saw_max, Ts_2021%saw_min, Ts_2021%saw, Ts_2021%saw_u, Ts_2021%asaw, Ts_2021%asaw_u)

    C API tennesine.
- type(element_t_2021), parameter, public **og_2021** =element_t_2021("organesson", "Og", 118, nan, nan, nan, nan, nan, nan)

    organesson.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Og_2021"), public, protected **capi_og_2021** =capi_element_t_2021(["o","r","g","a","n","e","s","s","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["O","g",c_null_char, " "," "," "," "," "," "], Og_2021%z, Og_2021%saw_max, Og_2021%saw_min, Og_2021%saw, Og_2021%saw_u, Og_2021%asaw, Og_2021%asaw_u)

    C API organesson.

5.3.1 Detailed Description

CIAAW Standard Atomic Weights 2021 - autogenerated.

5.4 ciaaw__saw_latest Module Reference

CIAAW Standard Atomic Weights latest - autogenerated.

Data Types

- type capi_element_t

    Object representing an element.
- type element_t

    Object representing an element.

Variables

- integer(int32), parameter, public **year** = 2021

    Year of saw.

- integer(c_int), bind(C, name="YEAR"), public, protected **capi_year** = YEAR

    C API Year of saw.

- type(element_t), parameter, public **h** =element_t("hydrogen", "H", 1, 1.00784d0, 1.00811d0, 1.00798d0, 0.←
00008d0, 1.0080d0, 0.0002d0)

    hydrogen.

- type(capi_element_t), bind(C, name="ciaaw_saw_H"), public, protected **capi_h** =capi_element_t(["h","y","d","r","o","g","e","n",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H",c_null_char, " "," "," "," "," "," "," "], H%z,
H%saw_max, H%saw_min, H%saw, H%saw_u, H%asaw, H%asaw_u)

    C API hydrogen.

- type(element_t), parameter, public **he** =element_t("helium", "He", 2, nan, nan, 4.002602d0, 0.000002d0, 4.←
0026d0, 0.0001d0)

    helium.

- type(capi_element_t), bind(C, name="ciaaw_saw_He"), public, protected **capi_he** =capi_element_t(["h","e","l","i","u","m",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","e",c_null_char, " "," "," "," "," "," "],
He%z, He%saw_max, He%saw_min, He%saw, He%saw_u, He%asaw, He%asaw_u)

    C API helium.

- type(element_t), parameter, public **li** =element_t("lithium", "Li", 3, 6.938d0, 6.997d0, 6.97d0, 0.02d0, 6.94d0,
0.06d0)

    lithium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Li"), public, protected **capi_li** =capi_element_t(["l","i","t","h","i","u","m",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","i",c_null_char, " "," "," "," "," "," "], Li%z,
Li%saw_max, Li%saw_min, Li%saw, Li%saw_u, Li%asaw, Li%asaw_u)

    C API lithium.

- type(element_t), parameter, public **be** =element_t("beryllium", "Be", 4, nan, nan, 9.0121831d0, 0.0000005d0,
9.0122d0, 0.00001d0)

    beryllium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Be"), public, protected **capi_be** =capi_element_t(["b","e","r","y","l","l","i","u","n←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","e",c_null_char, " "," "," "," "," "," "], Be%z,
Be%saw_max, Be%saw_min, Be%saw, Be%saw_u, Be%asaw, Be%asaw_u)

    C API beryllium.

- type(element_t), parameter, public **b** =element_t("boron", "B", 5, 10.806d0, 10.821d0, 10.813d0, 0.005d0,
10.81d0, 0.02d0)

    boron.

- type(capi_element_t), bind(C, name="ciaaw_saw_B"), public, protected **capi_b** =capi_element_t(["b","o","r","o","n",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B",c_null_char, " "," "," "," "," "," "," "],
B%z, B%saw_max, B%saw_min, B%saw, B%saw_u, B%asaw, B%asaw_u)

    C API boron.

- type(element_t), parameter, public **c** =element_t("carbon", "C", 6, 12.0096d0, 12.0116d0, 12.0106d0, 0.←
0006d0, 12.011d0, 0.002d0)

    carbon.

- type(capi_element_t), bind(C, name="ciaaw_saw_C"), public, protected **capi_c** =capi_element_t(["c","a","r","b","o","n",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C",c_null_char, " "," "," "," "," "," "," "], C%z,
C%saw_max, C%saw_min, C%saw, C%saw_u, C%asaw, C%asaw_u)

    C API carbon.

- type(element_t), parameter, public **n** =element_t("nitrogen", "N", 7, 14.00643d0, 14.00728d0, 14.0069d0,
0.0003d0, 14.007d0, 0.001d0)

    nitrogen.

- type(capi_element_t), bind(C, name="ciaaw_saw_N"), public, protected **capi_n** =capi_element_t(["n","i","t","r","o","g","e","n",c←
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N",c_null_char, " "," "," "," "," "," "," "], N%z,
N%saw_max, N%saw_min, N%saw, N%saw_u, N%asaw, N%asaw_u)

C API nitrogen.

- type([element_t](#)), parameter, public **o** =[element_t](#)("oxygen", "O", 8, 15.99903d0, 15.99977d0, 15.9994d0, 0.←
0003d0, 15.999d0, 0.001d0)

    oxygen.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_O"), public, protected **capi_o** =[capi_element_t](#)(["o","x","y","g","e","n",c←
_null_char, " "," " "], ["O",c_null_char, " "," "," "," "," "," "," "," "], O%z,
O%saw_max, O%saw_min, O%saw, O%saw_u, O%asaw, O%asaw_u)

    C API oxygen.

- type([element_t](#)), parameter, public **f** =[element_t](#)("fluorine", "F", 9, nan, nan, 18.998403162d0, 0.←
000000005d0, 18.998d0, 0.001d0)

    fluorine.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_F"), public, protected **capi_f** =[capi_element_t](#)(["f","l","u","o","r","i","n","e",c←
_null_char, " "," " "], ["F",c_null_char, " "," "," "," "," "," "," "," "], F%z,
F%saw_max, F%saw_min, F%saw, F%saw_u, F%asaw, F%asaw_u)

    C API fluorine.

- type([element_t](#)), parameter, public **ne** =[element_t](#)("neon", "Ne", 10, nan, nan, 20.1797d0, 0.0006d0, 20.←
180d0, 0.001d0)

    neon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ne"), public, protected **capi_ne** =[capi_element_t](#)(["n","e","o","n",c←
_null_char, " "," " "], ["N","e",c_null_char, " "," "," "," "," "," "," "],
Ne%z, Ne%saw_max, Ne%saw_min, Ne%saw, Ne%saw_u, Ne%asaw, Ne%asaw_u)

    C API neon.

- type([element_t](#)), parameter, public **na** =[element_t](#)("sodium", "Na", 11, nan, nan, 22.98976928d0, 0.←
00000002d0, 22.990d0, 0.001d0)

    sodium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Na"), public, protected **capi_na** =[capi_element_t](#)(["s","o","d","i","u","m",c←
_null_char, " "," " "], ["N","a",c_null_char, " "," "," "," "," "," "," "],
Na%z, Na%saw_max, Na%saw_min, Na%saw, Na%saw_u, Na%asaw, Na%asaw_u)

    C API sodium.

- type([element_t](#)), parameter, public **mg** =[element_t](#)("magnesium", "Mg", 12, 24.304d0, 24.307d0, 24.3055d0,
0.0009d0, 24.305d0, 0.002d0)

    magnesium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Mg"), public, protected **capi_mg** =[capi_element_t](#)(["m","a","g","n","e","s","i","u
_null_char, " "," "], ["M","g",c_null_char, " "," "," "," "," "," "," "], Mg%z,
Mg%saw_max, Mg%saw_min, Mg%saw, Mg%saw_u, Mg%asaw, Mg%asaw_u)

    C API magnesium.

- type([element_t](#)), parameter, public **al** =[element_t](#)("aluminium", "Al", 13, nan, nan, 26.9815384d0, 0.←
0000003d0, 26.982d0, 0.001d0)

    aluminium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Al"), public, protected **capi_al** =[capi_element_t](#)(["a","l","u","m","i","n","i","u","m
_null_char, " "," "], ["A","l",c_null_char, " "," "," "," "," "," "," "], Al%z,
Al%saw_max, Al%saw_min, Al%saw, Al%saw_u, Al%asaw, Al%asaw_u)

    C API aluminium.

- type([element_t](#)), parameter, public **si** =[element_t](#)("silicon", "Si", 14, 28.084d0, 28.086d0, 28.0850d0, 0.←
0006d0, 28.085d0, 0.001d0)

    silicon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Si"), public, protected **capi_si** =[capi_element_t](#)(["s","i","l","i","c","o","n",c←
_null_char, " "," " "], ["S","i",c_null_char, " "," "," "," "," "," "," "], Si%z,
Si%saw_max, Si%saw_min, Si%saw, Si%saw_u, Si%asaw, Si%asaw_u)

    C API silicon.

- type([element_t](#)), parameter, public **p** =[element_t](#)("phosphorus", "P", 15, nan, nan, 30.973761998d0, 0.←
000000005d0, 30.974d0, 0.001d0)

    phosphorus.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_P"), public, protected **capi_p** =[capi_element_t](#)(["p","h","o","s","p","h","o","r","u" _null_char, " "," "], ["P",c_null_char, " "," "," "," "," "," "," "," "], P%z, P%saw_max, P%saw_min, P%saw, P%saw_u, P%asaw, P%asaw_u)

  C API phosphorus.

- type([element_t](#)), parameter, public **s** =[element_t](#)("sulfur", "S", 16, 32.059d0, 32.076d0, 32.067d0, 0.005d0, 32.06d0, 0.02d0)

  sulfur.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_S"), public, protected **capi_s** =[capi_element_t](#)(["s","u","l","f","u","r",c↩ _null_char, " "," "], ["S",c_null_char, " "," "," "," "," "," "," "," "], S%z, S%saw_max, S%saw_min, S%saw, S%saw_u, S%asaw, S%asaw_u)

  C API sulfur.

- type([element_t](#)), parameter, public **cl** =[element_t](#)("chlorine", "Cl", 17, 35.446d0, 35.457d0, 35.451d0, 0.↩ 004d0, 35.45d0, 0.01d0)

  chlorine.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Cl"), public, protected **capi_cl** =[capi_element_t](#)(["c","h","l","o","r","i","n","e",c↩ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","l",c_null_char, " "," "," "," "," "," "], Cl%z, Cl%saw_max, Cl%saw_min, Cl%saw, Cl%saw_u, Cl%asaw, Cl%asaw_u)

  C API chlorine.

- type([element_t](#)), parameter, public **ar** =[element_t](#)("argon", "Ar", 18, 39.792d0, 39.963d0, 39.88d0, 0.05d0, 39.95d0, 0.16d0)

  argon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ar"), public, protected **capi_ar** =[capi_element_t](#)(["a","r","g","o","n",c↩ _null_char, " "," "], ["A","r",c_null_char, " "," "," "," "," "," "], Ar%z, Ar%saw_max, Ar%saw_min, Ar%saw, Ar%saw_u, Ar%asaw, Ar%asaw_u)

  C API argon.

- type([element_t](#)), parameter, public **k** =[element_t](#)("potassium", "K", 19, nan, nan, 39.0983d0, 0.0001d0, 39.↩ 098d0, 0.001d0)

  potassium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_K"), public, protected **capi_k** =[capi_element_t](#)(["p","o","t","a","s","s","i","u","m" _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["K",c_null_char, " "," "," "," "," "," "," "], K%z, K%saw_max, K%saw_min, K%saw, K%saw_u, K%asaw, K%asaw_u)

  C API potassium.

- type([element_t](#)), parameter, public **ca** =[element_t](#)("calcium", "Ca", 20, nan, nan, 40.078d0, 0.004d0, 40.↩ 078d0, 0.004d0)

  calcium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ca"), public, protected **capi_ca** =[capi_element_t](#)(["c","a","l","c","i","u","m",c↩ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","a",c_null_char, " "," "," "," "," "," "], Ca%z, Ca%saw_max, Ca%saw_min, Ca%saw, Ca%saw_u, Ca%asaw, Ca%asaw_u)

  C API calcium.

- type([element_t](#)), parameter, public **sc** =[element_t](#)("scandium", "Sc", 21, nan, nan, 44.955907d0, 0.000004d0, 44.956d0, 0.001d0)

  scandium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sc"), public, protected **capi_sc** =[capi_element_t](#)(["s","c","a","n","d","i","u","m" _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","c",c_null_char, " "," "," "," "," "," "], Sc%z, Sc%saw_max, Sc%saw_min, Sc%saw, Sc%saw_u, Sc%asaw, Sc%asaw_u)

  C API scandium.

- type([element_t](#)), parameter, public **ti** =[element_t](#)("titanium", "Ti", 22, nan, nan, 47.867d0, 0.001d0, 47.867d0, 0.001d0)

  titanium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ti"), public, protected **capi_ti** =[capi_element_t](#)(["t","i","t","a","n","i","u","m",c↩ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","i",c_null_char, " "," "," "," "," "," "], Ti%z, Ti%saw_max, Ti%saw_min, Ti%saw, Ti%saw_u, Ti%asaw, Ti%asaw_u)

  C API titanium.

- type(element_t), parameter, public **v** =element_t("vanadium", "V", 23, nan, nan, 50.9415d0, 0.0001d0, 50.↩
  942d0, 0.001d0)

    vanadium.
- type(capi_element_t), bind(C, name="ciaaw_saw_V"), public, protected **capi_v** =capi_element_t(["v","a","n","a","d","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["V",c_null_char, " "," "," "," "," "," " "], V%z,
  V%saw_max, V%saw_min, V%saw, V%saw_u, V%asaw, V%asaw_u)

    C API vanadium.
- type(element_t), parameter, public **cr** =element_t("chromium", "Cr", 24, nan, nan, 51.9961d0, 0.0006d0,
  51.996d0, 0.001d0)

    chromium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cr"), public, protected **capi_cr** =capi_element_t(["c","h","r","o","m","i","u","m",
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","r",c_null_char, " "," "," "," "," " "], Cr%z,
  Cr%saw_max, Cr%saw_min, Cr%saw, Cr%saw_u, Cr%asaw, Cr%asaw_u)

    C API chromium.
- type(element_t), parameter, public **mn** =element_t("manganese", "Mn", 25, nan, nan, 54.938043d0, 0.↩
  000002d0, 54.938d0, 0.001d0)

    manganese.
- type(capi_element_t), bind(C, name="ciaaw_saw_Mn"), public, protected **capi_mn** =capi_element_t(["m","a","n","g","a","n","e","
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["M","n",c_null_char, " "," "," "," "," " "], Mn%z,
  Mn%saw_max, Mn%saw_min, Mn%saw, Mn%saw_u, Mn%asaw, Mn%asaw_u)

    C API manganese.
- type(element_t), parameter, public **fe** =element_t("iron", "Fe", 26, nan, nan, 55.845d0, 0.002d0, 55.845d0,
  0.002d0)

    iron.
- type(capi_element_t), bind(C, name="ciaaw_saw_Fe"), public, protected **capi_fe** =capi_element_t(["i","r","o","n",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["F","e",c_null_char, " "," "," "," "," " "],
  Fe%z, Fe%saw_max, Fe%saw_min, Fe%saw, Fe%saw_u, Fe%asaw, Fe%asaw_u)

    C API iron.
- type(element_t), parameter, public **co** =element_t("cobalt", "Co", 27, nan, nan, 58.933194d0, 0.000003d0,
  58.933d0, 0.001d0)

    cobalt.
- type(capi_element_t), bind(C, name="ciaaw_saw_Co"), public, protected **capi_co** =capi_element_t(["c","o","b","a","l","t",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","o",c_null_char, " "," "," "," "," " "],
  Co%z, Co%saw_max, Co%saw_min, Co%saw, Co%saw_u, Co%asaw, Co%asaw_u)

    C API cobalt.
- type(element_t), parameter, public **ni** =element_t("nickel", "Ni", 28, nan, nan, 58.6934d0, 0.0004d0, 58.↩
  693d0, 0.001d0)

    nickel.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ni"), public, protected **capi_ni** =capi_element_t(["n","i","c","k","e","l",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","i",c_null_char, " "," "," "," "," " "], Ni%z,
  Ni%saw_max, Ni%saw_min, Ni%saw, Ni%saw_u, Ni%asaw, Ni%asaw_u)

    C API nickel.
- type(element_t), parameter, public **cu** =element_t("copper", "Cu", 29, nan, nan, 63.546d0, 0.003d0, 63.↩
  546d0, 0.003d0)

    copper.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cu"), public, protected **capi_cu** =capi_element_t(["c","o","p","p","e","r",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","u",c_null_char, " "," "," "," "," " "],
  Cu%z, Cu%saw_max, Cu%saw_min, Cu%saw, Cu%saw_u, Cu%asaw, Cu%asaw_u)

    C API copper.
- type(element_t), parameter, public **zn** =element_t("zinc", "Zn", 30, nan, nan, 65.38d0, 0.02d0, 65.38d0, 0.↩
  02d0)

    zinc.

- type(capi_element_t), bind(C, name="ciaaw_saw_Zn"), public, protected **capi_zn** =capi_element_t(["z","i","n","c",c↩
  _null_char, " "," " "], ["Z","n",c_null_char, " "," "," "," "," "," "],
  Zn%z, Zn%saw_max, Zn%saw_min, Zn%saw, Zn%saw_u, Zn%asaw, Zn%asaw_u)

    C API zinc.
- type(element_t), parameter, public **ga** =element_t("gallium", "Ga", 31, nan, nan, 69.723d0, 0.001d0, 69.↩
  723d0, 0.001d0)

    gallium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ga"), public, protected **capi_ga** =capi_element_t(["g","a","l","l","i","u","m",c↩
  _null_char, " "," " "], ["G","a",c_null_char, " "," "," "," "," "," "], Ga%z,
  Ga%saw_max, Ga%saw_min, Ga%saw, Ga%saw_u, Ga%asaw, Ga%asaw_u)

    C API gallium.
- type(element_t), parameter, public **ge** =element_t("germanium", "Ge", 32, nan, nan, 72.630d0, 0.008d0,
  72.630d0, 0.008d0)

    germanium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ge"), public, protected **capi_ge** =capi_element_t(["g","e","r","m","a","n","i","u"↩
  _null_char, " "," " "], ["G","e",c_null_char, " "," "," "," "," "," "], Ge%z,
  Ge%saw_max, Ge%saw_min, Ge%saw, Ge%saw_u, Ge%asaw, Ge%asaw_u)

    C API germanium.
- type(element_t), parameter, public **as** =element_t("arsenic", "As", 33, nan, nan, 74.921595d0, 0.000006d0,
  74.922d0, 0.001d0)

    arsenic.
- type(capi_element_t), bind(C, name="ciaaw_saw_As"), public, protected **capi_as** =capi_element_t(["a","r","s","e","n","i","c",c↩
  _null_char, " "," " "], ["A","s",c_null_char, " "," "," "," "," "," "], As%z,
  As%saw_max, As%saw_min, As%saw, As%saw_u, As%asaw, As%asaw_u)

    C API arsenic.
- type(element_t), parameter, public **se** =element_t("selenium", "Se", 34, nan, nan, 78.971d0, 0.008d0, 78.↩
  971d0, 0.008d0)

    selenium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Se"), public, protected **capi_se** =capi_element_t(["s","e","l","e","n","i","u","m",
  _null_char, " "," " "], ["S","e",c_null_char, " "," "," "," "," "," "], Se%z,
  Se%saw_max, Se%saw_min, Se%saw, Se%saw_u, Se%asaw, Se%asaw_u)

    C API selenium.
- type(element_t), parameter, public **br** =element_t("bromine", "Br", 35, 79.901d0, 79.907d0, 79.904d0, 0.↩
  002d0, 79.904d0, 0.003d0)

    bromine.
- type(capi_element_t), bind(C, name="ciaaw_saw_Br"), public, protected **capi_br** =capi_element_t(["b","r","o","m","i","n","e",c↩
  _null_char, " "," " "], ["B","r",c_null_char, " "," "," "," "," "," "], Br%z,
  Br%saw_max, Br%saw_min, Br%saw, Br%saw_u, Br%asaw, Br%asaw_u)

    C API bromine.
- type(element_t), parameter, public **kr** =element_t("krypton", "Kr", 36, nan, nan, 83.798d0, 0.002d0, 83.798d0,
  0.002d0)

    krypton.
- type(capi_element_t), bind(C, name="ciaaw_saw_Kr"), public, protected **capi_kr** =capi_element_t(["k","r","y","p","t","o","n",c↩
  _null_char, " "," " "], ["K","r",c_null_char, " "," "," "," "," "," "], Kr%z,
  Kr%saw_max, Kr%saw_min, Kr%saw, Kr%saw_u, Kr%asaw, Kr%asaw_u)

    C API krypton.
- type(element_t), parameter, public **rb** =element_t("rubidium", "Rb", 37, nan, nan, 85.4678d0, 0.0003d0, 85.↩
  468d0, 0.001d0)

    rubidium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Rb"), public, protected **capi_rb** =capi_element_t(["r","u","b","i","d","i","u","m",c↩
  _null_char, " "," " "], ["R","b",c_null_char, " "," "," "," "," "," "], Rb%z,
  Rb%saw_max, Rb%saw_min, Rb%saw, Rb%saw_u, Rb%asaw, Rb%asaw_u)

    C API rubidium.

- type(element_t), parameter, public **sr** =element_t("strontium", "Sr", 38, nan, nan, 87.62d0, 0.01d0, 87.62d0, 0.01d0)

    strontium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Sr"), public, protected **capi_sr** =capi_element_t(["s","t","r","o","n","t","i","u","m _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","r",c_null_char, " "," "," "," "," "," "], Sr%z, Sr%saw_max, Sr%saw_min, Sr%saw, Sr%saw_u, Sr%asaw, Sr%asaw_u)

    C API strontium.
- type(element_t), parameter, public **y** =element_t("yttrium", "Y", 39, nan, nan, 88.905838d0, 0.000002d0, 88.906d0, 0.001d0)

    yttrium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Y"), public, protected **capi_y** =capi_element_t(["y","t","t","r","i","u","m",c← _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Y",c_null_char, " "," "," "," "," "," "], Y%z, Y%saw_max, Y%saw_min, Y%saw, Y%saw_u, Y%asaw, Y%asaw_u)

    C API yttrium.
- type(element_t), parameter, public **zr** =element_t("zirconium", "Zr", 40, nan, nan, 91.224d0, 0.002d0, 91.← 224d0, 0.002d0)

    zirconium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Zr"), public, protected **capi_zr** =capi_element_t(["z","i","r","c","o","n","i","u","m _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Z","r",c_null_char, " "," "," "," "," "," "], Zr%z, Zr%saw_max, Zr%saw_min, Zr%saw, Zr%saw_u, Zr%asaw, Zr%asaw_u)

    C API zirconium.
- type(element_t), parameter, public **nb** =element_t("nobium", "Nb", 41, nan, nan, 92.90637d0, 0.00001d0, 92.906d0, 0.001d0)

    nobium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Nb"), public, protected **capi_nb** =capi_element_t(["n","o","b","i","u","m",c← _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","b",c_null_char, " "," "," "," "," "," "], Nb%z, Nb%saw_max, Nb%saw_min, Nb%saw, Nb%saw_u, Nb%asaw, Nb%asaw_u)

    C API nobium.
- type(element_t), parameter, public **mo** =element_t("molybdenum", "Mo", 42, nan, nan, 95.95d0, 0.01d0, 95.95d0, 0.01d0)

    molybdenum.
- type(capi_element_t), bind(C, name="ciaaw_saw_Mo"), public, protected **capi_mo** =capi_element_t(["m","o","l","y","b","d","e","← _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","o",c_null_char, " "," "," "," "," "," "], Mo%z, Mo%saw_max, Mo%saw_min, Mo%saw, Mo%saw_u, Mo%asaw, Mo%asaw_u)

    C API molybdenum.
- type(element_t), parameter, public **tc** =element_t("technetium", "Tc", 43, nan, nan, nan, nan, nan, nan)

    technetium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Tc"), public, protected **capi_tc** =capi_element_t(["t","e","c","h","n","e","t","i","u _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","c",c_null_char, " "," "," "," "," "," "], Tc%z, Tc%saw_max, Tc%saw_min, Tc%saw, Tc%saw_u, Tc%asaw, Tc%asaw_u)

    C API technetium.
- type(element_t), parameter, public **ru** =element_t("ruthenium", "Ru", 44, nan, nan, 101.07d0, 0.02d0, 101.← 07d0, 0.02d0)

    ruthenium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ru"), public, protected **capi_ru** =capi_element_t(["r","u","t","h","e","n","i","u"," _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","u",c_null_char, " "," "," "," "," "," "], Ru%z, Ru%saw_max, Ru%saw_min, Ru%saw, Ru%saw_u, Ru%asaw, Ru%asaw_u)

    C API ruthenium.
- type(element_t), parameter, public **rh** =element_t("rhodium", "Rh", 45, nan, nan, 102.90549d0, 0.00002d0, 102.91d0, 0.01d0)

    rhodium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Rh"), public, protected **capi_rh** =capi_element_t(["r","h","o","d","i","u","m",c← _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","h",c_null_char, " "," "," "," "," "," "], Rh%z, Rh%saw_max, Rh%saw_min, Rh%saw, Rh%saw_u, Rh%asaw, Rh%asaw_u)

C API rhodium.

- type(element_t), parameter, public **pd** =element_t("palladium", "Pd", 46, nan, nan, 106.42d0, 0.01d0, 106.←↩
42d0, 0.01d0)

    palladium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pd"), public, protected **capi_pd** =capi_element_t(["p","a","l","l","a","d","i","u","←↩
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","d",c_null_char, " "," "," "," "," "], Pd%z,
Pd%saw_max, Pd%saw_min, Pd%saw, Pd%saw_u, Pd%asaw, Pd%asaw_u)

    C API palladium.

- type(element_t), parameter, public **ag** =element_t("silver", "Ag", 47, nan, nan, 107.8682d0, 0.0002d0, 107.←↩
87d0, 0.01d0)

    silver.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ag"), public, protected **capi_ag** =capi_element_t(["s","i","l","v","e","r",c←↩
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","g",c_null_char, " "," "," "," "," "],
Ag%z, Ag%saw_max, Ag%saw_min, Ag%saw, Ag%saw_u, Ag%asaw, Ag%asaw_u)

    C API silver.

- type(element_t), parameter, public **cd** =element_t("cadmium", "Cd", 48, nan, nan, 112.414d0, 0.004d0,
112.41d0, 0.01d0)

    cadmium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cd"), public, protected **capi_cd** =capi_element_t(["c","a","d","m","i","u","m",c←↩
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","d",c_null_char, " "," "," "," "," "], Cd%z,
Cd%saw_max, Cd%saw_min, Cd%saw, Cd%saw_u, Cd%asaw, Cd%asaw_u)

    C API cadmium.

- type(element_t), parameter, public **in** =element_t("indium", "In", 49, nan, nan, 114.818d0, 0.001d0, 114.82d0,
0.01d0)

    indium.

- type(capi_element_t), bind(C, name="ciaaw_saw_In"), public, protected **capi_in** =capi_element_t(["i","n","d","i","u","m",c←↩
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["I","n",c_null_char, " "," "," "," "," "], In%z,
In%saw_max, In%saw_min, In%saw, In%saw_u, In%asaw, In%asaw_u)

    C API indium.

- type(element_t), parameter, public **sn** =element_t("tin", "Sn", 50, nan, nan, 118.70d0, 0.007d0, 118.71d0,
0.01d0)

    tin.

- type(capi_element_t), bind(C, name="ciaaw_saw_Sn"), public, protected **capi_sn** =capi_element_t(["t","i","n",c←↩
_null_char, " "," "], ["S","n",c_null_char, " "," "," "," "," "
"], Sn%z, Sn%saw_max, Sn%saw_min, Sn%saw, Sn%saw_u, Sn%asaw, Sn%asaw_u)

    C API tin.

- type(element_t), parameter, public **sb** =element_t("antimony", "Sb", 51, nan, nan, 121.760d0, 0.001d0,
121.76d0, 0.01d0)

    antimony.

- type(capi_element_t), bind(C, name="ciaaw_saw_Sb"), public, protected **capi_sb** =capi_element_t(["a","n","t","i","m","o","n","y",
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","b",c_null_char, " "," "," "," "," "], Sb%z,
Sb%saw_max, Sb%saw_min, Sb%saw, Sb%saw_u, Sb%asaw, Sb%asaw_u)

    C API antimony.

- type(element_t), parameter, public **te** =element_t("tellurium", "Te", 52, nan, nan, 127.60d0, 0.03d0, 127.60d0,
0.03d0)

    tellurium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Te"), public, protected **capi_te** =capi_element_t(["t","e","l","l","u","r","i","u","m"
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","e",c_null_char, " "," "," "," "," "], Te%z,
Te%saw_max, Te%saw_min, Te%saw, Te%saw_u, Te%asaw, Te%asaw_u)

    C API tellurium.

- type(element_t), parameter, public **i** =element_t("iodine", "I", 53, nan, nan, 126.90447d0, 0.00003d0, 126.←↩
90d0, 0.01d0)

    iodine.

- type(capi_element_t), bind(C, name="ciaaw_saw_I"), public, protected **capi_i** =capi_element_t(["i","o","d","i","n","e",c↩
  _null_char, " "," " "], ["I",c_null_char, " "," "," "," "," "," " "], I%z,
  I%saw_max, I%saw_min, I%saw, I%saw_u, I%asaw, I%asaw_u)

    C API iodine.
- type(element_t), parameter, public **xe** =element_t("xenon", "Xe", 54, nan, nan, 131.293d0, 0.006d0, 131.↩
  29d0, 0.01d0)

    xenon.
- type(capi_element_t), bind(C, name="ciaaw_saw_Xe"), public, protected **capi_xe** =capi_element_t(["x","e","n","o","n",c↩
  _null_char, " "," " "], ["X","e",c_null_char, " "," "," "," "," "," " "],
  Xe%z, Xe%saw_max, Xe%saw_min, Xe%saw, Xe%saw_u, Xe%asaw, Xe%asaw_u)

    C API xenon.
- type(element_t), parameter, public **cs** =element_t("caesium", "Cs", 55, nan, nan, 132.90545196d0, 0.↩
  00000006d0, 132.91d0, 0.01d0)

    caesium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cs"), public, protected **capi_cs** =capi_element_t(["c","a","e","s","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","s",c_null_char, " "," "," "," "," "," " "], Cs%z,
  Cs%saw_max, Cs%saw_min, Cs%saw, Cs%saw_u, Cs%asaw, Cs%asaw_u)

    C API caesium.
- type(element_t), parameter, public **ba** =element_t("barium", "Ba", 56, nan, nan, 137.327d0, 0.007d0, 137.↩
  33d0, 0.01d0)

    barium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ba"), public, protected **capi_ba** =capi_element_t(["b","a","r","i","u","m",c↩
  _null_char, " "," " "], ["B","a",c_null_char, " "," "," "," "," "," " "],
  Ba%z, Ba%saw_max, Ba%saw_min, Ba%saw, Ba%saw_u, Ba%asaw, Ba%asaw_u)

    C API barium.
- type(element_t), parameter, public **la** =element_t("lanthanum", "La", 57, nan, nan, 138.90547d0, 0.00007d0,
  138.91d0, 0.01d0)

    lanthanum.
- type(capi_element_t), bind(C, name="ciaaw_saw_La"), public, protected **capi_la** =capi_element_t(["l","a","n","t","h","a","n","u",↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["L","a",c_null_char, " "," "," "," "," "," " "], La%z,
  La%saw_max, La%saw_min, La%saw, La%saw_u, La%asaw, La%asaw_u)

    C API lanthanum.
- type(element_t), parameter, public **ce** =element_t("cerium", "Ce", 58, nan, nan, 140.116d0, 0.001d0, 140.↩
  12d0, 0.01d0)

    cerium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ce"), public, protected **capi_ce** =capi_element_t(["c","e","r","i","u","m",c↩
  _null_char, " "," " "], ["C","e",c_null_char, " "," "," "," "," "," " "],
  Ce%z, Ce%saw_max, Ce%saw_min, Ce%saw, Ce%saw_u, Ce%asaw, Ce%asaw_u)

    C API cerium.
- type(element_t), parameter, public **pr** =element_t("praseodymium", "Pr", 59, nan, nan, 140.90766d0, 0.↩
  00001d0, 140.91d0, 0.01d0)

    praseodymium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Pr"), public, protected **capi_pr** =capi_element_t(["p","r","a","s","e","o","d","y",↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["P","r",c_null_char, " "," "," "," "," "," " "], Pr%z, Pr%saw_max,
  Pr%saw_min, Pr%saw, Pr%saw_u, Pr%asaw, Pr%asaw_u)

    C API praseodymium.
- type(element_t), parameter, public **nd** =element_t("neodymium", "Nd", 60, nan, nan, 144.242d0, 0.003d0,
  144.24d0, 0.01d0)

    neodymium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Nd"), public, protected **capi_nd** =capi_element_t(["n","e","o","d","y","m","i","u"↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","d",c_null_char, " "," "," "," "," "," " "], Nd%z,
  Nd%saw_max, Nd%saw_min, Nd%saw, Nd%saw_u, Nd%asaw, Nd%asaw_u)

    C API neodymium.
- type(element_t), parameter, public **pm** =element_t("promethium", "Pm", 61, nan, nan, nan, nan, nan, nan)

promethium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pm"), public, protected **capi_pm** =capi_element_t(["p","r","o","m","e","t","h","i"
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","m",c_null_char, " "," "," "," "," "," "], Pm%z,
Pm%saw_max, Pm%saw_min, Pm%saw, Pm%saw_u, Pm%asaw, Pm%asaw_u)

  C API promethium.

- type(element_t), parameter, public **sm** =element_t("samarium", "Sm", 62, nan, nan, 150.36d0, 0.02d0, 150.↵
36d0, 0.02d0)

  samarium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Sm"), public, protected **capi_sm** =capi_element_t(["s","a","m","a","r","i","u","m
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","m",c_null_char, " "," "," "," "," "," "], Sm%z,
Sm%saw_max, Sm%saw_min, Sm%saw, Sm%saw_u, Sm%asaw, Sm%asaw_u)

  C API samarium.

- type(element_t), parameter, public **eu** =element_t("europium", "Eu", 63, nan, nan, 151.964d0, 0.001d0,
151.96d0, 0.01d0)

  europium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Eu"), public, protected **capi_eu** =capi_element_t(["e","u","r","o","p","i","u","m"
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","u",c_null_char, " "," "," "," "," "," "], Eu%z,
Eu%saw_max, Eu%saw_min, Eu%saw, Eu%saw_u, Eu%asaw, Eu%asaw_u)

  C API europium.

- type(element_t), parameter, public **gd** =element_t("gadolinium", "Gd", 64, nan, nan, 157.25d0, 0.03d0, 157.↵
25d0, 0.03d0)

  gadolinium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Gd"), public, protected **capi_gd** =capi_element_t(["g","a","d","o","l","i","n","i","
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","d",c_null_char, " "," "," "," "," "," "], Gd%z,
Gd%saw_max, Gd%saw_min, Gd%saw, Gd%saw_u, Gd%asaw, Gd%asaw_u)

  C API gadolinium.

- type(element_t), parameter, public **tb** =element_t("terbium", "Tb", 65, nan, nan, 158.925354d0, 0.000007d0,
158.93d0, 0.01d0)

  terbium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Tb"), public, protected **capi_tb** =capi_element_t(["t","e","r","b","i","u","m",c↵
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","b",c_null_char, " "," "," "," "," "," "], Tb%z,
Tb%saw_max, Tb%saw_min, Tb%saw, Tb%saw_u, Tb%asaw, Tb%asaw_u)

  C API terbium.

- type(element_t), parameter, public **dy** =element_t("dysprosium", "Dy", 66, nan, nan, 162.500d0, 0.001d0,
162.50d0, 0.01d0)

  dysprosium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Dy"), public, protected **capi_dy** =capi_element_t(["d","y","s","p","r","o","s","i","
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","y",c_null_char, " "," "," "," "," "," "], Dy%z,
Dy%saw_max, Dy%saw_min, Dy%saw, Dy%saw_u, Dy%asaw, Dy%asaw_u)

  C API dysprosium.

- type(element_t), parameter, public **ho** =element_t("holmium", "Ho", 67, nan, nan, 164.930329d0, 0.↵
000005d0, 164.93d0, 0.01d0)

  holmium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ho"), public, protected **capi_ho** =capi_element_t(["h","o","l","m","i","u","m",c↵
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","o",c_null_char, " "," "," "," "," "," "], Ho%z,
Ho%saw_max, Ho%saw_min, Ho%saw, Ho%saw_u, Ho%asaw, Ho%asaw_u)

  C API holmium.

- type(element_t), parameter, public **er** =element_t("erbium", "Er", 68, nan, nan, 167.259d0, 0.003d0, 167.↵
26d0, 0.01d0)

  erbium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Er"), public, protected **capi_er** =capi_element_t(["e","r","b","i","u","m",c↵
_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","r",c_null_char, " "," "," "," "," "," "], Er%z,
Er%saw_max, Er%saw_min, Er%saw, Er%saw_u, Er%asaw, Er%asaw_u)

  C API erbium.

- type([element_t](#)), parameter, public **tm** =[element_t](#)("thulium", "Tm", 69, nan, nan, 168.934219d0, 0.000005d0, 168.93d0, 0.01d0)

  thulium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Tm"), public, protected **capi_tm** =[capi_element_t](#)(["t","h","u","l","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","m",c_null_char, " "," "," "," "," "," "], Tm%z,
  Tm%saw_max, Tm%saw_min, Tm%saw, Tm%saw_u, Tm%asaw, Tm%asaw_u)

  C API thulium.
- type([element_t](#)), parameter, public **yb** =[element_t](#)("ytterbium", "Yb", 70, nan, nan, 173.045d0, 0.010d0, 173.05d0, 0.02d0)

  ytterbium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Yb"), public, protected **capi_yb** =[capi_element_t](#)(["y","t","t","e","r","b","i","u","n↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Y","b",c_null_char, " "," "," "," "," "," "], Yb%z,
  Yb%saw_max, Yb%saw_min, Yb%saw, Yb%saw_u, Yb%asaw, Yb%asaw_u)

  C API ytterbium.
- type([element_t](#)), parameter, public **lu** =[element_t](#)("lutetium", "Lu", 71, nan, nan, 174.9668d0, 0.0001d0, 174.97d0, 0.01d0)

  lutetium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Lu"), public, protected **capi_lu** =[capi_element_t](#)(["l","u","t","e","t","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","u",c_null_char, " "," "," "," "," "," "], Lu%z,
  Lu%saw_max, Lu%saw_min, Lu%saw, Lu%saw_u, Lu%asaw, Lu%asaw_u)

  C API lutetium.
- type([element_t](#)), parameter, public **hf** =[element_t](#)("hafnium", "Hf", 72, nan, nan, 178.486d0, 0.006d0, 178.↩
  49d0, 0.01d0)

  hafnium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Hf"), public, protected **capi_hf** =[capi_element_t](#)(["h","a","f","n","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","f",c_null_char, " "," "," "," "," "," "], Hf%z,
  Hf%saw_max, Hf%saw_min, Hf%saw, Hf%saw_u, Hf%asaw, Hf%asaw_u)

  C API hafnium.
- type([element_t](#)), parameter, public **ta** =[element_t](#)("tantalum", "Ta", 73, nan, nan, 180.94788d0, 0.00002d0, 180.95d0, 0.01d0)

  tantalum.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ta"), public, protected **capi_ta** =[capi_element_t](#)(["t","a","n","t","a","l","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","a",c_null_char, " "," "," "," "," "," "], Ta%z,
  Ta%saw_max, Ta%saw_min, Ta%saw, Ta%saw_u, Ta%asaw, Ta%asaw_u)

  C API tantalum.
- type([element_t](#)), parameter, public **w** =[element_t](#)("tungsten", "W", 74, nan, nan, 183.84d0, 0.01d0, 183.84d0, 0.01d0)

  tungsten.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_W"), public, protected **capi_w** =[capi_element_t](#)(["t","u","n","g","s","t","e","n",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["W",c_null_char, " "," "," "," "," "," "], W%z,
  W%saw_max, W%saw_min, W%saw, W%saw_u, W%asaw, W%asaw_u)

  C API tungsten.
- type([element_t](#)), parameter, public **re** =[element_t](#)("rhenium", "Re", 75, nan, nan, 186.207d0, 0.001d0, 186.↩
  21d0, 0.01d0)

  rhenium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Re"), public, protected **capi_re** =[capi_element_t](#)(["r","h","e","n","i","u","m",c↩
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","e",c_null_char, " "," "," "," "," "," "], Re%z,
  Re%saw_max, Re%saw_min, Re%saw, Re%saw_u, Re%asaw, Re%asaw_u)

  C API rhenium.
- type([element_t](#)), parameter, public **os** =[element_t](#)("osmium", "Os", 76, nan, nan, 190.23d0, 0.03d0, 190.↩
  23d0, 0.03d0)

  osmium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Os"), public, protected **capi_os** =capi_element_t(["o","s","m","i","u","m",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["O","s",c_null_char, " "," "," "," "," "," "],
  Os%z, Os%saw_max, Os%saw_min, Os%saw, Os%saw_u, Os%asaw, Os%asaw_u)

    C API osmium.
- type(element_t), parameter, public **ir** =element_t("iridium", "Ir", 77, nan, nan, 192.217d0, 0.002d0, 192.22d0,
  0.01d0)

    iridium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ir"), public, protected **capi_ir** =capi_element_t(["i","r","i","d","i","u","m",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["I","r",c_null_char, " "," "," "," "," "," "], Ir%z,
  Ir%saw_max, Ir%saw_min, Ir%saw, Ir%saw_u, Ir%asaw, Ir%asaw_u)

    C API iridium.
- type(element_t), parameter, public **pt** =element_t("platinum", "Pt", 78, nan, nan, 195.084d0, 0.009d0, 195.←
  08d0, 0.02d0)

    platinum.
- type(capi_element_t), bind(C, name="ciaaw_saw_Pt"), public, protected **capi_pt** =capi_element_t(["p","l","a","t","i","n","u","m",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","t",c_null_char, " "," "," "," "," "," "],
  Pt%z, Pt%saw_max, Pt%saw_min, Pt%saw, Pt%saw_u, Pt%asaw, Pt%asaw_u)

    C API platinum.
- type(element_t), parameter, public **au** =element_t("gold", "Au", 79, nan, nan, 196.966570d0, 0.000004d0,
  196.97d0, 0.01d0)

    gold.
- type(capi_element_t), bind(C, name="ciaaw_saw_Au"), public, protected **capi_au** =capi_element_t(["g","o","l","d",c←
  _null_char, " "," "], ["A","u",c_null_char, " "," "," "," "," "," "],
  Au%z, Au%saw_max, Au%saw_min, Au%saw, Au%saw_u, Au%asaw, Au%asaw_u)

    C API gold.
- type(element_t), parameter, public **hg** =element_t("mercury", "Hg", 80, nan, nan, 200.592d0, 0.003d0, 200.←
  59d0, 0.01d0)

    mercury.
- type(capi_element_t), bind(C, name="ciaaw_saw_Hg"), public, protected **capi_hg** =capi_element_t(["m","e","r","c","u","r","y",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","g",c_null_char, " "," "," "," "," "," "], Hg%z,
  Hg%saw_max, Hg%saw_min, Hg%saw, Hg%saw_u, Hg%asaw, Hg%asaw_u)

    C API mercury.
- type(element_t), parameter, public **tl** =element_t("thallium", "Tl", 81, 204.382d0, 204.385d0, 204.3835d0,
  0.0009d0, 204.38d0, 0.01d0)

    thallium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Tl"), public, protected **capi_tl** =capi_element_t(["t","h","a","l","l","i","u","m",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","l",c_null_char, " "," "," "," "," "," "],
  Tl%z, Tl%saw_max, Tl%saw_min, Tl%saw, Tl%saw_u, Tl%asaw, Tl%asaw_u)

    C API thallium.
- type(element_t), parameter, public **pb** =element_t("lead", "Pb", 82, 206.14d0, 207.94d0, 207.0d0, 0.6d0,
  207.2d0, 1.1d0)

    lead.
- type(capi_element_t), bind(C, name="ciaaw_saw_Pb"), public, protected **capi_pb** =capi_element_t(["l","e","a","d",c←
  _null_char, " "," "], ["P","b",c_null_char, " "," "," "," "," "," "],
  Pb%z, Pb%saw_max, Pb%saw_min, Pb%saw, Pb%saw_u, Pb%asaw, Pb%asaw_u)

    C API lead.
- type(element_t), parameter, public **bi** =element_t("bismuth", "Bi", 83, nan, nan, 208.98040d0, 0.00001d0,
  208.98d0, 0.01d0)

    bismuth.
- type(capi_element_t), bind(C, name="ciaaw_saw_Bi"), public, protected **capi_bi** =capi_element_t(["b","i","s","m","u","t","h",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","i",c_null_char, " "," "," "," "," "," "], Bi%z,
  Bi%saw_max, Bi%saw_min, Bi%saw, Bi%saw_u, Bi%asaw, Bi%asaw_u)

    C API bismuth.
- type(element_t), parameter, public **po** =element_t("polonium", "Po", 84, nan, nan, nan, nan, nan, nan)

polonium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Po"), public, protected **capi_po** =[capi_element_t](#)(["p","o","l","o","n","i","u","m", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","o",c_null_char, " "," "," "," "," "," "], Po%z, Po%saw_max, Po%saw_min, Po%saw, Po%saw_u, Po%asaw, Po%asaw_u)

  C API polonium.

- type([element_t](#)), parameter, public **at** =[element_t](#)("astatine", "At", 85, nan, nan, nan, nan, nan, nan)

  astatine.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_At"), public, protected **capi_at** =[capi_element_t](#)(["a","s","t","a","t","i","n","e",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","t",c_null_char, " "," "," "," "," "," "], At%z, At%saw_max, At%saw_min, At%saw, At%saw_u, At%asaw, At%asaw_u)

  C API astatine.

- type([element_t](#)), parameter, public **rn** =[element_t](#)("radon", "Rn", 86, nan, nan, nan, nan, nan, nan)

  radon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Rn"), public, protected **capi_rn** =[capi_element_t](#)(["r","a","d","o","n",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","n",c_null_char, " "," "," "," "," "," "], Rn%z, Rn%saw_max, Rn%saw_min, Rn%saw, Rn%saw_u, Rn%asaw, Rn%asaw_u)

  C API radon.

- type([element_t](#)), parameter, public **fr** =[element_t](#)("francium", "Fr", 87, nan, nan, nan, nan, nan, nan)

  francium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Fr"), public, protected **capi_fr** =[capi_element_t](#)(["f","r","a","n","c","i","u","m",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","r",c_null_char, " "," "," "," "," "," "], Fr%z, Fr%saw_max, Fr%saw_min, Fr%saw, Fr%saw_u, Fr%asaw, Fr%asaw_u)

  C API francium.

- type([element_t](#)), parameter, public **ra** =[element_t](#)("radium", "Ra", 88, nan, nan, nan, nan, nan, nan)

  radium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ra"), public, protected **capi_ra** =[capi_element_t](#)(["r","a","d","i","u","m",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","a",c_null_char, " "," "," "," "," "," "], Ra%z, Ra%saw_max, Ra%saw_min, Ra%saw, Ra%saw_u, Ra%asaw, Ra%asaw_u)

  C API radium.

- type([element_t](#)), parameter, public **ac** =[element_t](#)("actinium", "Ac", 89, nan, nan, nan, nan, nan, nan)

  actinium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ac"), public, protected **capi_ac** =[capi_element_t](#)(["a","c","t","i","n","i","u","m",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","c",c_null_char, " "," "," "," "," "," "], Ac%z, Ac%saw_max, Ac%saw_min, Ac%saw, Ac%saw_u, Ac%asaw, Ac%asaw_u)

  C API actinium.

- type([element_t](#)), parameter, public **th** =[element_t](#)("thorium", "Th", 90, nan, nan, 232.0377d0, 0.0004d0, 232.04d0, 0.01d0)

  thorium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Th"), public, protected **capi_th** =[capi_element_t](#)(["t","h","o","r","i","u","m",c↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","h",c_null_char, " "," "," "," "," "," "], Th%z, Th%saw_max, Th%saw_min, Th%saw, Th%saw_u, Th%asaw, Th%asaw_u)

  C API thorium.

- type([element_t](#)), parameter, public **pa** =[element_t](#)("protactinium", "Pa", 91, nan, nan, 231.03588d0, 0.↵ 00001d0, 231.04d0, 0.01d0)

  protactinium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Pa"), public, protected **capi_pa** =[capi_element_t](#)(["p","r","o","t","a","c","t","i","↵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "], ["P","a",c_null_char, " "," "," "," "," "," "], Pa%z, Pa%saw_max, Pa%saw_min, Pa%saw, Pa%saw_u, Pa%asaw, Pa%asaw_u)

  C API protactinium.

- type([element_t](#)), parameter, public **u** =[element_t](#)("uranium", "U", 92, nan, nan, 238.02891d0, 0.00003d0, 238.03d0, 0.01d0)

  uranium.

- type(capi_element_t), bind(C, name="ciaaw_saw_U"), public, protected **capi_u** =capi_element_t(["u","r","a","n","i","u","m",c←↩
  _null_char, " "," "], ["U",c_null_char, " "," "," "," "," "," "," "], U%z,
  U%saw_max, U%saw_min, U%saw, U%saw_u, U%asaw, U%asaw_u)

  C API uranium.

- type(element_t), parameter, public **np** =element_t("neptunium", "Np", 93, nan, nan, nan, nan, nan, nan)

  neptunium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Np"), public, protected **capi_np** =capi_element_t(["n","e","p","t","u","n","i","u",
  _null_char, " "," "], ["N","p",c_null_char, " "," "," "," "," "," "], Np%z,
  Np%saw_max, Np%saw_min, Np%saw, Np%saw_u, Np%asaw, Np%asaw_u)

  C API neptunium.

- type(element_t), parameter, public **pu** =element_t("plutonium", "Pu", 94, nan, nan, nan, nan, nan, nan)

  plutonium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pu"), public, protected **capi_pu** =capi_element_t(["p","l","u","t","o","n","i","u","
  _null_char, " "," "], ["P","u",c_null_char, " "," "," "," "," "," "], Pu%z,
  Pu%saw_max, Pu%saw_min, Pu%saw, Pu%saw_u, Pu%asaw, Pu%asaw_u)

  C API plutonium.

- type(element_t), parameter, public **am** =element_t("americium", "Am", 95, nan, nan, nan, nan, nan, nan)

  americium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Am"), public, protected **capi_am** =capi_element_t(["a","m","e","r","i","c","i","u"
  _null_char, " "," "], ["A","m",c_null_char, " "," "," "," "," "," "], Am%z,
  Am%saw_max, Am%saw_min, Am%saw, Am%saw_u, Am%asaw, Am%asaw_u)

  C API americium.

- type(element_t), parameter, public **cm** =element_t("curium", "Cm", 96, nan, nan, nan, nan, nan, nan)

  curium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cm"), public, protected **capi_cm** =capi_element_t(["c","u","r","i","u","m",c←↩
  _null_char, " "," "], ["C","m",c_null_char, " "," "," "," "," "," "],
  Cm%z, Cm%saw_max, Cm%saw_min, Cm%saw, Cm%saw_u, Cm%asaw, Cm%asaw_u)

  C API curium.

- type(element_t), parameter, public **bk** =element_t("berkelium", "Bk", 97, nan, nan, nan, nan, nan, nan)

  berkelium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Bk"), public, protected **capi_bk** =capi_element_t(["b","e","r","k","e","l","i","u","
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","k",c_null_char, " "," "," "," "," "," "], Bk%z,
  Bk%saw_max, Bk%saw_min, Bk%saw, Bk%saw_u, Bk%asaw, Bk%asaw_u)

  C API berkelium.

- type(element_t), parameter, public **cf** =element_t("californium", "Cf", 98, nan, nan, nan, nan, nan, nan)

  californium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cf"), public, protected **capi_cf** =capi_element_t(["c","a","l","i","f","o","r","n","i",
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","f",c_null_char, " "," "," "," "," "," "], Cf%z, Cf%saw_max,
  Cf%saw_min, Cf%saw, Cf%saw_u, Cf%asaw, Cf%asaw_u)

  C API californium.

- type(element_t), parameter, public **es** =element_t("einsteinium", "Es", 99, nan, nan, nan, nan, nan, nan)

  einsteinium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Es"), public, protected **capi_es** =capi_element_t(["e","i","n","s","t","e","i","n","i
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","s",c_null_char, " "," "," "," "," "," "], Es%z, Es%saw_max,
  Es%saw_min, Es%saw, Es%saw_u, Es%asaw, Es%asaw_u)

  C API einsteinium.

- type(element_t), parameter, public **fm** =element_t("fermium", "Fm", 100, nan, nan, nan, nan, nan, nan)

  fermium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Fm"), public, protected **capi_fm** =capi_element_t(["f","e","r","m","i","u","m",c←
  _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","m",c_null_char, " "," "," "," "," "," "], Fm%z,
  Fm%saw_max, Fm%saw_min, Fm%saw, Fm%saw_u, Fm%asaw, Fm%asaw_u)

  C API fermium.

- type(element_t), parameter, public **md** =element_t("mendelevium", "Md", 101, nan, nan, nan, nan, nan, nan)

mendelevium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Md"), public, protected **capi_md** =capi_element_t(["m","e","n","d","e","l","e","v ⟵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["M","d",c_null_char, " "," "," "," "," "," " "], Md%z, Md%saw⟵ _max, Md%saw_min, Md%saw, Md%saw_u, Md%asaw, Md%asaw_u)

  C API mendelevium.
- type(element_t), parameter, public **no** =element_t("nobelium", "No", 102, nan, nan, nan, nan, nan, nan)

  nobelium.
- type(capi_element_t), bind(C, name="ciaaw_saw_No"), public, protected **capi_no** =capi_element_t(["n","o","b","e","l","i","u","m" _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","o",c_null_char, " "," "," "," "," "," " "], No%z, No%saw_max, No%saw_min, No%saw, No%saw_u, No%asaw, No%asaw_u)

  C API nobelium.
- type(element_t), parameter, public **lr** =element_t("lawrencium", "Lr", 103, nan, nan, nan, nan, nan, nan)

  lawrencium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Lr"), public, protected **capi_lr** =capi_element_t(["l","a","w","r","e","n","c","i","u" _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["L","r",c_null_char, " "," "," "," "," "," " "], Lr%z, Lr%saw_max, Lr%saw_min, Lr%saw, Lr%saw_u, Lr%asaw, Lr%asaw_u)

  C API lawrencium.
- type(element_t), parameter, public **rf** =element_t("rutherfordium", "Rf", 104, nan, nan, nan, nan, nan, nan)

  rutherfordium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Rf"), public, protected **capi_rf** =capi_element_t(["r","u","t","h","e","r","f","o","r _null_char, " "," "," "," "," "," "," "," "," "," "," " "], ["R","f",c_null_char, " "," "," "," "," "," " "], Rf%z, Rf%saw_max, Rf%saw_min, Rf%saw, Rf%saw_u, Rf%asaw, Rf%asaw_u)

  C API rutherfordium.
- type(element_t), parameter, public **db** =element_t("dubnium", "Db", 105, nan, nan, nan, nan, nan, nan)

  dubnium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Db"), public, protected **capi_db** =capi_element_t(["d","u","b","n","i","u","m",c⟵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["D","b",c_null_char, " "," "," "," "," "," " "], Db%z, Db%saw_max, Db%saw_min, Db%saw, Db%saw_u, Db%asaw, Db%asaw_u)

  C API dubnium.
- type(element_t), parameter, public **sg** =element_t("seaborgium", "Sg", 106, nan, nan, nan, nan, nan, nan)

  seaborgium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Sg"), public, protected **capi_sg** =capi_element_t(["s","e","a","b","o","r","g","i", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["S","g",c_null_char, " "," "," "," "," "," " "], Sg%z, Sg%saw_max, Sg%saw_min, Sg%saw, Sg%saw_u, Sg%asaw, Sg%asaw_u)

  C API seaborgium.
- type(element_t), parameter, public **bh** =element_t("bohrium", "Bh", 107, nan, nan, nan, nan, nan, nan)

  bohrium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Bh"), public, protected **capi_bh** =capi_element_t(["b","o","h","r","i","u","m",c⟵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["B","h",c_null_char, " "," "," "," "," "," " "], Bh%z, Bh%saw_max, Bh%saw_min, Bh%saw, Bh%saw_u, Bh%asaw, Bh%asaw_u)

  C API bohrium.
- type(element_t), parameter, public **hs** =element_t("hassium", "Hs", 108, nan, nan, nan, nan, nan, nan)

  hassium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Hs"), public, protected **capi_hs** =capi_element_t(["h","a","s","s","i","u","m",c⟵ _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["H","s",c_null_char, " "," "," "," "," "," " "], Hs%z, Hs%saw_max, Hs%saw_min, Hs%saw, Hs%saw_u, Hs%asaw, Hs%asaw_u)

  C API hassium.
- type(element_t), parameter, public **mt** =element_t("meitnerium", "Mt", 109, nan, nan, nan, nan, nan, nan)

  meitnerium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Mt"), public, protected **capi_mt** =capi_element_t(["m","e","i","t","n","e","r","i", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "], ["M","t",c_null_char, " "," "," "," "," "," " "], Mt%z, Mt%saw_max, Mt%saw_min, Mt%saw, Mt%saw_u, Mt%asaw, Mt%asaw_u)

  C API meitnerium.

- type([element_t](#)), parameter, public **ds** =[element_t](#)("darmstadtium", "Ds", 110, nan, nan, nan, nan, nan, nan)

    darmstadtium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ds"), public, protected **capi_ds** =[capi_element_t](#)(["d","a","r","m","s","t","a","d", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","s",c_null_char, " "," "," "," "," "," "], Ds%z, Ds%saw_max, Ds%saw_min, Ds%saw, Ds%saw_u, Ds%asaw, Ds%asaw_u)

    C API darmstadtium.
- type([element_t](#)), parameter, public **rg** =[element_t](#)("roentgenium", "Rg", 111, nan, nan, nan, nan, nan, nan)

    roentgenium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Rg"), public, protected **capi_rg** =[capi_element_t](#)(["r","o","e","n","t","g","e","n", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","g",c_null_char, " "," "," "," "," "," "], Rg%z, Rg%saw_max, Rg%saw_min, Rg%saw, Rg%saw_u, Rg%asaw, Rg%asaw_u)

    C API roentgenium.
- type([element_t](#)), parameter, public **cn** =[element_t](#)("copernicium", "Cn", 112, nan, nan, nan, nan, nan, nan)

    copernicium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Cn"), public, protected **capi_cn** =[capi_element_t](#)(["c","o","p","e","r","n","i","c", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","n",c_null_char, " "," "," "," "," "," "], Cn%z, Cn%saw_max, Cn%saw_min, Cn%saw, Cn%saw_u, Cn%asaw, Cn%asaw_u)

    C API copernicium.
- type([element_t](#)), parameter, public **nh** =[element_t](#)("nihonium", "Nh", 113, nan, nan, nan, nan, nan, nan)

    nihonium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Nh"), public, protected **capi_nh** =[capi_element_t](#)(["n","i","h","o","n","i","u","m", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","h",c_null_char, " "," "," "," "," "," "], Nh%z, Nh%saw_max, Nh%saw_min, Nh%saw, Nh%saw_u, Nh%asaw, Nh%asaw_u)

    C API nihonium.
- type([element_t](#)), parameter, public **fl** =[element_t](#)("flerovium", "Fl", 114, nan, nan, nan, nan, nan, nan)

    flerovium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Fl"), public, protected **capi_fl** =[capi_element_t](#)(["f","l","e","r","o","v","i","u","m", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","l",c_null_char, " "," "," "," "," "," "], Fl%z, Fl%saw_max, Fl%saw_min, Fl%saw, Fl%saw_u, Fl%asaw, Fl%asaw_u)

    C API flerovium.
- type([element_t](#)), parameter, public **mc** =[element_t](#)("moscovium", "Mc", 115, nan, nan, nan, nan, nan, nan)

    moscovium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Mc"), public, protected **capi_mc** =[capi_element_t](#)(["m","o","s","c","o","v","i","u", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","c",c_null_char, " "," "," "," "," "," "], Mc%z, Mc%saw_max, Mc%saw_min, Mc%saw, Mc%saw_u, Mc%asaw, Mc%asaw_u)

    C API moscovium.
- type([element_t](#)), parameter, public **lv** =[element_t](#)("livermorium", "Lv", 116, nan, nan, nan, nan, nan, nan)

    livermorium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Lv"), public, protected **capi_lv** =[capi_element_t](#)(["l","i","v","e","r","m","o","r","i", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","v",c_null_char, " "," "," "," "," "," "], Lv%z, Lv%saw_max, Lv%saw_min, Lv%saw, Lv%saw_u, Lv%asaw, Lv%asaw_u)

    C API livermorium.
- type([element_t](#)), parameter, public **ts** =[element_t](#)("tennesine", "Ts", 117, nan, nan, nan, nan, nan, nan)

    tennesine.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ts"), public, protected **capi_ts** =[capi_element_t](#)(["t","e","n","n","e","s","i","n","e", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","s",c_null_char, " "," "," "," "," "," "], Ts%z, Ts%saw_max, Ts%saw_min, Ts%saw, Ts%saw_u, Ts%asaw, Ts%asaw_u)

    C API tennesine.
- type([element_t](#)), parameter, public **og** =[element_t](#)("organesson", "Og", 118, nan, nan, nan, nan, nan, nan)

    organesson.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Og"), public, protected **capi_og** =[capi_element_t](#)(["o","r","g","a","n","e","s","s", _null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["O","g",c_null_char, " "," "," "," "," "," "], Og%z, Og%saw_max, Og%saw_min, Og%saw, Og%saw_u, Og%asaw, Og%asaw_u)

    C API organesson.

5.4.1 Detailed Description

CIAAW Standard Atomic Weights latest - autogenerated.

5.5 ciaaw__version Module Reference

CIAAW version.

Functions/Subroutines

- character(len=:) function, pointer, public get_version ()

    Get the version.

5.5.1 Detailed Description

CIAAW version.

5.5.2 Function/Subroutine Documentation

5.5.2.1 get_version()

```
character(len=:)  function, pointer, public ciaaw__version::get_version
```

Get the version.

Returns

   fptr Pointer to the version string.

Chapter 6

Data Type Documentation

6.1 ciaaw__saw_latest::capi_element_t Type Reference

Object representing an element.

Data Fields

- character(kind=c_char), dimension(25) **element**

    Element name.
- character(kind=c_char), dimension(9) **symbol**

    Element symbol.
- integer(c_int) **z**

    Element atomic number.
- real(c_double) **saw_min**

    Min standard atomic weight.
- real(c_double) **saw_max**

    Max standard atomic weight.
- real(c_double) **saw**

    Value standard atomic weight.
- real(c_double) **saw_u**

    Uncertainty standard atomic weight.
- real(c_double) **asaw**

    Abridged value standard atomic weight.
- real(c_double) **asaw_u**

    Abridged uncertainty standard atomic weight.

6.1.1 Detailed Description

Object representing an element.

The documentation for this type was generated from the following file:

- ciaaw_saw_latest.f90

6.2 ciaaw__saw_2021::capi_element_t_2021 Type Reference

Object representing an element.

Data Fields

- character(kind=c_char), dimension(25) **element**

    Element name.
- character(kind=c_char), dimension(9) **symbol**

    Element symbol.
- integer(c_int) **z**

    Element atomic number.
- real(c_double) **saw_min**

    Min standard atomic weight.
- real(c_double) **saw_max**

    Max standard atomic weight.
- real(c_double) **saw**

    Value standard atomic weight.
- real(c_double) **saw_u**

    Uncertainty standard atomic weight.
- real(c_double) **asaw**

    Abridged value standard atomic weight.
- real(c_double) **asaw_u**

    Abridged uncertainty standard atomic weight.

6.2.1 Detailed Description

Object representing an element.

The documentation for this type was generated from the following file:

- ciaaw_saw_2021.f90

6.3 ciaaw_saw_element_t Struct Reference

C API Object representing an element.

```
#include <ciaaw_saw_latest.h>
```

Data Fields

- char element [25]
- char symbol [9]
- int z
- double saw_min
- double saw_max
- double saw
- double saw_u
- double asaw
- double asaw_u

6.3.1 Detailed Description

C API Object representing an element.

6.3.2 Field Documentation

6.3.2.1 asaw

```
double ciaaw_saw_element_t::asaw
```

Abridged value standard atomic weight.

6.3.2.2 asaw_u

```
double ciaaw_saw_element_t::asaw_u
```

Abridged uncertainty standard atomic weight.

6.3.2.3 element

```
char ciaaw_saw_element_t::element[25]
```

Element name.

6.3.2.4 saw

```
double ciaaw_saw_element_t::saw
```

Value standard atomic weight.

6.3.2.5 saw_max

```
double ciaaw_saw_element_t::saw_max
```

Max standard atomic weight.

6.3.2.6 saw_min

```
double ciaaw_saw_element_t::saw_min
```

Min standard atomic weight.

6.3.2.7 saw_u

```
double ciaaw_saw_element_t::saw_u
```

Uncertainty standard atomic weight.

6.3.2.8 symbol

```
char ciaaw_saw_element_t::symbol[9]
```

Element symbol.

6.3.2.9 z

```
int ciaaw_saw_element_t::z
```

Element atomic number.

The documentation for this struct was generated from the following file:

- ciaaw_saw_latest.h

6.4 ciaaw_saw_element_t_2021 Struct Reference

C API Object representing an element.

```
#include <ciaaw_saw_2021.h>
```

Data Fields

- char element [25]
- char symbol [9]
- int z
- double saw_min
- double saw_max
- double saw
- double saw_u
- double asaw
- double asaw_u

6.4.1 Detailed Description

C API Object representing an element.

6.4.2 Field Documentation

6.4.2.1 asaw

```
double ciaaw_saw_element_t_2021::asaw
```

Abridged value standard atomic weight.

6.4.2.2 asaw_u

```
double ciaaw_saw_element_t_2021::asaw_u
```

Abridged uncertainty standard atomic weight.

6.4.2.3 element

```
char ciaaw_saw_element_t_2021::element[25]
```

Element name.

6.4.2.4 saw

```
double ciaaw_saw_element_t_2021::saw
```

Value standard atomic weight.

6.4.2.5 saw_max

```
double ciaaw_saw_element_t_2021::saw_max
```

Max standard atomic weight.

6.4.2.6 saw_min

```
double ciaaw_saw_element_t_2021::saw_min
```

Min standard atomic weight.

6.4.2.7 saw_u

```
double ciaaw_saw_element_t_2021::saw_u
```

Uncertainty standard atomic weight.

6.4.2.8 symbol

```
char ciaaw_saw_element_t_2021::symbol[9]
```

Element symbol.

6.4.2.9 z

```
int ciaaw_saw_element_t_2021::z
```

Element atomic number.

The documentation for this struct was generated from the following file:

- ciaaw_saw_2021.h

6.5 ciaaw__saw_latest::element_t Type Reference

Object representing an element.

Data Fields

- character(len=24) **element**

    Element name.
- character(len=8) **symbol**

    Element symbol.
- integer(int32) **z**

    Element atomic number.
- real(real64) **saw_min**

    Min standard atomic weight.
- real(real64) **saw_max**

    Max standard atomic weight.
- real(real64) **saw**

    Value standard atomic weight.
- real(real64) **saw_u**

    Uncertainty standard atomic weight.
- real(real64) **asaw**

    Abridged value standard atomic weight.
- real(real64) **asaw_u**

    Abridged uncertainty standard atomic weight.

6.5.1 Detailed Description

Object representing an element.

The documentation for this type was generated from the following file:

- ciaaw_saw_latest.f90

6.6 ciaaw__saw_2021::element_t_2021 Type Reference

Object representing an element.

Data Fields

- character(len=24) **element**

  Element name.
- character(len=8) **symbol**

  Element symbol.
- integer(int32) **z**

  Element atomic number.
- real(real64) **saw_min**

  Min standard atomic weight.
- real(real64) **saw_max**

  Max standard atomic weight.
- real(real64) **saw**

  Value standard atomic weight.
- real(real64) **saw_u**

  Uncertainty standard atomic weight.
- real(real64) **asaw**

  Abridged value standard atomic weight.
- real(real64) **asaw_u**

  Abridged uncertainty standard atomic weight.

6.6.1 Detailed Description

Object representing an element.

The documentation for this type was generated from the following file:

- ciaaw_saw_2021.f90

Chapter 7

File Documentation

7.1 ciaaw.h File Reference

Main C header for the CIAAW library.

```
#include "ciaaw_version.h"
#include "ciaaw_saw.h"
```
Include dependency graph for ciaaw.h:
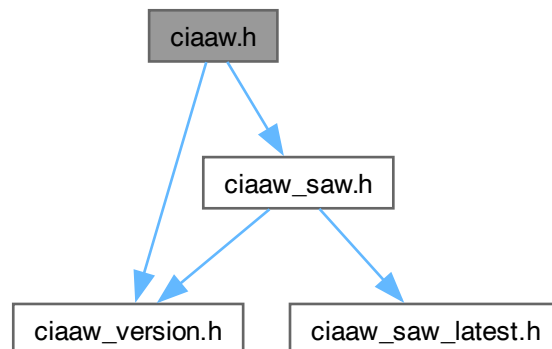
7.1.1 Detailed Description

Main C header for the CIAAW library.

7.2 ciaaw.h

Go to the documentation of this file.
```
00001
00005 #ifndef CIAAW_H
00006 #define CIAAW_H
00007
00008 #include "ciaaw_version.h"
00009 #include "ciaaw_saw.h"
00010
00011 #endif
```

7.3 ciaaw_saw.h File Reference

C API Standard Atomic Weights.

```
#include "ciaaw_version.h"
#include "ciaaw_saw_latest.h"
```
Include dependency graph for ciaaw_saw.h:
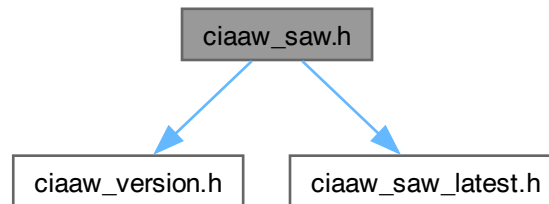
This graph shows which files directly or indirectly include this file:
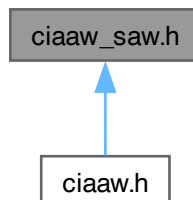
7.3.1 Detailed Description

C API Standard Atomic Weights.

7.4 ciaaw_saw.h

[Go to the documentation of this file.](#)
```
00001
00006 #ifndef CIAAW_SAW_H
00007 #define CIAAW_SAW_H
00008 #include "ciaaw_version.h"
00009 #include "ciaaw_saw_latest.h"
00010 #endif
```

7.5 ciaaw_saw_2021.h File Reference

C API Standard Atomic Weights 2021 - autogenerated.

Data Structures

- struct ciaaw_saw_element_t_2021

    C API Object representing an element.

Variables

- ADD_IMPORT const int YEAR_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_H_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_He_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Li_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Be_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_B_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_C_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_N_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_O_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_F_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ne_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Na_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mg_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Al_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Si_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_P_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_S_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cl_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ar_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_K_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ca_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sc_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ti_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_V_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mn_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fe_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Co_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ni_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cu_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zn_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ga_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ge_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_As_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Se_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Br_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Kr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Y_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zr_2021

- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mo_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tc_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ru_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rh_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pd_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ag_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cd_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_In_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sn_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Te_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_I_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Xe_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cs_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ba_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_La_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ce_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nd_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pm_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sm_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Eu_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Gd_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Dy_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ho_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Er_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tm_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Yb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lu_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hf_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ta_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_W_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Re_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Os_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ir_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pt_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Au_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hg_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tl_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pb_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bi_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Po_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_At_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rn_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ra_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ac_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Th_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pa_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_U_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Np_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pu_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Am_2021

- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cm_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bk_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cf_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Es_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fm_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Md_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_No_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lr_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rf_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Db_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sg_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bh_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hs_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mt_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ds_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rg_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cn_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nh_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fl_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mc_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lv_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ts_2021
- ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Og_2021

7.5.1 Detailed Description

C API Standard Atomic Weights 2021 - autogenerated.

7.5.2 Variable Documentation

7.5.2.1 ciaaw_saw_Ac_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ac_2021 [extern]

C API Ac_2021.

7.5.2.2 ciaaw_saw_Ag_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ag_2021 [extern]

C API Ag_2021.

7.5.2.3 ciaaw_saw_Al_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Al_2021 [extern]

C API Al_2021.

7.5.2.4 ciaaw_saw_Am_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Am_2021 [extern]

C API Am_2021.

7.5.2.5 ciaaw_saw_Ar_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Ar_2021 [extern]

C API Ar_2021.

7.5.2.6 ciaaw_saw_As_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_As_2021 [extern]

C API As_2021.

7.5.2.7 ciaaw_saw_At_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_At_2021 [extern]

C API At_2021.

7.5.2.8 ciaaw_saw_Au_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Au_2021 [extern]

C API Au_2021.

7.5.2.9 ciaaw_saw_B_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_B_2021 [extern]

C API B_2021.

7.5.2.10 ciaaw_saw_Ba_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Ba_2021 [extern]

C API Ba_2021.

7.5.2.11 ciaaw_saw_Be_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Be_2021 [extern]

C API Be_2021.

7.5.2.12 ciaaw_saw_Bh_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bh_2021 [extern]

C API Bh_2021.

7.5.2.13 ciaaw_saw_Bi_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bi_2021 [extern]

C API Bi_2021.

7.5.2.14 ciaaw_saw_Bk_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bk_2021 [extern]

C API Bk_2021.

7.5.2.15 ciaaw_saw_Br_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Br_2021 [extern]

C API Br_2021.

7.5.2.16 ciaaw_saw_C_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_C_2021 [extern]

C API C_2021.

7.5.2.17 ciaaw_saw_Ca_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ca_2021 [extern]

C API Ca_2021.

7.5.2.18 ciaaw_saw_Cd_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cd_2021 [extern]

C API Cd_2021.

7.5.2.19 ciaaw_saw_Ce_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ce_2021 [extern]

C API Ce_2021.

7.5.2.20 ciaaw_saw_Cf_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cf_2021 [extern]

C API Cf_2021.

7.5.2.21 ciaaw_saw_Cl_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cl_2021 [extern]

C API Cl_2021.

7.5.2.22 ciaaw_saw_Cm_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cm_2021 [extern]

C API Cm_2021.

7.5.2.23 ciaaw_saw_Cn_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cn_2021 [extern]

C API Cn_2021.

7.5.2.24 ciaaw_saw_Co_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Co_2021 [extern]

C API Co_2021.

7.5.2.25 ciaaw_saw_Cr_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cr_2021 [extern]

C API Cr_2021.

7.5.2.26 ciaaw_saw_Cs_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cs_2021 [extern]

C API Cs_2021.

7.5.2.27 ciaaw_saw_Cu_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cu_2021 [extern]

C API Cu_2021.

7.5.2.28 ciaaw_saw_Db_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Db_2021 [extern]

C API Db_2021.

7.5.2.29 ciaaw_saw_Ds_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ds_2021 [extern]

C API Ds_2021.

7.5.2.30 ciaaw_saw_Dy_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Dy_2021 [extern]

C API Dy_2021.

7.5.2.31 ciaaw_saw_Er_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Er_2021 [extern]

C API Er_2021.

7.5.2.32 ciaaw_saw_Es_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Es_2021 [extern]

C API Es_2021.

7.5.2.33 ciaaw_saw_Eu_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Eu_2021 [extern]

C API Eu_2021.

7.5.2.34 ciaaw_saw_F_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_F_2021 [extern]

C API F_2021.

7.5.2.35 ciaaw_saw_Fe_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fe_2021 [extern]

C API Fe_2021.

7.5.2.36 ciaaw_saw_Fl_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fl_2021 [extern]

C API Fl_2021.

7.5.2.37 ciaaw_saw_Fm_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fm_2021 [extern]

C API Fm_2021.

7.5.2.38 ciaaw_saw_Fr_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fr_2021 [extern]

C API Fr_2021.

7.5.2.39 ciaaw_saw_Ga_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ga_2021 [extern]

C API Ga_2021.

7.5.2.40 ciaaw_saw_Gd_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Gd_2021 [extern]

C API Gd_2021.

7.5.2.41 ciaaw_saw_Ge_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ge_2021 [extern]

C API Ge_2021.

7.5.2.42 ciaaw_saw_H_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_H_2021 [extern]

C API H_2021.

7.5.2.43 ciaaw_saw_He_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_He_2021 [extern]

C API He_2021.

7.5.2.44 ciaaw_saw_Hf_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hf_2021 [extern]

C API Hf_2021.

7.5.2.45 ciaaw_saw_Hg_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hg_2021 [extern]

C API Hg_2021.

7.5.2.46 ciaaw_saw_Ho_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ho_2021 [extern]

C API Ho_2021.

7.5.2.47 ciaaw_saw_Hs_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hs_2021 [extern]

C API Hs_2021.

7.5.2.48 ciaaw_saw_I_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_I_2021 [extern]

C API I_2021.

7.5.2.49 ciaaw_saw_In_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_In_2021 [extern]

C API In_2021.

7.5.2.50 ciaaw_saw_Ir_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ir_2021 [extern]

C API Ir_2021.

7.5.2.51 ciaaw_saw_K_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_K_2021 [extern]

C API K_2021.

7.5.2.52 ciaaw_saw_Kr_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Kr_2021 [extern]

C API Kr_2021.

7.5.2.53 ciaaw_saw_La_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_La_2021 [extern]

C API La_2021.

7.5.2.54 ciaaw_saw_Li_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Li_2021 [extern]

C API Li_2021.

7.5.2.55 ciaaw_saw_Lr_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Lr_2021 [extern]

C API Lr_2021.

7.5.2.56 ciaaw_saw_Lu_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Lu_2021 [extern]

C API Lu_2021.

7.5.2.57 ciaaw_saw_Lv_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Lv_2021 [extern]

C API Lv_2021.

7.5.2.58 ciaaw_saw_Mc_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Mc_2021 [extern]

C API Mc_2021.

7.5.2.59 ciaaw_saw_Md_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Md_2021 [extern]

C API Md_2021.

7.5.2.60 ciaaw_saw_Mg_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mg_2021 [extern]

C API Mg_2021.

7.5.2.61 ciaaw_saw_Mn_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mn_2021 [extern]

C API Mn_2021.

7.5.2.62 ciaaw_saw_Mo_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mo_2021 [extern]

C API Mo_2021.

7.5.2.63 ciaaw_saw_Mt_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mt_2021 [extern]

C API Mt_2021.

7.5.2.64 ciaaw_saw_N_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_N_2021 [extern]

C API N_2021.

7.5.2.65 ciaaw_saw_Na_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Na_2021 [extern]

C API Na_2021.

7.5.2.66 ciaaw_saw_Nb_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nb_2021 [extern]

C API Nb_2021.

7.5.2.67 ciaaw_saw_Nd_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nd_2021 [extern]

C API Nd_2021.

7.5.2.68 ciaaw_saw_Ne_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ne_2021 [extern]

C API Ne_2021.

7.5.2.69 ciaaw_saw_Nh_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nh_2021 [extern]

C API Nh_2021.

7.5.2.70 ciaaw_saw_Ni_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ni_2021 [extern]

C API Ni_2021.

7.5.2.71 ciaaw_saw_No_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_No_2021 [extern]

C API No_2021.

7.5.2.72 ciaaw_saw_Np_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Np_2021 [extern]

C API Np_2021.

7.5.2.73 ciaaw_saw_O_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_O_2021 [extern]

C API O_2021.

7.5.2.74 ciaaw_saw_Og_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Og_2021 [extern]

C API Og_2021.

7.5.2.75 ciaaw_saw_Os_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Os_2021 [extern]

C API Os_2021.

7.5.2.76 ciaaw_saw_P_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_P_2021 [extern]

C API P_2021.

7.5.2.77 ciaaw_saw_Pa_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pa_2021 [extern]

C API Pa_2021.

7.5.2.78 ciaaw_saw_Pb_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pb_2021 [extern]

C API Pb_2021.

7.5.2.79 ciaaw_saw_Pd_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pd_2021 [extern]

C API Pd_2021.

7.5.2.80 ciaaw_saw_Pm_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pm_2021 [extern]

C API Pm_2021.

7.5.2.81 ciaaw_saw_Po_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Po_2021 [extern]

C API Po_2021.

7.5.2.82 ciaaw_saw_Pr_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pr_2021 [extern]

C API Pr_2021.

7.5.2.83 ciaaw_saw_Pt_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pt_2021 [extern]

C API Pt_2021.

7.5.2.84 ciaaw_saw_Pu_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Pu_2021 [extern]

C API Pu_2021.

7.5.2.85 ciaaw_saw_Ra_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Ra_2021 [extern]

C API Ra_2021.

7.5.2.86 ciaaw_saw_Rb_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Rb_2021 [extern]

C API Rb_2021.

7.5.2.87 ciaaw_saw_Re_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Re_2021 [extern]

C API Re_2021.

7.5.2.88 ciaaw_saw_Rf_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Rf_2021 [extern]

C API Rf_2021.

7.5.2.89 ciaaw_saw_Rg_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Rg_2021 [extern]

C API Rg_2021.

7.5.2.90 ciaaw_saw_Rh_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Rh_2021 [extern]

C API Rh_2021.

7.5.2.91 ciaaw_saw_Rn_2021

ADD_IMPORT const struct [ciaaw_saw_element_t_2021](#) ciaaw_saw_Rn_2021 [extern]

C API Rn_2021.

7.5.2.92 ciaaw_saw_Ru_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ru_2021 [extern]

C API Ru_2021.

7.5.2.93 ciaaw_saw_S_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_S_2021 [extern]

C API S_2021.

7.5.2.94 ciaaw_saw_Sb_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sb_2021 [extern]

C API Sb_2021.

7.5.2.95 ciaaw_saw_Sc_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sc_2021 [extern]

C API Sc_2021.

7.5.2.96 ciaaw_saw_Se_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Se_2021 [extern]

C API Se_2021.

7.5.2.97 ciaaw_saw_Sg_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sg_2021 [extern]

C API Sg_2021.

7.5.2.98 ciaaw_saw_Si_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Si_2021 [extern]

C API Si_2021.

7.5.2.99 ciaaw_saw_Sm_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sm_2021 [extern]

C API Sm_2021.

7.5.2.100 ciaaw_saw_Sn_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sn_2021 [extern]

C API Sn_2021.

7.5.2.101 ciaaw_saw_Sr_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sr_2021 [extern]

C API Sr_2021.

7.5.2.102 ciaaw_saw_Ta_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ta_2021 [extern]

C API Ta_2021.

7.5.2.103 ciaaw_saw_Tb_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tb_2021 [extern]

C API Tb_2021.

7.5.2.104 ciaaw_saw_Tc_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tc_2021 [extern]

C API Tc_2021.

7.5.2.105 ciaaw_saw_Te_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Te_2021 [extern]

C API Te_2021.

7.5.2.106 ciaaw_saw_Th_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Th_2021 [extern]

C API Th_2021.

7.5.2.107 ciaaw_saw_Ti_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ti_2021 [extern]

C API Ti_2021.

7.5.2.108 ciaaw_saw_Tl_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tl_2021 [extern]

C API Tl_2021.

7.5.2.109 ciaaw_saw_Tm_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tm_2021 [extern]

C API Tm_2021.

7.5.2.110 ciaaw_saw_Ts_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ts_2021 [extern]

C API Ts_2021.

7.5.2.111 ciaaw_saw_U_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_U_2021 [extern]

C API U_2021.

7.5.2.112 ciaaw_saw_V_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_V_2021 [extern]

C API V_2021.

7.5.2.113 ciaaw_saw_W_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_W_2021 [extern]

C API W_2021.

7.5.2.114 ciaaw_saw_Xe_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Xe_2021 [extern]

C API Xe_2021.

7.5.2.115 ciaaw_saw_Y_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Y_2021 [extern]

C API Y_2021.

7.5.2.116 ciaaw_saw_Yb_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Yb_2021 [extern]

C API Yb_2021.

7.5.2.117 ciaaw_saw_Zn_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zn_2021 [extern]

C API Zn_2021.

7.5.2.118 ciaaw_saw_Zr_2021

ADD_IMPORT const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zr_2021 [extern]

C API Zr_2021.

7.5.2.119 YEAR_2021

ADD_IMPORT const int YEAR_2021 [extern]

C API Publication year.

7.6 ciaaw_saw_2021.h

Go to the documentation of this file.

```
00001
00006 #ifndef CIAAW_SAW_H_2021
00007 #define CIAAW_SAW_H_2021
00008 #if _MSC_VER
00009 #define ADD_IMPORT __declspec(dllimport)
00010 #else
00011 #define ADD_IMPORT
00012 #endif
00014 struct ciaaw_saw_element_t_2021{
00015     char element[25];
00016     char symbol[9];
00017     int z;
00018     double saw_min;
00019     double saw_max;
00020     double saw;
00021     double saw_u;
00022     double asaw;
00023     double asaw_u;
00024 };
00025 ADD_IMPORT extern const int YEAR_2021;
00027 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_H_2021;
00028 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_He_2021;
00029 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Li_2021;
00030 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Be_2021;
00031 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_B_2021;
00032 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_C_2021;
00033 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_N_2021;
00034 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_O_2021;
00035 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_F_2021;
00036 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ne_2021;
00037 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Na_2021;
00038 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mg_2021;
00039 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Al_2021;
00040 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Si_2021;
00041 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_P_2021;
```

```
00042 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_S_2021;
00043 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cl_2021;
00044 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ar_2021;
00045 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_K_2021;
00046 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ca_2021;
00047 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sc_2021;
00048 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ti_2021;
00049 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_V_2021;
00050 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cr_2021;
00051 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mn_2021;
00052 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fe_2021;
00053 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Co_2021;
00054 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ni_2021;
00055 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cu_2021;
00056 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zn_2021;
00057 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ga_2021;
00058 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ge_2021;
00059 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_As_2021;
00060 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Se_2021;
00061 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Br_2021;
00062 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Kr_2021;
00063 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rb_2021;
00064 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sr_2021;
00065 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Y_2021;
00066 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Zr_2021;
00067 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nb_2021;
00068 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mo_2021;
00069 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tc_2021;
00070 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ru_2021;
00071 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rh_2021;
00072 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pd_2021;
00073 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ag_2021;
00074 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cd_2021;
00075 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_In_2021;
00076 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sn_2021;
00077 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sb_2021;
00078 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Te_2021;
00079 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_I_2021;
00080 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Xe_2021;
00081 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cs_2021;
00082 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ba_2021;
00083 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_La_2021;
00084 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ce_2021;
00085 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pr_2021;
00086 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nd_2021;
00087 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pm_2021;
00088 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sm_2021;
00089 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Eu_2021;
00090 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Gd_2021;
00091 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tb_2021;
00092 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Dy_2021;
00093 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ho_2021;
00094 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Er_2021;
00095 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tm_2021;
00096 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Yb_2021;
00097 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lu_2021;
00098 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hf_2021;
00099 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ta_2021;
00100 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_W_2021;
00101 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Re_2021;
00102 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Os_2021;
00103 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ir_2021;
00104 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pt_2021;
00105 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Au_2021;
00106 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hg_2021;
00107 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Tl_2021;
00108 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pb_2021;
00109 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bi_2021;
00110 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Po_2021;
00111 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_At_2021;
00112 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rn_2021;
00113 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fr_2021;
00114 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ra_2021;
00115 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ac_2021;
00116 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Th_2021;
00117 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pa_2021;
00118 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_U_2021;
00119 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Np_2021;
00120 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Pu_2021;
00121 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Am_2021;
00122 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cm_2021;
00123 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bk_2021;
00124 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cf_2021;
00125 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Es_2021;
00126 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fm_2021;
00127 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Md_2021;
00128 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_No_2021;
```

```
00129 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lr_2021;
00130 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rf_2021;
00131 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Db_2021;
00132 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Sg_2021;
00133 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Bh_2021;
00134 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Hs_2021;
00135 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mt_2021;
00136 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ds_2021;
00137 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Rg_2021;
00138 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Cn_2021;
00139 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Nh_2021;
00140 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Fl_2021;
00141 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Mc_2021;
00142 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Lv_2021;
00143 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Ts_2021;
00144 ADD_IMPORT extern const struct ciaaw_saw_element_t_2021 ciaaw_saw_Og_2021;
00146 #endif
00147
```

7.7 ciaaw_saw_latest.h File Reference

C API Standard Atomic Weights latest - autogenerated.

This graph shows which files directly or indirectly include this file:
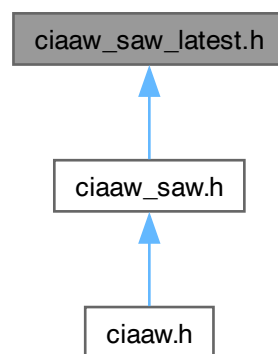
Data Structures

- struct ciaaw_saw_element_t

  C API Object representing an element.

Variables

- ADD_IMPORT const int YEAR
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_H
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_He
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Li
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Be
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_B
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_C

- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_N
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_O
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_F
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ne
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Na
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mg
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Al
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Si
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_P
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_S
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cl
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ar
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_K
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ca
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sc
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ti
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_V
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mn
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fe
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Co
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ni
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cu
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zn
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ga
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ge
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_As
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Se
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Br
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Kr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Y
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mo
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Tc
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ru
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rh
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pd
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ag
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cd
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_In
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sn
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Te
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_I
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Xe
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cs
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ba
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_La
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ce
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nd
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pm

- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sm
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Eu
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Gd
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Tb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Dy
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ho
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Er
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Tm
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Yb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Lu
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hf
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ta
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_W
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Re
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Os
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ir
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pt
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Au
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hg
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Tl
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pb
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bi
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Po
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_At
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rn
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ra
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ac
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Th
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pa
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_U
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Np
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Pu
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Am
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cm
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bk
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cf
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Es
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fm
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Md
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_No
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Lr
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rf
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Db
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sg
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bh
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hs
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mt
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ds
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rg
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cn
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nh
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fl
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mc
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Lv
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ts
- ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Og

7.7.1 Detailed Description

C API Standard Atomic Weights latest - autogenerated.

7.7.2 Variable Documentation

7.7.2.1 ciaaw_saw_Ac

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ac [extern]

C API Ac.

7.7.2.2 ciaaw_saw_Ag

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ag [extern]

C API Ag.

7.7.2.3 ciaaw_saw_Al

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Al [extern]

C API Al.

7.7.2.4 ciaaw_saw_Am

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Am [extern]

C API Am.

7.7.2.5 ciaaw_saw_Ar

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ar [extern]

C API Ar.

7.7.2.6 ciaaw_saw_As

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_As [extern]

C API As.

7.7.2.7 ciaaw_saw_At

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_At [extern]

C API At.

7.7.2.8 ciaaw_saw_Au

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Au [extern]

C API Au.

7.7.2.9 ciaaw_saw_B

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_B [extern]

C API B.

7.7.2.10 ciaaw_saw_Ba

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ba [extern]

C API Ba.

7.7.2.11 ciaaw_saw_Be

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Be [extern]

C API Be.

7.7.2.12 ciaaw_saw_Bh

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Bh [extern]

C API Bh.

7.7.2.13 ciaaw_saw_Bi

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Bi [extern]

C API Bi.

7.7.2.14 ciaaw_saw_Bk

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Bk [extern]

C API Bk.

7.7.2.15 ciaaw_saw_Br

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Br [extern]

C API Br.

7.7.2.16 ciaaw_saw_C

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_C [extern]

C API C.

7.7.2.17 ciaaw_saw_Ca

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ca [extern]

C API Ca.

7.7.2.18 ciaaw_saw_Cd

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cd [extern]

C API Cd.

7.7.2.19 ciaaw_saw_Ce

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ce [extern]

C API Ce.

7.7.2.20 ciaaw_saw_Cf

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cf [extern]

C API Cf.

7.7.2.21 ciaaw_saw_Cl

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cl [extern]

C API Cl.

7.7.2.22 ciaaw_saw_Cm

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Cm [extern]

C API Cm.

7.7.2.23 ciaaw_saw_Cn

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Cn [extern]

C API Cn.

7.7.2.24 ciaaw_saw_Co

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Co [extern]

C API Co.

7.7.2.25 ciaaw_saw_Cr

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Cr [extern]

C API Cr.

7.7.2.26 ciaaw_saw_Cs

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Cs [extern]

C API Cs.

7.7.2.27 ciaaw_saw_Cu

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Cu [extern]

C API Cu.

7.7.2.28 ciaaw_saw_Db

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Db [extern]

C API Db.

7.7.2.29 ciaaw_saw_Ds

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ds [extern]

C API Ds.

7.7.2.30 ciaaw_saw_Dy

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Dy [extern]

C API Dy.

7.7.2.31 ciaaw_saw_Er

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Er [extern]

C API Er.

7.7.2.32 ciaaw_saw_Es

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Es [extern]

C API Es.

7.7.2.33 ciaaw_saw_Eu

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Eu [extern]

C API Eu.

7.7.2.34 ciaaw_saw_F

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_F [extern]

C API F.

7.7.2.35 ciaaw_saw_Fe

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fe [extern]

C API Fe.

7.7.2.36 ciaaw_saw_Fl

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fl [extern]

C API Fl.

7.7.2.37 ciaaw_saw_Fm

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fm [extern]

C API Fm.

7.7.2.38 ciaaw_saw_Fr

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Fr [extern]

C API Fr.

7.7.2.39 ciaaw_saw_Ga

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ga [extern]

C API Ga.

7.7.2.40 ciaaw_saw_Gd

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Gd [extern]

C API Gd.

7.7.2.41 ciaaw_saw_Ge

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ge [extern]

C API Ge.

7.7.2.42 ciaaw_saw_H

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_H [extern]

C API H.

7.7.2.43 ciaaw_saw_He

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_He [extern]

C API He.

7.7.2.44 ciaaw_saw_Hf

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hf [extern]

C API Hf.

7.7.2.45 ciaaw_saw_Hg

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hg [extern]

C API Hg.

7.7.2.46 ciaaw_saw_Ho

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ho [extern]

C API Ho.

7.7.2.47 ciaaw_saw_Hs

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Hs [extern]

C API Hs.

7.7.2.48 ciaaw_saw_I

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_I [extern]

C API I.

7.7.2.49 ciaaw_saw_In

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_In [extern]

C API In.

7.7.2.50 ciaaw_saw_Ir

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ir [extern]

C API Ir.

7.7.2.51 ciaaw_saw_K

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_K [extern]

C API K.

7.7.2.52 ciaaw_saw_Kr

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Kr [extern]

C API Kr.

7.7.2.53 ciaaw_saw_La

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_La [extern]

C API La.

7.7.2.54 ciaaw_saw_Li

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Li [extern]

C API Li.

7.7.2.55 ciaaw_saw_Lr

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Lr [extern]

C API Lr.

7.7.2.56 ciaaw_saw_Lu

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Lu [extern]

C API Lu.

7.7.2.57 ciaaw_saw_Lv

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Lv [extern]

C API Lv.

7.7.2.58 ciaaw_saw_Mc

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Mc [extern]

C API Mc.

7.7.2.59 ciaaw_saw_Md

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Md [extern]

C API Md.

7.7.2.60 ciaaw_saw_Mg

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Mg [extern]

C API Mg.

7.7.2.61 ciaaw_saw_Mn

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Mn [extern]

C API Mn.

7.7.2.62 ciaaw_saw_Mo

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Mo [extern]

C API Mo.

7.7.2.63 ciaaw_saw_Mt

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Mt [extern]

C API Mt.

7.7.2.64 ciaaw_saw_N

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_N [extern]

C API N.

7.7.2.65 ciaaw_saw_Na

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Na [extern]

C API Na.

7.7.2.66 ciaaw_saw_Nb

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nb [extern]

C API Nb.

7.7.2.67 ciaaw_saw_Nd

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nd [extern]

C API Nd.

7.7.2.68 ciaaw_saw_Ne

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ne [extern]

C API Ne.

7.7.2.69 ciaaw_saw_Nh

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Nh [extern]

C API Nh.

7.7.2.70 ciaaw_saw_Ni

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ni [extern]

C API Ni.

7.7.2.71 ciaaw_saw_No

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_No [extern]

C API No.

7.7.2.72 ciaaw_saw_Np

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Np [extern]

C API Np.

7.7.2.73 ciaaw_saw_O

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_O [extern]

C API O.

7.7.2.74 ciaaw_saw_Og

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Og [extern]

C API Og.

7.7.2.75 ciaaw_saw_Os

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Os [extern]

C API Os.

7.7.2.76 ciaaw_saw_P

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_P [extern]

C API P.

7.7.2.77 ciaaw_saw_Pa

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pa [extern]

C API Pa.

7.7.2.78 ciaaw_saw_Pb

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pb [extern]

C API Pb.

7.7.2.79 ciaaw_saw_Pd

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pd [extern]

C API Pd.

7.7.2.80 ciaaw_saw_Pm

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pm [extern]

C API Pm.

7.7.2.81 ciaaw_saw_Po

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Po [extern]

C API Po.

7.7.2.82 ciaaw_saw_Pr

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pr [extern]

C API Pr.

7.7.2.83 ciaaw_saw_Pt

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pt [extern]

C API Pt.

7.7.2.84 ciaaw_saw_Pu

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Pu [extern]

C API Pu.

7.7.2.85 ciaaw_saw_Ra

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ra [extern]

C API Ra.

7.7.2.86 ciaaw_saw_Rb

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Rb [extern]

C API Rb.

7.7.2.87 ciaaw_saw_Re

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Re [extern]

C API Re.

7.7.2.88 ciaaw_saw_Rf

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rf [extern]

C API Rf.

7.7.2.89 ciaaw_saw_Rg

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rg [extern]

C API Rg.

7.7.2.90 ciaaw_saw_Rh

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rh [extern]

C API Rh.

7.7.2.91 ciaaw_saw_Rn

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rn [extern]

C API Rn.

7.7.2.92 ciaaw_saw_Ru

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ru [extern]

C API Ru.

7.7.2.93 ciaaw_saw_S

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_S [extern]

C API S.

7.7.2.94 ciaaw_saw_Sb

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sb [extern]

C API Sb.

7.7.2.95 ciaaw_saw_Sc

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Sc [extern]

C API Sc.

7.7.2.96 ciaaw_saw_Se

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Se [extern]

C API Se.

7.7.2.97 ciaaw_saw_Sg

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Sg [extern]

C API Sg.

7.7.2.98 ciaaw_saw_Si

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Si [extern]

C API Si.

7.7.2.99 ciaaw_saw_Sm

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Sm [extern]

C API Sm.

7.7.2.100 ciaaw_saw_Sn

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Sn [extern]

C API Sn.

7.7.2.101 ciaaw_saw_Sr

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Sr [extern]

C API Sr.

7.7.2.102 ciaaw_saw_Ta

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ta [extern]

C API Ta.

7.7.2.103 ciaaw_saw_Tb

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Tb [extern]

C API Tb.

7.7.2.104 ciaaw_saw_Tc

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Tc [extern]

C API Tc.

7.7.2.105 ciaaw_saw_Te

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Te [extern]

C API Te.

7.7.2.106 ciaaw_saw_Th

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Th [extern]

C API Th.

7.7.2.107 ciaaw_saw_Ti

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ti [extern]

C API Ti.

7.7.2.108 ciaaw_saw_Tl

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Tl [extern]

C API Tl.

7.7.2.109 ciaaw_saw_Tm

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Tm [extern]

C API Tm.

7.7.2.110 ciaaw_saw_Ts

ADD_IMPORT const struct [ciaaw_saw_element_t](#) ciaaw_saw_Ts [extern]

C API Ts.

7.7.2.111 ciaaw_saw_U

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_U [extern]

C API U.

7.7.2.112 ciaaw_saw_V

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_V [extern]

C API V.

7.7.2.113 ciaaw_saw_W

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_W [extern]

C API W.

7.7.2.114 ciaaw_saw_Xe

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Xe [extern]

C API Xe.

7.7.2.115 ciaaw_saw_Y

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Y [extern]

C API Y.

7.7.2.116 ciaaw_saw_Yb

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Yb [extern]

C API Yb.

7.7.2.117 ciaaw_saw_Zn

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zn [extern]

C API Zn.

7.7.2.118 ciaaw_saw_Zr

ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zr [extern]

C API Zr.

7.7.2.119 YEAR

```
ADD_IMPORT const int YEAR  [extern]
```

C API Publication year.

7.8 ciaaw_saw_latest.h

Go to the documentation of this file.
```
00001
00006 #ifndef CIAAW_SAW_H_latest
00007 #define CIAAW_SAW_H_latest
00008 #if _MSC_VER
00009 #define ADD_IMPORT __declspec(dllimport)
00010 #else
00011 #define ADD_IMPORT
00012 #endif
00014 struct ciaaw_saw_element_t{
00015     char element[25];
00016     char symbol[9];
00017     int z;
00018     double saw_min;
00019     double saw_max;
00020     double saw;
00021     double saw_u;
00022     double asaw;
00023     double asaw_u;
00024 };
00025 ADD_IMPORT extern const int YEAR;
00027 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_H;
00028 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_He;
00029 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Li;
00030 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Be;
00031 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_B;
00032 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_C;
00033 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_N;
00034 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_O;
00035 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_F;
00036 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ne;
00037 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Na;
00038 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Mg;
00039 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Al;
00040 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Si;
00041 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_P;
00042 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_S;
00043 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cl;
00044 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ar;
00045 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_K;
00046 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ca;
00047 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sc;
00048 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ti;
00049 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_V;
00050 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cr;
00051 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Mn;
00052 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Fe;
00053 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Co;
00054 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ni;
00055 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cu;
00056 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Zn;
00057 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ga;
00058 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ge;
00059 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_As;
00060 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Se;
00061 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Br;
00062 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Kr;
00063 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Rb;
00064 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sr;
00065 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Y;
00066 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Zr;
00067 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Nb;
00068 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Mo;
00069 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Tc;
00070 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ru;
00071 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Rh;
00072 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pd;
00073 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ag;
00074 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cd;
00075 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_In;
```

```
00076 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sn;
00077 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sb;
00078 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Te;
00079 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_I;
00080 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Xe;
00081 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cs;
00082 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ba;
00083 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_La;
00084 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ce;
00085 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pr;
00086 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Nd;
00087 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pm;
00088 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sm;
00089 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Eu;
00090 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Gd;
00091 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Tb;
00092 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Dy;
00093 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ho;
00094 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Er;
00095 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Tm;
00096 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Yb;
00097 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Lu;
00098 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Hf;
00099 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ta;
00100 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_W;
00101 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Re;
00102 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Os;
00103 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ir;
00104 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pt;
00105 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Au;
00106 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Hg;
00107 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Tl;
00108 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pb;
00109 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Bi;
00110 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Po;
00111 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_At;
00112 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Rn;
00113 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Fr;
00114 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ra;
00115 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ac;
00116 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Th;
00117 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pa;
00118 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_U;
00119 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Np;
00120 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Pu;
00121 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Am;
00122 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cm;
00123 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Bk;
00124 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cf;
00125 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Es;
00126 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Fm;
00127 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Md;
00128 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_No;
00129 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Lr;
00130 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Rf;
00131 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Db;
00132 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Sg;
00133 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Bh;
00134 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Hs;
00135 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Mt;
00136 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ds;
00137 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Rg;
00138 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Cn;
00139 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Nh;
00140 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Fl;
00141 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Mc;
00142 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Lv;
00143 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Ts;
00144 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Og;
00146 #endif
00147
```

7.9 ciaaw_version.h File Reference

C API Version.

This graph shows which files directly or indirectly include this file:

Functions

- char * ciaaw_get_version (void)

7.9.1 Detailed Description

C API Version.

7.9.2 Function Documentation

7.9.2.1 ciaaw_get_version()

```
char * ciaaw_get_version (
            void  )  [extern]
```

C API Get the version

7.10 ciaaw_version.h

Go to the documentation of this file.
```
00001
00006 #ifndef CIAAW_VERSION_H
00007 #define CIAAW_VERSION_H
00008 extern char* ciaaw_get_version(void);
00009 #endif
00010
```

7.11 ciaaw.f90 File Reference

Main module for CIAAW.

Modules

- module ciaaw

    Main module for CIAAW.

7.11.1 Detailed Description

Main module for CIAAW.

7.12 ciaaw_saw.f90 File Reference

CIAAW Standard Atomic Weights.

Modules

- module ciaaw__saw

    CIAAW Standard Atomic Weights.

7.12.1 Detailed Description

CIAAW Standard Atomic Weights.

7.13 ciaaw_saw_2021.f90 File Reference

CIAAW Standard Atomic Weights 2021 -autogenerated.

Data Types

- type ciaaw__saw_2021::element_t_2021

    Object representing an element.
- type ciaaw__saw_2021::capi_element_t_2021

    Object representing an element.

Modules

- module ciaaw__saw_2021

    CIAAW Standard Atomic Weights 2021 - autogenerated.

Variables

- integer(int32), parameter, public **ciaaw__saw_2021::year_2021** = 2021

    Year of saw.

- integer(c_int), bind(C, name="YEAR_2021"), public, protected **ciaaw__saw_2021::capi_year_2021** = YEAR_2021

    C API Year of saw.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::h_2021** =[element_t_2021](#)("hydrogen", "H", 1, 1.00784d0, 1.00811d0, 1.00798d0, 0.00008d0, 1.0080d0, 0.0002d0)

    hydrogen.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_H_2021"), public, protected **ciaaw__saw_2021↩ ::capi_h_2021** =[capi_element_t_2021](#)(["h","y","d","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["H",c_null_char, " "," "," "," "," "," "," " "], H_2021%z, H_2021%saw_max, H_2021%saw_min, H_2021%saw, H_2021%saw_u, H_2021%asaw, H_2021%asaw_u)

    C API hydrogen.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::he_2021** =[element_t_2021](#)("helium", "He", 2, nan, nan, 4.002602d0, 0.000002d0, 4.0026d0, 0.0001d0)

    helium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_He_2021"), public, protected **ciaaw__saw_2021↩ ::capi_he_2021** =[capi_element_t_2021](#)(["h","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["H","e",c_null_char, " "," "," "," "," "," " "], He_2021%z, He_2021%saw_max, He_2021%saw↩ _min, He_2021%saw, He_2021%saw_u, He_2021%asaw, He_2021%asaw_u)

    C API helium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::li_2021** =[element_t_2021](#)("lithium", "Li", 3, 6.↩ 938d0, 6.997d0, 6.97d0, 0.02d0, 6.94d0, 0.06d0)

    lithium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Li_2021"), public, protected **ciaaw__saw_2021↩ ::capi_li_2021** =[capi_element_t_2021](#)(["l","i","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["L","i",c_null_char, " "," "," "," "," "," " "], Li_2021%z, Li_2021%saw_max, Li_2021%saw_min, Li_2021%saw, Li_2021%saw_u, Li_2021%asaw, Li_2021%asaw_u)

    C API lithium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::be_2021** =[element_t_2021](#)("beryllium", "Be", 4, nan, nan, 9.0121831d0, 0.0000005d0, 9.0122d0, 0.00001d0)

    beryllium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Be_2021"), public, protected **ciaaw__saw_2021↩ ::capi_be_2021** =[capi_element_t_2021](#)(["b","e","r","y","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["B","e",c_null_char, " "," "," "," "," "," " "], Be_2021%z, Be_2021%saw_max, Be_2021%saw↩ _min, Be_2021%saw, Be_2021%saw_u, Be_2021%asaw, Be_2021%asaw_u)

    C API beryllium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::b_2021** =[element_t_2021](#)("boron", "B", 5, 10.806d0, 10.821d0, 10.813d0, 0.005d0, 10.81d0, 0.02d0)

    boron.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_B_2021"), public, protected **ciaaw__saw_2021↩ ::capi_b_2021** =[capi_element_t_2021](#)(["b","o","r","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["B",c_null_char, " "," "," "," "," "," " "], B_2021%z, B_2021%saw_max, B_2021%saw_↩ min, B_2021%saw, B_2021%saw_u, B_2021%asaw, B_2021%asaw_u)

    C API boron.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::c_2021** =[element_t_2021](#)("carbon", "C", 6, 12.0096d0, 12.0116d0, 12.0106d0, 0.0006d0, 12.011d0, 0.002d0)

    carbon.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_C_2021"), public, protected **ciaaw__saw_2021↩ ::capi_c_2021** =[capi_element_t_2021](#)(["c","a","r","b","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," " "], ["C",c_null_char, " "," "," "," "," "," " "], C_2021%z, C_2021%saw_max, C_2021%saw↩ _min, C_2021%saw, C_2021%saw_u, C_2021%asaw, C_2021%asaw_u)

C API carbon.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::n_2021** =[element_t_2021](#)("nitrogen", "N", 7, 14.00643d0, 14.00728d0, 14.0069d0, 0.0003d0, 14.007d0, 0.001d0)

    nitrogen.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_N_2021"), public, protected **ciaaw__saw_2021↩ ::capi_n_2021** =[capi_element_t_2021](#)(["n","i","t","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N",c_null_char, " "," "," "," "," "," "," " "], N_2021%z, N_2021%saw_max, N_2021%saw↩ _min, N_2021%saw, N_2021%saw_u, N_2021%asaw, N_2021%asaw_u)

    C API nitrogen.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::o_2021** =[element_t_2021](#)("oxygen", "O", 8, 15.99903d0, 15.99977d0, 15.9994d0, 0.0003d0, 15.999d0, 0.001d0)

    oxygen.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_O_2021"), public, protected **ciaaw__saw_2021↩ ::capi_o_2021** =[capi_element_t_2021](#)(["o","x","y","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["O",c_null_char, " "," "," "," "," "," "," " "], O_2021%z, O_2021%saw_max, O_2021%saw↩ _min, O_2021%saw, O_2021%saw_u, O_2021%asaw, O_2021%asaw_u)

    C API oxygen.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::f_2021** =[element_t_2021](#)("fluorine", "F", 9, nan, nan, 18.998403162d0, 0.000000005d0, 18.998d0, 0.001d0)

    fluorine.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_F_2021"), public, protected **ciaaw__saw_2021↩ ::capi_f_2021** =[capi_element_t_2021](#)(["f","l","u","o","r","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["F",c_null_char, " "," "," "," "," "," "," " "], F_2021%z, F_2021%saw_max, F_2021%saw_min, F_2021%saw, F_2021%saw_u, F_2021%asaw, F_2021%asaw_u)

    C API fluorine.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::ne_2021** =[element_t_2021](#)("neon", "Ne", 10, nan, nan, 20.1797d0, 0.0006d0, 20.180d0, 0.001d0)

    neon.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ne_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ne_2021** =[capi_element_t_2021](#)(["n","e","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","e",c_null_char, " "," "," "," "," "," " "], Ne_2021%z, Ne_2021%saw_max, Ne_2021%saw↩ _min, Ne_2021%saw, Ne_2021%saw_u, Ne_2021%asaw, Ne_2021%asaw_u)

    C API neon.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::na_2021** =[element_t_2021](#)("sodium", "Na", 11, nan, nan, 22.98976928d0, 0.00000002d0, 22.990d0, 0.001d0)

    sodium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Na_2021"), public, protected **ciaaw__saw_2021↩ ::capi_na_2021** =[capi_element_t_2021](#)(["s","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","a",c_null_char, " "," "," "," "," "," " "], Na_2021%z, Na_2021%saw_max, Na_2021%saw↩ _min, Na_2021%saw, Na_2021%saw_u, Na_2021%asaw, Na_2021%asaw_u)

    C API sodium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::mg_2021** =[element_t_2021](#)("magnesium", "Mg", 12, 24.304d0, 24.307d0, 24.3055d0, 0.0009d0, 24.305d0, 0.002d0)

    magnesium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Mg_2021"), public, protected **ciaaw__saw_2021↩ ::capi_mg_2021** =[capi_element_t_2021](#)(["m","a","g","n","e","s","i","u","m",c_null_char, " "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["M","g",c_null_char, " "," "," "," "," "," " "], Mg_2021%z, Mg_2021%saw_max, Mg_↩ 2021%saw_min, Mg_2021%saw, Mg_2021%saw_u, Mg_2021%asaw, Mg_2021%asaw_u)

    C API magnesium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::al_2021** =[element_t_2021](#)("aluminium", "Al", 13, nan, nan, 26.9815384d0, 0.0000003d0, 26.982d0, 0.001d0)

    aluminium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Al_2021"), public, protected **ciaaw__saw_2021↩ ::capi_al_2021** =capi_element_t_2021(["a","l","u","m","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["A","l",c_null_char, " "," "," "," "," "," " "], Al_2021%z, Al_2021%saw_max, Al_2021%saw↩ _min, Al_2021%saw, Al_2021%saw_u, Al_2021%asaw, Al_2021%asaw_u)

    C API aluminium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::si_2021** =element_t_2021("silicon", "Si", 14, 28.084d0, 28.086d0, 28.0850d0, 0.0006d0, 28.085d0, 0.001d0)

    silicon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Si_2021"), public, protected **ciaaw__saw_2021↩ ::capi_si_2021** =capi_element_t_2021(["s","i","l","i","c","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," " "," "," "," "," " "], ["S","i",c_null_char, " "," "," "," "," "," " "], Si_2021%z, Si_2021%saw_max, Si_2021%saw_min, Si_2021%saw, Si_2021%saw_u, Si_2021%asaw, Si_2021%asaw_u)

    C API silicon.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::p_2021** =element_t_2021("phosphorus", "P", 15, nan, nan, 30.973761998d0, 0.000000005d0, 30.974d0, 0.001d0)

    phosphorus.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_P_2021"), public, protected **ciaaw__saw_2021↩ ::capi_p_2021** =capi_element_t_2021(["p","h","o","s","p","h","o","r","u","s",c_null_char, " "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["P",c_null_char, " "," "," "," "," "," "," " "], P_2021%z, P_2021%saw_max, P_2021%saw_min, P_2021%saw, P_2021%saw_u, P_2021%asaw, P_2021%asaw_u)

    C API phosphorus.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::s_2021** =element_t_2021("sulfur", "S", 16, 32.059d0, 32.076d0, 32.067d0, 0.005d0, 32.06d0, 0.02d0)

    sulfur.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_S_2021"), public, protected **ciaaw__saw_2021↩ ::capi_s_2021** =capi_element_t_2021(["s","u","l","f","u","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," " "," "," "," "," "," " "], ["S",c_null_char, " "," "," "," "," "," "," " "], S_2021%z, S_2021%saw_max, S_2021%saw_min, S_2021%saw, S_2021%saw_u, S_2021%asaw, S_2021%asaw_u)

    C API sulfur.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::cl_2021** =element_t_2021("chlorine", "Cl", 17, 35.446d0, 35.457d0, 35.451d0, 0.004d0, 35.45d0, 0.01d0)

    chlorine.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cl_2021"), public, protected **ciaaw__saw_2021↩ ::capi_cl_2021** =capi_element_t_2021(["c","h","l","o","r","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," " "," "," "," "," " "], ["C","l",c_null_char, " "," "," "," "," "," " "], Cl_2021%z, Cl_2021%saw_max, Cl_2021%saw_min, Cl_2021%saw, Cl_2021%saw_u, Cl_2021%asaw, Cl_2021%asaw_u)

    C API chlorine.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::ar_2021** =element_t_2021("argon", "Ar", 18, 39.792d0, 39.963d0, 39.88d0, 0.05d0, 39.95d0, 0.16d0)

    argon.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ar_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ar_2021** =capi_element_t_2021(["a","r","g","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "," "," "," "," " "], ["A","r",c_null_char, " "," "," "," "," "," " "], Ar_2021%z, Ar_2021%saw_max, Ar_2021%saw_min, Ar_2021%saw, Ar_2021%saw_u, Ar_2021%asaw, Ar_2021%asaw_u)

    C API argon.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::k_2021** =element_t_2021("potassium", "K", 19, nan, nan, 39.0983d0, 0.0001d0, 39.098d0, 0.001d0)

    potassium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_K_2021"), public, protected **ciaaw__saw_2021↩ ::capi_k_2021** =capi_element_t_2021(["p","o","t","a","s","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["K",c_null_char, " "," "," "," "," "," "," " "], K_2021%z, K_2021%saw_max, K_2021%saw_min, K_2021%saw, K_2021%saw_u, K_2021%asaw, K_2021%asaw_u)

    C API potassium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::ca_2021** =element_t_2021("calcium", "Ca", 20, nan, nan, 40.078d0, 0.004d0, 40.078d0, 0.004d0)

    calcium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ca_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_ca_2021 =capi_element_t_2021(["c","a","l","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","a",c_null_char, " "," "," "," "," "," " "], Ca_2021%z, Ca_2021%saw_max, Ca_2021%saw←
  _min, Ca_2021%saw, Ca_2021%saw_u, Ca_2021%asaw, Ca_2021%asaw_u)

    C API calcium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::sc_2021** =element_t_2021("scandium", "Sc",
  21, nan, nan, 44.955907d0, 0.000004d0, 44.956d0, 0.001d0)

    scandium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sc_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_sc_2021 =capi_element_t_2021(["s","c","a","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["S","c",c_null_char, " "," "," "," "," "," " "], Sc_2021%z, Sc_2021%saw_max, Sc←
  2021%saw_min, Sc_2021%saw, Sc_2021%saw_u, Sc_2021%asaw, Sc_2021%asaw_u)

    C API scandium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::ti_2021** =element_t_2021("titanium", "Ti", 22,
  nan, nan, 47.867d0, 0.001d0, 47.867d0, 0.001d0)

    titanium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ti_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_ti_2021 =capi_element_t_2021(["t","i","t","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["T","i",c_null_char, " "," "," "," "," "," " "], Ti_2021%z, Ti_2021%saw_max, Ti_2021%saw_min,
  Ti_2021%saw, Ti_2021%saw_u, Ti_2021%asaw, Ti_2021%asaw_u)

    C API titanium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::v_2021** =element_t_2021("vanadium", "V", 23,
  nan, nan, 50.9415d0, 0.0001d0, 50.942d0, 0.001d0)

    vanadium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_V_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_v_2021 =capi_element_t_2021(["v","a","n","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," " "," "," "," "," " "], ["V",c_null_char, " "," "," "," "," "," " "], V_2021%z, V_2021%saw_max, V_2021%saw_min,
  V_2021%saw, V_2021%saw_u, V_2021%asaw, V_2021%asaw_u)

    C API vanadium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::cr_2021** =element_t_2021("chromium", "Cr",
  24, nan, nan, 51.9961d0, 0.0006d0, 51.996d0, 0.001d0)

    chromium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cr_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_cr_2021 =capi_element_t_2021(["c","h","r","o","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["C","r",c_null_char, " "," "," "," "," "," " "], Cr_2021%z, Cr_2021%saw_max, Cr_2021%saw←
  _min, Cr_2021%saw, Cr_2021%saw_u, Cr_2021%asaw, Cr_2021%asaw_u)

    C API chromium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::mn_2021** =element_t_2021("manganese",
  "Mn", 25, nan, nan, 54.938043d0, 0.000002d0, 54.938d0, 0.001d0)

    manganese.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mn_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_mn_2021 =capi_element_t_2021(["m","a","n","g","a","n","e","s","e",c_null_char, " "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["M","n",c_null_char, " "," "," "," "," "," " "], Mn_2021%z, Mn_2021%saw_max, Mn←
  2021%saw_min, Mn_2021%saw, Mn_2021%saw_u, Mn_2021%asaw, Mn_2021%asaw_u)

    C API manganese.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::fe_2021** =element_t_2021("iron", "Fe", 26,
  nan, nan, 55.845d0, 0.002d0, 55.845d0, 0.002d0)

    iron.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fe_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_fe_2021 =capi_element_t_2021(["i","r","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["F","e",c_null_char, " "," "," "," "," "," " "], Fe_2021%z, Fe_2021%saw_max, Fe_2021%saw←
  _min, Fe_2021%saw, Fe_2021%saw_u, Fe_2021%asaw, Fe_2021%asaw_u)

    C API iron.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::co_2021** =element_t_2021("cobalt", "Co", 27, nan, nan, 58.933194d0, 0.000003d0, 58.933d0, 0.001d0)

    cobalt.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Co_2021"), public, protected **ciaaw__saw_2021←**
::capi_co_2021 =capi_element_t_2021(["c","o","b","a","l","t",c_null_char, " "," "], ["C","o",c_null_char, " "," "," "," "," "," "], Co_2021%z, Co_2021%saw_max, Co_2021%saw←
_min, Co_2021%saw, Co_2021%saw_u, Co_2021%asaw, Co_2021%asaw_u)

    C API cobalt.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ni_2021** =element_t_2021("nickel", "Ni", 28, nan, nan, 58.6934d0, 0.0004d0, 58.693d0, 0.001d0)

    nickel.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ni_2021"), public, protected **ciaaw__saw_2021←**
::capi_ni_2021 =capi_element_t_2021(["n","i","c","k","e","l",c_null_char, " "," "], ["N","i",c_null_char, " "," "," "," "," "," "], Ni_2021%z, Ni_2021%saw_max, Ni_2021%saw_min, Ni_2021%saw, Ni_2021%saw_u, Ni_2021%asaw, Ni_2021%asaw_u)

    C API nickel.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::cu_2021** =element_t_2021("copper", "Cu", 29, nan, nan, 63.546d0, 0.003d0, 63.546d0, 0.003d0)

    copper.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cu_2021"), public, protected **ciaaw__saw_2021←**
::capi_cu_2021 =capi_element_t_2021(["c","o","p","p","e","r",c_null_char, " "," "], ["C","u",c_null_char, " "," "," "," "," "," "], Cu_2021%z, Cu_2021%saw_max, Cu_2021%saw←
_min, Cu_2021%saw, Cu_2021%saw_u, Cu_2021%asaw, Cu_2021%asaw_u)

    C API copper.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::zn_2021** =element_t_2021("zinc", "Zn", 30, nan, nan, 65.38d0, 0.02d0, 65.38d0, 0.02d0)

    zinc.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Zn_2021"), public, protected **ciaaw__saw_2021←**
::capi_zn_2021 =capi_element_t_2021(["z","i","n","c",c_null_char, " "," "], ["Z","n",c_null_char, " "," "," "," "," "," "], Zn_2021%z, Zn_2021%saw_max, Zn_2021%saw←
_min, Zn_2021%saw, Zn_2021%saw_u, Zn_2021%asaw, Zn_2021%asaw_u)

    C API zinc.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ga_2021** =element_t_2021("gallium", "Ga", 31, nan, nan, 69.723d0, 0.001d0, 69.723d0, 0.001d0)

    gallium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ga_2021"), public, protected **ciaaw__saw_2021←**
::capi_ga_2021 =capi_element_t_2021(["g","a","l","l","i","u","m",c_null_char, " "," "], ["G","a",c_null_char, " "," "," "," "," "," "], Ga_2021%z, Ga_2021%saw_max, Ga_2021%saw←
_min, Ga_2021%saw, Ga_2021%saw_u, Ga_2021%asaw, Ga_2021%asaw_u)

    C API gallium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ge_2021** =element_t_2021("germanium", "Ge", 32, nan, nan, 72.630d0, 0.008d0, 72.630d0, 0.008d0)

    germanium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ge_2021"), public, protected **ciaaw__saw_2021←**
::capi_ge_2021 =capi_element_t_2021(["g","e","r","m","a","n","i","u","m",c_null_char, " "," "], ["G","e",c_null_char, " "," "," "," "," "," "], Ge_2021%z, Ge_2021%saw_max, Ge_←
2021%saw_min, Ge_2021%saw, Ge_2021%saw_u, Ge_2021%asaw, Ge_2021%asaw_u)

    C API germanium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::as_2021** =element_t_2021("arsenic", "As", 33, nan, nan, 74.921595d0, 0.000006d0, 74.922d0, 0.001d0)

    arsenic.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_As_2021"), public, protected **ciaaw__saw_2021←**
::capi_as_2021 =capi_element_t_2021(["a","r","s","e","n","i","c",c_null_char, " "," "], ["A","s",c_null_char, " "," "," "," "," "," "], As_2021%z, As_2021%saw_max, As_2021%saw←
_min, As_2021%saw, As_2021%saw_u, As_2021%asaw, As_2021%asaw_u)

  C API arsenic.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::se_2021** =[element_t_2021](#)("selenium", "Se", 34, nan, nan, 78.971d0, 0.008d0, 78.971d0, 0.008d0)

  selenium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Se_2021"), public, protected **ciaaw__saw_2021↩ ::capi_se_2021** =[capi_element_t_2021](#)(["s","e","l","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["S","e",c_null_char, " "," "," "," "," " "], Se_2021%z, Se_2021%saw_max, Se_↩ 2021%saw_min, Se_2021%saw, Se_2021%saw_u, Se_2021%asaw, Se_2021%asaw_u)

  C API selenium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::br_2021** =[element_t_2021](#)("bromine", "Br", 35, 79.901d0, 79.907d0, 79.904d0, 0.002d0, 79.904d0, 0.003d0)

  bromine.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Br_2021"), public, protected **ciaaw__saw_2021↩ ::capi_br_2021** =[capi_element_t_2021](#)(["b","r","o","m","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," " "," "," "," "," " "], ["B","r",c_null_char, " "," "," "," "," " "], Br_2021%z, Br_2021%saw_max, Br_2021%saw↩ _min, Br_2021%saw, Br_2021%saw_u, Br_2021%asaw, Br_2021%asaw_u)

  C API bromine.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021:kr_2021** =[element_t_2021](#)("krypton", "Kr", 36, nan, nan, 83.798d0, 0.002d0, 83.798d0, 0.002d0)

  krypton.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Kr_2021"), public, protected **ciaaw__saw_2021↩ ::capi_kr_2021** =[capi_element_t_2021](#)(["k","r","y","p","t","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," " "," "," "," " "], ["K","r",c_null_char, " "," "," "," "," " "], Kr_2021%z, Kr_2021%saw_max, Kr_2021%saw_min, Kr_2021%saw, Kr_2021%saw_u, Kr_2021%asaw, Kr_2021%asaw_u)

  C API krypton.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::rb_2021** =[element_t_2021](#)("rubidium", "Rb", 37, nan, nan, 85.4678d0, 0.0003d0, 85.468d0, 0.001d0)

  rubidium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Rb_2021"), public, protected **ciaaw__saw_2021↩ ::capi_rb_2021** =[capi_element_t_2021](#)(["r","u","b","i","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["R","b",c_null_char, " "," "," "," "," " "], Rb_2021%z, Rb_2021%saw_max, Rb_2021%saw↩ _min, Rb_2021%saw, Rb_2021%saw_u, Rb_2021%asaw, Rb_2021%asaw_u)

  C API rubidium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::sr_2021** =[element_t_2021](#)("strontium", "Sr", 38, nan, nan, 87.62d0, 0.01d0, 87.62d0, 0.01d0)

  strontium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Sr_2021"), public, protected **ciaaw__saw_2021↩ ::capi_sr_2021** =[capi_element_t_2021](#)(["s","t","r","o","n","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["S","r",c_null_char, " "," "," "," "," " "], Sr_2021%z, Sr_2021%saw_max, Sr_2021%saw↩ _min, Sr_2021%saw, Sr_2021%saw_u, Sr_2021%asaw, Sr_2021%asaw_u)

  C API strontium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::y_2021** =[element_t_2021](#)("yttrium", "Y", 39, nan, nan, 88.905838d0, 0.000002d0, 88.906d0, 0.001d0)

  yttrium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Y_2021"), public, protected **ciaaw__saw_2021↩ ::capi_y_2021** =[capi_element_t_2021](#)(["y","t","t","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," " "," "," "," " "], ["Y",c_null_char, " "," "," "," "," "," " "], Y_2021%z, Y_2021%saw_max, Y_2021%saw_min, Y_2021%saw, Y_2021%saw_u, Y_2021%asaw, Y_2021%asaw_u)

  C API yttrium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::zr_2021** =[element_t_2021](#)("zirconium", "Zr", 40, nan, nan, 91.224d0, 0.002d0, 91.224d0, 0.002d0)

  zirconium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Zr_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_zr_2021 =capi_element_t_2021(["z","i","r","c","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["Z","r",c_null_char, " "," "," "," "," "," "], Zr_2021%z, Zr_2021%saw_max, Zr_2021%saw↩
  _min, Zr_2021%saw, Zr_2021%saw_u, Zr_2021%asaw, Zr_2021%asaw_u)

    C API zirconium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::nb_2021** =element_t_2021("nobium", "Nb",
  41, nan, nan, 92.90637d0, 0.00001d0, 92.906d0, 0.001d0)

    nobium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Nb_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_nb_2021 =capi_element_t_2021(["n","o","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["N","b",c_null_char, " "," "," "," "," "," "], Nb_2021%z, Nb_2021%saw_max, Nb_↩
  2021%saw_min, Nb_2021%saw, Nb_2021%saw_u, Nb_2021%asaw, Nb_2021%asaw_u)

    C API nobium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::mo_2021** =element_t_2021("molybdenum",
  "Mo", 42, nan, nan, 95.95d0, 0.01d0, 95.95d0, 0.01d0)

    molybdenum.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mo_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_mo_2021 =capi_element_t_2021(["m","o","l","y","b","d","e","n","u","m",c_null_char, " "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["M","o",c_null_char, " "," "," "," "," "," "], Mo_2021%z, Mo_2021%saw_max, Mo_↩
  2021%saw_min, Mo_2021%saw, Mo_2021%saw_u, Mo_2021%asaw, Mo_2021%asaw_u)

    C API molybdenum.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::tc_2021** =element_t_2021("technetium", "Tc",
  43, nan, nan, nan, nan, nan, nan)

    technetium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tc_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_tc_2021 =capi_element_t_2021(["t","e","c","h","n","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["T","c",c_null_char, " "," "," "," "," "," "], Tc_2021%z, Tc_2021%saw_max, Tc_2021%saw↩
  _min, Tc_2021%saw, Tc_2021%saw_u, Tc_2021%asaw, Tc_2021%asaw_u)

    C API technetium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ru_2021** =element_t_2021("ruthenium", "Ru",
  44, nan, nan, 101.07d0, 0.02d0, 101.07d0, 0.02d0)

    ruthenium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ru_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_ru_2021 =capi_element_t_2021(["r","u","t","h","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["R","u",c_null_char, " "," "," "," "," "," "], Ru_2021%z, Ru_2021%saw_max, Ru_↩
  2021%saw_min, Ru_2021%saw, Ru_2021%saw_u, Ru_2021%asaw, Ru_2021%asaw_u)

    C API ruthenium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::rh_2021** =element_t_2021("rhodium", "Rh",
  45, nan, nan, 102.90549d0, 0.00002d0, 102.91d0, 0.01d0)

    rhodium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rh_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_rh_2021 =capi_element_t_2021(["r","h","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  " "," "," "," "," "," "], ["R","h",c_null_char, " "," "," "," "," "," "], Rh_2021%z, Rh_2021%saw_max, Rh_2021%saw↩
  _min, Rh_2021%saw, Rh_2021%saw_u, Rh_2021%asaw, Rh_2021%asaw_u)

    C API rhodium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::pd_2021** =element_t_2021("palladium", "Pd",
  46, nan, nan, 106.42d0, 0.01d0, 106.42d0, 0.01d0)

    palladium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pd_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_pd_2021 =capi_element_t_2021(["p","a","l","l","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," ","
  " "," "," "," "," "," "," "], ["P","d",c_null_char, " "," "," "," "," "," "], Pd_2021%z, Pd_2021%saw_max, Pd_↩
  2021%saw_min, Pd_2021%saw, Pd_2021%saw_u, Pd_2021%asaw, Pd_2021%asaw_u)

    C API palladium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ag_2021** =element_t_2021("silver", "Ag", 47,
  nan, nan, 107.8682d0, 0.0002d0, 107.87d0, 0.01d0)

silver.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ag_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_ag_2021 =capi_element_t_2021(["s","i","l","v","e","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "], ["A","g",c_null_char, " "," "," "," "," "," "], Ag_2021%z, Ag_2021%saw_max, Ag_2021%saw↩
  _min, Ag_2021%saw, Ag_2021%saw_u, Ag_2021%asaw, Ag_2021%asaw_u)

  C API silver.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::cd_2021** =element_t_2021("cadmium", "Cd",
  48, nan, nan, 112.414d0, 0.004d0, 112.41d0, 0.01d0)

  cadmium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cd_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_cd_2021 =capi_element_t_2021(["c","a","d","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "," "], ["C","d",c_null_char, " "," "," "," "," "], Cd_2021%z, Cd_2021%saw_max, Cd_↩
  2021%saw_min, Cd_2021%saw, Cd_2021%saw_u, Cd_2021%asaw, Cd_2021%asaw_u)

  C API cadmium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::in_2021** =element_t_2021("indium", "In", 49,
  nan, nan, 114.818d0, 0.001d0, 114.82d0, 0.01d0)

  indium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_In_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_in_2021 =capi_element_t_2021(["i","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "], ["I","n",c_null_char, " "," "," "," "," "," "], In_2021%z, In_2021%saw_max, In_2021%saw_min,
  In_2021%saw, In_2021%saw_u, In_2021%asaw, In_2021%asaw_u)

  C API indium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::sn_2021** =element_t_2021("tin", "Sn", 50, nan,
  nan, 118.70d0, 0.007d0, 118.71d0, 0.01d0)

  tin.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sn_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_sn_2021 =capi_element_t_2021(["t","i","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "], ["S","n",c_null_char, " "," "," "," "," "," "], Sn_2021%z, Sn_2021%saw_max, Sn_2021%saw↩
  _min, Sn_2021%saw, Sn_2021%saw_u, Sn_2021%asaw, Sn_2021%asaw_u)

  C API tin.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::sb_2021** =element_t_2021("antimony", "Sb",
  51, nan, nan, 121.760d0, 0.001d0, 121.76d0, 0.01d0)

  antimony.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sb_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_sb_2021 =capi_element_t_2021(["a","n","t","i","m","o","n","y",c_null_char, " "," "," "," "," "," "," "," ","
  "," "," "," "," "," "," "], ["S","b",c_null_char, " "," "," "," "," "," "], Sb_2021%z, Sb_2021%saw_max, Sb_↩
  2021%saw_min, Sb_2021%saw, Sb_2021%saw_u, Sb_2021%asaw, Sb_2021%asaw_u)

  C API antimony.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::te_2021** =element_t_2021("tellurium", "Te", 52,
  nan, nan, 127.60d0, 0.03d0, 127.60d0, 0.03d0)

  tellurium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Te_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_te_2021 =capi_element_t_2021(["t","e","l","l","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "], ["T","e",c_null_char, " "," "," "," "," "," "], Te_2021%z, Te_2021%saw_max, Te_2021%saw_↩
  min, Te_2021%saw, Te_2021%saw_u, Te_2021%asaw, Te_2021%asaw_u)

  C API tellurium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::i_2021** =element_t_2021("iodine", "I", 53, nan,
  nan, 126.90447d0, 0.00003d0, 126.90d0, 0.01d0)

  iodine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_I_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_i_2021 =capi_element_t_2021(["i","o","d","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "," "," "," "," "," "], ["I",c_null_char, " "," "," "," "," "," "], I_2021%z, I_2021%saw_max, I_2021%saw_min,
  I_2021%saw, I_2021%saw_u, I_2021%asaw, I_2021%asaw_u)

  C API iodine.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::xe_2021** =element_t_2021("xenon", "Xe", 54, nan, nan, 131.293d0, 0.006d0, 131.29d0, 0.01d0)

     xenon.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Xe_2021"), public, protected **ciaaw__saw_2021↩ ::capi_xe_2021** =capi_element_t_2021(["x","e","n","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," "], ["X","e",c_null_char, " "," "," "," "," "," "], Xe_2021%z, Xe_2021%saw_max, Xe_2021%saw↩ _min, Xe_2021%saw, Xe_2021%saw_u, Xe_2021%asaw, Xe_2021%asaw_u)

     C API xenon.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::cs_2021** =element_t_2021("caesium", "Cs", 55, nan, nan, 132.90545196d0, 0.00000006d0, 132.91d0, 0.01d0)

     caesium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cs_2021"), public, protected **ciaaw__saw_2021↩ ::capi_cs_2021** =capi_element_t_2021(["c","a","e","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," "," "], ["C","s",c_null_char, " "," "," "," "," "," "], Cs_2021%z, Cs_2021%saw_max, Cs_↩ 2021%saw_min, Cs_2021%saw, Cs_2021%saw_u, Cs_2021%asaw, Cs_2021%asaw_u)

     C API caesium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ba_2021** =element_t_2021("barium", "Ba", 56, nan, nan, 137.327d0, 0.007d0, 137.33d0, 0.01d0)

     barium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ba_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ba_2021** =capi_element_t_2021(["b","a","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," "," "], ["B","a",c_null_char, " "," "," "," "," "," "], Ba_2021%z, Ba_2021%saw_max, Ba_2021%saw↩ _min, Ba_2021%saw, Ba_2021%saw_u, Ba_2021%asaw, Ba_2021%asaw_u)

     C API barium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::la_2021** =element_t_2021("lanthanum", "La", 57, nan, nan, 138.90547d0, 0.00007d0, 138.91d0, 0.01d0)

     lanthanum.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_La_2021"), public, protected **ciaaw__saw_2021↩ ::capi_la_2021** =capi_element_t_2021(["l","a","n","t","h","a","n","u","m",c_null_char, " "," "," "," "," "," "," "," ", " "," "," "," "," "," "," "], ["L","a",c_null_char, " "," "," "," "," "," "], La_2021%z, La_2021%saw_max, La_2021%saw↩ _min, La_2021%saw, La_2021%saw_u, La_2021%asaw, La_2021%asaw_u)

     C API lanthanum.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ce_2021** =element_t_2021("cerium", "Ce", 58, nan, nan, 140.116d0, 0.001d0, 140.12d0, 0.01d0)

     cerium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ce_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ce_2021** =capi_element_t_2021(["c","e","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," ", " "," "," "," "," "," "," "], ["C","e",c_null_char, " "," "," "," "," "," "], Ce_2021%z, Ce_2021%saw_max, Ce_2021%saw↩ _min, Ce_2021%saw, Ce_2021%saw_u, Ce_2021%asaw, Ce_2021%asaw_u)

     C API cerium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::pr_2021** =element_t_2021("praseodymium", "Pr", 59, nan, nan, 140.90766d0, 0.00001d0, 140.91d0, 0.01d0)

     praseodymium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pr_2021"), public, protected **ciaaw__saw_2021↩ ::capi_pr_2021** =capi_element_t_2021(["p","r","a","s","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," ", " "," "," "," "," "," "," "], ["P","r",c_null_char, " "," "," "," "," "," "], Pr_2021%z, Pr_2021%saw_max, Pr_↩ 2021%saw_min, Pr_2021%saw, Pr_2021%saw_u, Pr_2021%asaw, Pr_2021%asaw_u)

     C API praseodymium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::nd_2021** =element_t_2021("neodymium", "Nd", 60, nan, nan, 144.242d0, 0.003d0, 144.24d0, 0.01d0)

     neodymium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Nd_2021"), public, protected **ciaaw__saw_2021↩ ::capi_nd_2021** =capi_element_t_2021(["n","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," ", " "," "," "," "," "," "," "], ["N","d",c_null_char, " "," "," "," "," "," "], Nd_2021%z, Nd_2021%saw_max, Nd_↩ 2021%saw_min, Nd_2021%saw, Nd_2021%saw_u, Nd_2021%asaw, Nd_2021%asaw_u)

    C API neodymium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::pm_2021** =[element_t_2021](#)("promethium", "Pm", 61, nan, nan, nan, nan, nan, nan)

    promethium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Pm_2021"), public, protected **ciaaw__saw_2021←** **::capi_pm_2021** =[capi_element_t_2021](#)(["p","r","o","m","e","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","m",c_null_char, " "," "," "," "," "," "], Pm_2021%z, Pm_2021%saw_max, Pm_← 2021%saw_min, Pm_2021%saw, Pm_2021%saw_u, Pm_2021%asaw, Pm_2021%asaw_u)

    C API promethium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::sm_2021** =[element_t_2021](#)("samarium", "Sm", 62, nan, nan, 150.36d0, 0.02d0, 150.36d0, 0.02d0)

    samarium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Sm_2021"), public, protected **ciaaw__saw_2021←** **::capi_sm_2021** =[capi_element_t_2021](#)(["s","a","m","a","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","m",c_null_char, " "," "," "," "," "," "], Sm_2021%z, Sm_2021%saw_max, Sm_← 2021%saw_min, Sm_2021%saw, Sm_2021%saw_u, Sm_2021%asaw, Sm_2021%asaw_u)

    C API samarium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::eu_2021** =[element_t_2021](#)("europium", "Eu", 63, nan, nan, 151.964d0, 0.001d0, 151.96d0, 0.01d0)

    europium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Eu_2021"), public, protected **ciaaw__saw_2021←** **::capi_eu_2021** =[capi_element_t_2021](#)(["e","u","r","o","p","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","u",c_null_char, " "," "," "," "," "," "], Eu_2021%z, Eu_2021%saw_max, Eu_← 2021%saw_min, Eu_2021%saw, Eu_2021%saw_u, Eu_2021%asaw, Eu_2021%asaw_u)

    C API europium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::gd_2021** =[element_t_2021](#)("gadolinium", "Gd", 64, nan, nan, 157.25d0, 0.03d0, 157.25d0, 0.03d0)

    gadolinium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Gd_2021"), public, protected **ciaaw__saw_2021←** **::capi_gd_2021** =[capi_element_t_2021](#)(["g","a","d","o","l","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","d",c_null_char, " "," "," "," "," "," "], Gd_2021%z, Gd_2021%saw_max, Gd_← 2021%saw_min, Gd_2021%saw, Gd_2021%saw_u, Gd_2021%asaw, Gd_2021%asaw_u)

    C API gadolinium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::tb_2021** =[element_t_2021](#)("terbium", "Tb", 65, nan, nan, 158.925354d0, 0.000007d0, 158.93d0, 0.01d0)

    terbium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Tb_2021"), public, protected **ciaaw__saw_2021←** **::capi_tb_2021** =[capi_element_t_2021](#)(["t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","b",c_null_char, " "," "," "," "," "," "], Tb_2021%z, Tb_2021%saw_max, Tb_2021%saw← _min, Tb_2021%saw, Tb_2021%saw_u, Tb_2021%asaw, Tb_2021%asaw_u)

    C API terbium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::dy_2021** =[element_t_2021](#)("dysprosium", "Dy", 66, nan, nan, 162.500d0, 0.001d0, 162.50d0, 0.01d0)

    dysprosium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Dy_2021"), public, protected **ciaaw__saw_2021←** **::capi_dy_2021** =[capi_element_t_2021](#)(["d","y","s","p","r","o","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","y",c_null_char, " "," "," "," "," "," "], Dy_2021%z, Dy_2021%saw_max, Dy_← 2021%saw_min, Dy_2021%saw, Dy_2021%saw_u, Dy_2021%asaw, Dy_2021%asaw_u)

    C API dysprosium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::ho_2021** =[element_t_2021](#)("holmium", "Ho", 67, nan, nan, 164.930329d0, 0.000005d0, 164.93d0, 0.01d0)

    holmium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ho_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ho_2021** =capi_element_t_2021(["h","o","l","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","o",c_null_char, " "," "," "," "," "," "], Ho_2021%z, Ho_2021%saw_max, Ho_↩ 2021%saw_min, Ho_2021%saw, Ho_2021%saw_u, Ho_2021%asaw, Ho_2021%asaw_u)

  C API holmium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::er_2021** =element_t_2021("erbium", "Er", 68, nan, nan, 167.259d0, 0.003d0, 167.26d0, 0.01d0)

  erbium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Er_2021"), public, protected **ciaaw__saw_2021↩ ::capi_er_2021** =capi_element_t_2021(["e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","r",c_null_char, " "," "," "," "," "," "], Er_2021%z, Er_2021%saw_max, Er_2021%saw_min, Er_2021%saw, Er_2021%saw_u, Er_2021%asaw, Er_2021%asaw_u)

  C API erbium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::tm_2021** =element_t_2021("thulium", "Tm", 69, nan, nan, 168.934219d0, 0.000005d0, 168.93d0, 0.01d0)

  thulium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tm_2021"), public, protected **ciaaw__saw_2021↩ ::capi_tm_2021** =capi_element_t_2021(["t","h","u","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","m",c_null_char, " "," "," "," "," "," "], Tm_2021%z, Tm_2021%saw_max, Tm_↩ 2021%saw_min, Tm_2021%saw, Tm_2021%saw_u, Tm_2021%asaw, Tm_2021%asaw_u)

  C API thulium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::yb_2021** =element_t_2021("ytterbium", "Yb", 70, nan, nan, 173.045d0, 0.010d0, 173.05d0, 0.02d0)

  ytterbium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Yb_2021"), public, protected **ciaaw__saw_2021↩ ::capi_yb_2021** =capi_element_t_2021(["y","t","t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["Y","b",c_null_char, " "," "," "," "," "," "], Yb_2021%z, Yb_2021%saw_max, Yb_↩ 2021%saw_min, Yb_2021%saw, Yb_2021%saw_u, Yb_2021%asaw, Yb_2021%asaw_u)

  C API ytterbium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::lu_2021** =element_t_2021("lutetium", "Lu", 71, nan, nan, 174.9668d0, 0.0001d0, 174.97d0, 0.01d0)

  lutetium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Lu_2021"), public, protected **ciaaw__saw_2021↩ ::capi_lu_2021** =capi_element_t_2021(["l","u","t","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","u",c_null_char, " "," "," "," "," "," "], Lu_2021%z, Lu_2021%saw_max, Lu_2021%saw↩ _min, Lu_2021%saw, Lu_2021%saw_u, Lu_2021%asaw, Lu_2021%asaw_u)

  C API lutetium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::hf_2021** =element_t_2021("hafnium", "Hf", 72, nan, nan, 178.486d0, 0.006d0, 178.49d0, 0.01d0)

  hafnium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hf_2021"), public, protected **ciaaw__saw_2021↩ ::capi_hf_2021** =capi_element_t_2021(["h","a","f","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","f",c_null_char, " "," "," "," "," "," "], Hf_2021%z, Hf_2021%saw_max, Hf_2021%saw↩ _min, Hf_2021%saw, Hf_2021%saw_u, Hf_2021%asaw, Hf_2021%asaw_u)

  C API hafnium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ta_2021** =element_t_2021("tantalum", "Ta", 73, nan, nan, 180.94788d0, 0.00002d0, 180.95d0, 0.01d0)

  tantalum.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ta_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ta_2021** =capi_element_t_2021(["t","a","n","t","a","l","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","a",c_null_char, " "," "," "," "," "," "], Ta_2021%z, Ta_2021%saw_max, Ta_2021%saw↩ _min, Ta_2021%saw, Ta_2021%saw_u, Ta_2021%asaw, Ta_2021%asaw_u)

  C API tantalum.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::w_2021** =element_t_2021("tungsten", "W", 74, nan, nan, 183.84d0, 0.01d0, 183.84d0, 0.01d0)

tungsten.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_W_2021"), public, protected **ciaaw__saw_2021↩ ::capi_w_2021** =capi_element_t_2021(["t","u","n","g","s","t","e","n",c_null_char, " "," " "], ["W",c_null_char, " "," "," "," "," "," "," "," "], W_2021%z, W_2021%saw_max, W_2021%saw_min, W_2021%saw, W_2021%saw_u, W_2021%asaw, W_2021%asaw_u)

  C API tungsten.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::re_2021** =element_t_2021("rhenium", "Re", 75, nan, nan, 186.207d0, 0.001d0, 186.21d0, 0.01d0)

  rhenium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Re_2021"), public, protected **ciaaw__saw_2021↩ ::capi_re_2021** =capi_element_t_2021(["r","h","e","n","i","u","m",c_null_char, " "," "], ["R","e",c_null_char, " "," "," "," "," "," "," "], Re_2021%z, Re_2021%saw_max, Re_2021%saw↩ _min, Re_2021%saw, Re_2021%saw_u, Re_2021%asaw, Re_2021%asaw_u)

  C API rhenium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::os_2021** =element_t_2021("osmium", "Os", 76, nan, nan, 190.23d0, 0.03d0, 190.23d0, 0.03d0)

  osmium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Os_2021"), public, protected **ciaaw__saw_2021↩ ::capi_os_2021** =capi_element_t_2021(["o","s","m","i","u","m",c_null_char, " "," "], ["O","s",c_null_char, " "," "," "," "," "," "," "], Os_2021%z, Os_2021%saw_max, Os_↩ 2021%saw_min, Os_2021%saw, Os_2021%saw_u, Os_2021%asaw, Os_2021%asaw_u)

  C API osmium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::ir_2021** =element_t_2021("iridium", "Ir", 77, nan, nan, 192.217d0, 0.002d0, 192.22d0, 0.01d0)

  iridium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ir_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ir_2021** =capi_element_t_2021(["i","r","i","d","i","u","m",c_null_char, " "," "], ["I","r",c_null_char, " "," "," "," "," "," "," "], Ir_2021%z, Ir_2021%saw_max, Ir_2021%saw_min, Ir_2021%saw, Ir_2021%saw_u, Ir_2021%asaw, Ir_2021%asaw_u)

  C API iridium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::pt_2021** =element_t_2021("platinum", "Pt", 78, nan, nan, 195.084d0, 0.009d0, 195.08d0, 0.02d0)

  platinum.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pt_2021"), public, protected **ciaaw__saw_2021↩ ::capi_pt_2021** =capi_element_t_2021(["p","l","a","t","i","n","u","m",c_null_char, " "," " "], ["P","t",c_null_char, " "," "," "," "," "," "," "], Pt_2021%z, Pt_2021%saw_max, Pt_2021%saw↩ _min, Pt_2021%saw, Pt_2021%saw_u, Pt_2021%asaw, Pt_2021%asaw_u)

  C API platinum.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::au_2021** =element_t_2021("gold", "Au", 79, nan, nan, 196.966570d0, 0.000004d0, 196.97d0, 0.01d0)

  gold.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Au_2021"), public, protected **ciaaw__saw_2021↩ ::capi_au_2021** =capi_element_t_2021(["g","o","l","d",c_null_char, " "," "], ["A","u",c_null_char, " "," "," "," "," "," "," "], Au_2021%z, Au_2021%saw_max, Au_2021%saw↩ _min, Au_2021%saw, Au_2021%saw_u, Au_2021%asaw, Au_2021%asaw_u)

  C API gold.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::hg_2021** =element_t_2021("mercury", "Hg", 80, nan, nan, 200.592d0, 0.003d0, 200.59d0, 0.01d0)

  mercury.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hg_2021"), public, protected **ciaaw__saw_2021↩ ::capi_hg_2021** =capi_element_t_2021(["m","e","r","c","u","r","y",c_null_char, " "," "], ["H","g",c_null_char, " "," "," "," "," "," "," "], Hg_2021%z, Hg_2021%saw_max, Hg_↩ 2021%saw_min, Hg_2021%saw, Hg_2021%saw_u, Hg_2021%asaw, Hg_2021%asaw_u)

  C API mercury.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::tl_2021** =element_t_2021("thallium", "Tl", 81, 204.382d0, 204.385d0, 204.3835d0, 0.0009d0, 204.38d0, 0.01d0)

    thallium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Tl_2021"), public, protected **ciaaw__saw_2021↩ ::capi_tl_2021** =capi_element_t_2021(["t","h","a","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","l",c_null_char, " "," "," "," "," "," "], Tl_2021%z, Tl_2021%saw_max, Tl_2021%saw_min, Tl_2021%saw, Tl_2021%saw_u, Tl_2021%asaw, Tl_2021%asaw_u)

    C API thallium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::pb_2021** =element_t_2021("lead", "Pb", 82, 206.14d0, 207.94d0, 207.0d0, 0.6d0, 207.2d0, 1.1d0)

    lead.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pb_2021"), public, protected **ciaaw__saw_2021↩ ::capi_pb_2021** =capi_element_t_2021(["l","e","a","d",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","b",c_null_char, " "," "," "," "," "," "], Pb_2021%z, Pb_2021%saw_max, Pb_2021%saw↩ _min, Pb_2021%saw, Pb_2021%saw_u, Pb_2021%asaw, Pb_2021%asaw_u)

    C API lead.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::bi_2021** =element_t_2021("bismuth", "Bi", 83, nan, nan, 208.98040d0, 0.00001d0, 208.98d0, 0.01d0)

    bismuth.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Bi_2021"), public, protected **ciaaw__saw_2021↩ ::capi_bi_2021** =capi_element_t_2021(["b","i","s","m","u","t","h",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","i",c_null_char, " "," "," "," "," "," "], Bi_2021%z, Bi_2021%saw_max, Bi_2021%saw↩ _min, Bi_2021%saw, Bi_2021%saw_u, Bi_2021%asaw, Bi_2021%asaw_u)

    C API bismuth.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::po_2021** =element_t_2021("polonium", "Po", 84, nan, nan, nan, nan, nan, nan)

    polonium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Po_2021"), public, protected **ciaaw__saw_2021↩ ::capi_po_2021** =capi_element_t_2021(["p","o","l","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","o",c_null_char, " "," "," "," "," "," "], Po_2021%z, Po_2021%saw_max, Po_↩ 2021%saw_min, Po_2021%saw, Po_2021%saw_u, Po_2021%asaw, Po_2021%asaw_u)

    C API polonium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::at_2021** =element_t_2021("astatine", "At", 85, nan, nan, nan, nan, nan, nan)

    astatine.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_At_2021"), public, protected **ciaaw__saw_2021↩ ::capi_at_2021** =capi_element_t_2021(["a","s","t","a","t","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","t",c_null_char, " "," "," "," "," "," "], At_2021%z, At_2021%saw_max, At_2021%saw_min, At_2021%saw, At_2021%saw_u, At_2021%asaw, At_2021%asaw_u)

    C API astatine.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::rn_2021** =element_t_2021("radon", "Rn", 86, nan, nan, nan, nan, nan, nan)

    radon.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rn_2021"), public, protected **ciaaw__saw_2021↩ ::capi_rn_2021** =capi_element_t_2021(["r","a","d","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","n",c_null_char, " "," "," "," "," "," "], Rn_2021%z, Rn_2021%saw_max, Rn_2021%saw↩ _min, Rn_2021%saw, Rn_2021%saw_u, Rn_2021%asaw, Rn_2021%asaw_u)

    C API radon.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::fr_2021** =element_t_2021("francium", "Fr", 87, nan, nan, nan, nan, nan, nan)

    francium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fr_2021"), public, protected **ciaaw__saw_2021↩ ::capi_fr_2021** =capi_element_t_2021(["f","r","a","n","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","r",c_null_char, " "," "," "," "," "," "], Fr_2021%z, Fr_2021%saw_max, Fr_2021%saw_min, Fr_2021%saw, Fr_2021%saw_u, Fr_2021%asaw, Fr_2021%asaw_u)

C API francium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::ra_2021** =[element_t_2021](#)("radium", "Ra", 88, nan, nan, nan, nan, nan, nan)

    radium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ra_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ra_2021** =[capi_element_t_2021](#)(["r","a","d","i","u","m",c_null_char, " "," "], ["R","a",c_null_char, " "," "," "," "," "," "], Ra_2021%z, Ra_2021%saw_max, Ra_2021%saw↩ _min, Ra_2021%saw, Ra_2021%saw_u, Ra_2021%asaw, Ra_2021%asaw_u)

    C API radium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::ac_2021** =[element_t_2021](#)("actinium", "Ac", 89, nan, nan, nan, nan, nan, nan)

    actinium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ac_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ac_2021** =[capi_element_t_2021](#)(["a","c","t","i","n","i","u","m",c_null_char, " "," "], ["A","c",c_null_char, " "," "," "," "," "," "], Ac_2021%z, Ac_2021%saw_max, Ac_2021%saw↩ _min, Ac_2021%saw, Ac_2021%saw_u, Ac_2021%asaw, Ac_2021%asaw_u)

    C API actinium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::th_2021** =[element_t_2021](#)("thorium", "Th", 90, nan, nan, 232.0377d0, 0.0004d0, 232.04d0, 0.01d0)

    thorium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Th_2021"), public, protected **ciaaw__saw_2021↩ ::capi_th_2021** =[capi_element_t_2021](#)(["t","h","o","r","i","u","m",c_null_char, " "," "], ["T","h",c_null_char, " "," "," "," "," "," "], Th_2021%z, Th_2021%saw_max, Th_2021%saw↩ _min, Th_2021%saw, Th_2021%saw_u, Th_2021%asaw, Th_2021%asaw_u)

    C API thorium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::pa_2021** =[element_t_2021](#)("protactinium", "Pa", 91, nan, nan, 231.03588d0, 0.00001d0, 231.04d0, 0.01d0)

    protactinium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Pa_2021"), public, protected **ciaaw__saw_2021↩ ::capi_pa_2021** =[capi_element_t_2021](#)(["p","r","o","t","a","c","t","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","a",c_null_char, " "," "," "," "," "," "], Pa_2021%z, Pa_2021%saw_max, Pa_↩ 2021%saw_min, Pa_2021%saw, Pa_2021%saw_u, Pa_2021%asaw, Pa_2021%asaw_u)

    C API protactinium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::u_2021** =[element_t_2021](#)("uranium", "U", 92, nan, nan, 238.02891d0, 0.00003d0, 238.03d0, 0.01d0)

    uranium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_U_2021"), public, protected **ciaaw__saw_2021↩ ::capi_u_2021** =[capi_element_t_2021](#)(["u","r","a","n","i","u","m",c_null_char, " "," "], ["U",c_null_char, " "," "," "," "," "," "," "], U_2021%z, U_2021%saw_max, U_2021%saw_min, U_2021%saw, U_2021%saw_u, U_2021%asaw, U_2021%asaw_u)

    C API uranium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::np_2021** =[element_t_2021](#)("neptunium", "Np", 93, nan, nan, nan, nan, nan, nan)

    neptunium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Np_2021"), public, protected **ciaaw__saw_2021↩ ::capi_np_2021** =[capi_element_t_2021](#)(["n","e","p","t","u","n","i","u","m",c_null_char, " "," "], ["N","p",c_null_char, " "," "," "," "," "," "], Np_2021%z, Np_2021%saw_max, Np_↩ 2021%saw_min, Np_2021%saw, Np_2021%saw_u, Np_2021%asaw, Np_2021%asaw_u)

    C API neptunium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::pu_2021** =[element_t_2021](#)("plutonium", "Pu", 94, nan, nan, nan, nan, nan, nan)

    plutonium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Pu_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_pu_2021 =capi_element_t_2021(["p","l","u","t","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "
  "," "," "," "," "," "," "," "], ["P","u",c_null_char, " "," "," "," "," "," "], Pu_2021%z, Pu_2021%saw_max, Pu_←
  2021%saw_min, Pu_2021%saw, Pu_2021%saw_u, Pu_2021%asaw, Pu_2021%asaw_u)

  C API plutonium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::am_2021** =element_t_2021("americium",
  "Am", 95, nan, nan, nan, nan, nan, nan)

  americium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Am_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_am_2021 =capi_element_t_2021(["a","m","e","r","i","c","i","u","m",c_null_char, " "," "," "," "," "," "," "
  "," "," "," "," "," "," "," "], ["A","m",c_null_char, " "," "," "," "," "," "], Am_2021%z, Am_2021%saw_max, Am_←
  2021%saw_min, Am_2021%saw, Am_2021%saw_u, Am_2021%asaw, Am_2021%asaw_u)

  C API americium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::cm_2021** =element_t_2021("curium", "Cm",
  96, nan, nan, nan, nan, nan, nan)

  curium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cm_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_cm_2021 =capi_element_t_2021(["c","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "
  "," "," "," "," "," "," "], ["C","m",c_null_char, " "," "," "," "," "," "], Cm_2021%z, Cm_2021%saw_max, Cm_←
  2021%saw_min, Cm_2021%saw, Cm_2021%saw_u, Cm_2021%asaw, Cm_2021%asaw_u)

  C API curium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::bk_2021** =element_t_2021("berkelium", "Bk",
  97, nan, nan, nan, nan, nan, nan)

  berkelium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Bk_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_bk_2021 =capi_element_t_2021(["b","e","r","k","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "
  "," "," "," "," "," "," "," "], ["B","k",c_null_char, " "," "," "," "," "," "], Bk_2021%z, Bk_2021%saw_max, Bk_←
  2021%saw_min, Bk_2021%saw, Bk_2021%saw_u, Bk_2021%asaw, Bk_2021%asaw_u)

  C API berkelium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::cf_2021** =element_t_2021("californium", "Cf",
  98, nan, nan, nan, nan, nan, nan)

  californium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cf_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_cf_2021 =capi_element_t_2021(["c","a","l","i","f","o","r","n","i","u","m",c_null_char, " "," "," "," "," "," "
  "," "," "," "," "," "," "], ["C","f",c_null_char, " "," "," "," "," "," "], Cf_2021%z, Cf_2021%saw_max, Cf_2021%saw←
  _min, Cf_2021%saw, Cf_2021%saw_u, Cf_2021%asaw, Cf_2021%asaw_u)

  C API californium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::es_2021** =element_t_2021("einsteinium", "Es",
  99, nan, nan, nan, nan, nan, nan)

  einsteinium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Es_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_es_2021 =capi_element_t_2021(["e","i","n","s","t","e","i","n","i","u","m",c_null_char, " "," "," "," "," "
  "," "," "," "," "," "," "," "], ["E","s",c_null_char, " "," "," "," "," "," "], Es_2021%z, Es_2021%saw_max, Es_←
  2021%saw_min, Es_2021%saw, Es_2021%saw_u, Es_2021%asaw, Es_2021%asaw_u)

  C API einsteinium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::fm_2021** =element_t_2021("fermium", "Fm",
  100, nan, nan, nan, nan, nan, nan)

  fermium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fm_2021"), public, protected **ciaaw__saw_2021←**
  ::capi_fm_2021 =capi_element_t_2021(["f","e","r","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "
  "," "," "," "," "," "," "], ["F","m",c_null_char, " "," "," "," "," "," "], Fm_2021%z, Fm_2021%saw_max, Fm_←
  2021%saw_min, Fm_2021%saw, Fm_2021%saw_u, Fm_2021%asaw, Fm_2021%asaw_u)

  C API fermium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::md_2021** =element_t_2021("mendelevium",
  "Md", 101, nan, nan, nan, nan, nan, nan)

mendelevium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Md_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_md_2021 =capi_element_t_2021(["m","e","n","d","e","l","e","v","i","u","m",c_null_char, " "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["M","d",c_null_char, " "," "," "," "," "," "], Md_2021%z, Md_2021%saw_max, Md_↩
  2021%saw_min, Md_2021%saw, Md_2021%saw_u, Md_2021%asaw, Md_2021%asaw_u)

  C API mendelevium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::no_2021** =element_t_2021("nobelium", "No",
  102, nan, nan, nan, nan, nan, nan)

  nobelium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_No_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_no_2021 =capi_element_t_2021(["n","o","b","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["N","o",c_null_char, " "," "," "," "," "," "], No_2021%z, No_2021%saw_max, No_↩
  2021%saw_min, No_2021%saw, No_2021%saw_u, No_2021%asaw, No_2021%asaw_u)

  C API nobelium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::lr_2021** =element_t_2021("lawrencium", "Lr",
  103, nan, nan, nan, nan, nan, nan)

  lawrencium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Lr_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_lr_2021 =capi_element_t_2021(["l","a","w","r","e","n","c","i","u","m",c_null_char, " "," "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["L","r",c_null_char, " "," "," "," "," "," "], Lr_2021%z, Lr_2021%saw_max, Lr_2021%saw↩
  _min, Lr_2021%saw, Lr_2021%saw_u, Lr_2021%asaw, Lr_2021%asaw_u)

  C API lawrencium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::rf_2021** =element_t_2021("rutherfordium",
  "Rf", 104, nan, nan, nan, nan, nan, nan)

  rutherfordium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rf_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_rf_2021 =capi_element_t_2021(["r","u","t","h","e","r","f","o","r","d","i","u","m",c_null_char, " "," "," "," ",
  " "," "," "," "," "," "," "], ["R","f",c_null_char, " "," "," "," "," "," "], Rf_2021%z, Rf_2021%saw_max, Rf_2021%saw↩
  _min, Rf_2021%saw, Rf_2021%saw_u, Rf_2021%asaw, Rf_2021%asaw_u)

  C API rutherfordium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::db_2021** =element_t_2021("dubnium", "Db",
  105, nan, nan, nan, nan, nan, nan)

  dubnium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Db_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_db_2021 =capi_element_t_2021(["d","u","b","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["D","b",c_null_char, " "," "," "," "," "," "], Db_2021%z, Db_2021%saw_max, Db_↩
  2021%saw_min, Db_2021%saw, Db_2021%saw_u, Db_2021%asaw, Db_2021%asaw_u)

  C API dubnium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::sg_2021** =element_t_2021("seaborgium",
  "Sg", 106, nan, nan, nan, nan, nan, nan)

  seaborgium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Sg_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_sg_2021 =capi_element_t_2021(["s","e","a","b","o","r","g","i","u","m",c_null_char, " "," "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["S","g",c_null_char, " "," "," "," "," "," "], Sg_2021%z, Sg_2021%saw_max, Sg_↩
  2021%saw_min, Sg_2021%saw, Sg_2021%saw_u, Sg_2021%asaw, Sg_2021%asaw_u)

  C API seaborgium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::bh_2021** =element_t_2021("bohrium", "Bh",
  107, nan, nan, nan, nan, nan, nan)

  bohrium.

- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Bh_2021"), public, protected **ciaaw__saw_2021**↩
  ::capi_bh_2021 =capi_element_t_2021(["b","o","h","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," ",
  " "," "," "," "," "," "," "], ["B","h",c_null_char, " "," "," "," "," "," "], Bh_2021%z, Bh_2021%saw_max, Bh_↩
  2021%saw_min, Bh_2021%saw, Bh_2021%saw_u, Bh_2021%asaw, Bh_2021%asaw_u)

  C API bohrium.

- type(element_t_2021), parameter, public **ciaaw__saw_2021::hs_2021** =element_t_2021("hassium", "Hs", 108, nan, nan, nan, nan, nan, nan)

  hassium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Hs_2021"), public, protected **ciaaw__saw_2021↩ ::capi_hs_2021** =capi_element_t_2021(["h","a","s","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["H","s",c_null_char, " "," "," "," "," "," " "], Hs_2021%z, Hs_2021%saw_max, Hs_↩ 2021%saw_min, Hs_2021%saw, Hs_2021%saw_u, Hs_2021%asaw, Hs_2021%asaw_u)

  C API hassium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::mt_2021** =element_t_2021("meitnerium", "Mt", 109, nan, nan, nan, nan, nan, nan)

  meitnerium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Mt_2021"), public, protected **ciaaw__saw_2021↩ ::capi_mt_2021** =capi_element_t_2021(["m","e","i","t","n","e","r","i","u","m",c_null_char, " "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["M","t",c_null_char, " "," "," "," "," "," " "], Mt_2021%z, Mt_2021%saw_max, Mt_↩ 2021%saw_min, Mt_2021%saw, Mt_2021%saw_u, Mt_2021%asaw, Mt_2021%asaw_u)

  C API meitnerium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::ds_2021** =element_t_2021("darmstadtium", "Ds", 110, nan, nan, nan, nan, nan, nan)

  darmstadtium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Ds_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ds_2021** =capi_element_t_2021(["d","a","r","m","s","t","a","d","t","i","u","m",c_null_char, " "," "," " "," "," "," "," "," "," "," " "], ["D","s",c_null_char, " "," "," "," "," "," " "], Ds_2021%z, Ds_2021%saw_max, Ds_↩ 2021%saw_min, Ds_2021%saw, Ds_2021%saw_u, Ds_2021%asaw, Ds_2021%asaw_u)

  C API darmstadtium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::rg_2021** =element_t_2021("roentgenium", "Rg", 111, nan, nan, nan, nan, nan, nan)

  roentgenium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Rg_2021"), public, protected **ciaaw__saw_2021↩ ::capi_rg_2021** =capi_element_t_2021(["r","o","e","n","t","g","e","n","i","u","m",c_null_char, " "," "," "," "," " "," "," "," "," "," "," "," " "], ["R","g",c_null_char, " "," "," "," "," "," " "], Rg_2021%z, Rg_2021%saw_max, Rg_↩ 2021%saw_min, Rg_2021%saw, Rg_2021%saw_u, Rg_2021%asaw, Rg_2021%asaw_u)

  C API roentgenium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::cn_2021** =element_t_2021("copernicium", "Cn", 112, nan, nan, nan, nan, nan, nan)

  copernicium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Cn_2021"), public, protected **ciaaw__saw_2021↩ ::capi_cn_2021** =capi_element_t_2021(["c","o","p","e","r","n","i","c","i","u","m",c_null_char, " "," "," "," "," " "," "," "," "," "," "," "," " "], ["C","n",c_null_char, " "," "," "," "," "," " "], Cn_2021%z, Cn_2021%saw_max, Cn_↩ 2021%saw_min, Cn_2021%saw, Cn_2021%saw_u, Cn_2021%asaw, Cn_2021%asaw_u)

  C API copernicium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::nh_2021** =element_t_2021("nihonium", "Nh", 113, nan, nan, nan, nan, nan, nan)

  nihonium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Nh_2021"), public, protected **ciaaw__saw_2021↩ ::capi_nh_2021** =capi_element_t_2021(["n","i","h","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["N","h",c_null_char, " "," "," "," "," "," " "], Nh_2021%z, Nh_2021%saw_max, Nh_↩ 2021%saw_min, Nh_2021%saw, Nh_2021%saw_u, Nh_2021%asaw, Nh_2021%asaw_u)

  C API nihonium.
- type(element_t_2021), parameter, public **ciaaw__saw_2021::fl_2021** =element_t_2021("flerovium", "Fl", 114, nan, nan, nan, nan, nan, nan)

  flerovium.
- type(capi_element_t_2021), bind(C, name="ciaaw_saw_Fl_2021"), public, protected **ciaaw__saw_2021↩ ::capi_fl_2021** =capi_element_t_2021(["f","l","e","r","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," " "], ["F","l",c_null_char, " "," "," "," "," "," " "], Fl_2021%z, Fl_2021%saw_max, Fl_2021%saw_min, Fl_2021%saw, Fl_2021%saw_u, Fl_2021%asaw, Fl_2021%asaw_u)

C API flerovium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::mc_2021** =[element_t_2021](#)("moscovium", "Mc", 115, nan, nan, nan, nan, nan, nan)

    moscovium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Mc_2021"), public, protected **ciaaw__saw_2021↩ ::capi_mc_2021** =[capi_element_t_2021](#)(["m","o","s","c","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["M","c",c_null_char, " "," "," "," "," "," " "], Mc_2021%z, Mc_2021%saw_max, Mc_↩ 2021%saw_min, Mc_2021%saw, Mc_2021%saw_u, Mc_2021%asaw, Mc_2021%asaw_u)

    C API moscovium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::lv_2021** =[element_t_2021](#)("livermorium", "Lv", 116, nan, nan, nan, nan, nan, nan)

    livermorium.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Lv_2021"), public, protected **ciaaw__saw_2021↩ ::capi_lv_2021** =[capi_element_t_2021](#)(["l","i","v","e","r","m","o","r","i","u","m",c_null_char, " "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["L","v",c_null_char, " "," "," "," "," "," " "], Lv_2021%z, Lv_2021%saw_max, Lv_2021%saw↩ _min, Lv_2021%saw, Lv_2021%saw_u, Lv_2021%asaw, Lv_2021%asaw_u)

    C API livermorium.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::ts_2021** =[element_t_2021](#)("tennesine", "Ts", 117, nan, nan, nan, nan, nan, nan)

    tennesine.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Ts_2021"), public, protected **ciaaw__saw_2021↩ ::capi_ts_2021** =[capi_element_t_2021](#)(["t","e","n","n","e","s","i","n","e",c_null_char, " "," "," "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["T","s",c_null_char, " "," "," "," "," "," " "], Ts_2021%z, Ts_2021%saw_max, Ts_2021%saw↩ _min, Ts_2021%saw, Ts_2021%saw_u, Ts_2021%asaw, Ts_2021%asaw_u)

    C API tennesine.

- type([element_t_2021](#)), parameter, public **ciaaw__saw_2021::og_2021** =[element_t_2021](#)("organesson", "Og", 118, nan, nan, nan, nan, nan, nan)

    organesson.

- type([capi_element_t_2021](#)), bind(C, name="ciaaw_saw_Og_2021"), public, protected **ciaaw__saw_2021↩ ::capi_og_2021** =[capi_element_t_2021](#)(["o","r","g","a","n","e","s","s","o","n",c_null_char, " "," "," "," "," "," " "," "," "," "," "," "," "," " "], ["O","g",c_null_char, " "," "," "," "," "," " "], Og_2021%z, Og_2021%saw_max, Og_↩ 2021%saw_min, Og_2021%saw, Og_2021%saw_u, Og_2021%asaw, Og_2021%asaw_u)

    C API organesson.

7.13.1 Detailed Description

CIAAW Standard Atomic Weights 2021 -autogenerated.

7.14 ciaaw_saw_latest.f90 File Reference

CIAAW Standard Atomic Weights latest -autogenerated.

Data Types

- type [ciaaw__saw_latest::element_t](#)

    Object representing an element.

- type [ciaaw__saw_latest::capi_element_t](#)

    Object representing an element.

Modules

- module [ciaaw__saw_latest](#)

    CIAAW Standard Atomic Weights latest - autogenerated.

Variables

- integer(int32), parameter, public **ciaaw__saw_latest::year** = 2021

    Year of saw.

- integer(c_int), bind(C, name="YEAR"), public, protected **ciaaw__saw_latest::capi_year** = YEAR

    C API Year of saw.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::h** =[element_t](#)("hydrogen", "H", 1, 1.00784d0, 1.↩00811d0, 1.00798d0, 0.00008d0, 1.0080d0, 0.0002d0)

    hydrogen.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_H"), public, protected **ciaaw__saw_latest::capi_↩h** =[capi_element_t](#)(["h","y","d","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H",c_null_char, " "," "," "," "," "," "," "], H%z, H%saw_max, H%saw_min, H%saw, H%saw_u, H%asaw, H%asaw_u)

    C API hydrogen.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::he** =[element_t](#)("helium", "He", 2, nan, nan, 4.↩002602d0, 0.000002d0, 4.0026d0, 0.0001d0)

    helium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_He"), public, protected **ciaaw__saw_latest::capi_he** =[capi_element_t](#)(["h","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","e",c_null_char, " "," "," "," "," "," "], He%z, He%saw_max, He%saw_min, He%saw, He%saw_u, He%asaw, He%asaw_u)

    C API helium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::li** =[element_t](#)("lithium", "Li", 3, 6.938d0, 6.997d0, 6.97d0, 0.02d0, 6.94d0, 0.06d0)

    lithium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Li"), public, protected **ciaaw__saw_latest::capi_↩li** =[capi_element_t](#)(["l","i","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","i",c_null_char, " "," "," "," "," "," "], Li%z, Li%saw_max, Li%saw_min, Li%saw, Li%saw_u, Li%asaw, Li%asaw_u)

    C API lithium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::be** =[element_t](#)("beryllium", "Be", 4, nan, nan, 9.↩0121831d0, 0.0000005d0, 9.0122d0, 0.00001d0)

    beryllium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Be"), public, protected **ciaaw__saw_latest::capi_be** =[capi_element_t](#)(["b","e","r","y","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","e",c_null_char, " "," "," "," "," "," "], Be%z, Be%saw_max, Be%saw_min, Be%saw, Be%saw_u, Be%asaw, Be%asaw_u)

    C API beryllium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::b** =[element_t](#)("boron", "B", 5, 10.806d0, 10.821d0, 10.813d0, 0.005d0, 10.81d0, 0.02d0)

    boron.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_B"), public, protected **ciaaw__saw_latest::capi_↩b** =[capi_element_t](#)(["b","o","r","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B",c_null_char, " "," "," "," "," "," "," "], B%z, B%saw_max, B%saw_min, B%saw, B%saw_u, B%asaw, B%asaw_u)

    C API boron.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::c** =[element_t](#)("carbon", "C", 6, 12.0096d0, 12.↩0116d0, 12.0106d0, 0.0006d0, 12.011d0, 0.002d0)

carbon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_C"), public, protected **ciaaw__saw_latest::capi_↩ c** =[capi_element_t](#)(["c","a","r","b","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C",c_null_char, " "," "," "," "," "," " "], C%z, C%saw_max, C%saw_min, C%saw, C%saw_u, C%asaw, C%asaw_u)

    C API carbon.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::n** =[element_t](#)("nitrogen", "N", 7, 14.00643d0, 14.↩ 00728d0, 14.0069d0, 0.0003d0, 14.007d0, 0.001d0)

    nitrogen.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_N"), public, protected **ciaaw__saw_latest::capi_↩ n** =[capi_element_t](#)(["n","i","t","r","o","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N",c_null_char, " "," "," "," "," "," " "], N%z, N%saw_max, N%saw_min, N%saw, N%saw_u, N%asaw, N%asaw_u)

    C API nitrogen.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::o** =[element_t](#)("oxygen", "O", 8, 15.99903d0, 15.↩ 99977d0, 15.9994d0, 0.0003d0, 15.999d0, 0.001d0)

    oxygen.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_O"), public, protected **ciaaw__saw_latest::capi_↩ o** =[capi_element_t](#)(["o","x","y","g","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "," "], ["O",c_null_char, " "," "," "," "," "," " "], O%z, O%saw_max, O%saw_min, O%saw, O%saw_u, O%asaw, O%asaw_u)

    C API oxygen.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::f** =[element_t](#)("fluorine", "F", 9, nan, nan, 18.↩ 998403162d0, 0.000000005d0, 18.998d0, 0.001d0)

    fluorine.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_F"), public, protected **ciaaw__saw_latest::capi_↩ f** =[capi_element_t](#)(["f","l","u","o","r","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["F",c_null_char, " "," "," "," "," "," " "], F%z, F%saw_max, F%saw_min, F%saw, F%saw_u, F%asaw, F%asaw_u)

    C API fluorine.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::ne** =[element_t](#)("neon", "Ne", 10, nan, nan, 20.↩ 1797d0, 0.0006d0, 20.180d0, 0.001d0)

    neon.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ne"), public, protected **ciaaw__saw_latest::capi_ne** =[capi_element_t](#)(["n","e","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","e",c_null_char, " "," "," "," "," " "], Ne%z, Ne%saw_max, Ne%saw_min, Ne%saw, Ne%saw_u, Ne%asaw, Ne%asaw_u)

    C API neon.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::na** =[element_t](#)("sodium", "Na", 11, nan, nan, 22.↩ 98976928d0, 0.00000002d0, 22.990d0, 0.001d0)

    sodium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Na"), public, protected **ciaaw__saw_latest::capi_na** =[capi_element_t](#)(["s","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["N","a",c_null_char, " "," "," "," "," " "], Na%z, Na%saw_max, Na%saw_min, Na%saw, Na%saw_u, Na%asaw, Na%asaw_u)

    C API sodium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::mg** =[element_t](#)("magnesium", "Mg", 12, 24.304d0, 24.307d0, 24.3055d0, 0.0009d0, 24.305d0, 0.002d0)

    magnesium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Mg"), public, protected **ciaaw__saw_latest::capi_mg** =[capi_element_t](#)(["m","a","g","n","e","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["M","g",c_null_char, " "," "," "," "," " "], Mg%z, Mg%saw_max, Mg%saw_min, Mg%saw, Mg%saw_u, Mg%asaw, Mg%asaw_u)

    C API magnesium.

- type(element_t), parameter, public **ciaaw__saw_latest::al** =element_t("aluminium", "Al", 13, nan, nan, 26.↩
  9815384d0, 0.0000003d0, 26.982d0, 0.001d0)

  aluminium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Al"), public, protected **ciaaw__saw_latest::capi_al**
  =capi_element_t(["a","l","u","m","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," ","
  "], ["A","l",c_null_char, " "," "," "," "," "," "], Al%z, Al%saw_max, Al%saw_min, Al%saw, Al%saw_u, Al%asaw,
  Al%asaw_u)

  C API aluminium.
- type(element_t), parameter, public **ciaaw__saw_latest::si** =element_t("silicon", "Si", 14, 28.084d0, 28.↩
  086d0, 28.0850d0, 0.0006d0, 28.085d0, 0.001d0)

  silicon.
- type(capi_element_t), bind(C, name="ciaaw_saw_Si"), public, protected **ciaaw__saw_latest::capi_↩
  si** =capi_element_t(["s","i","l","i","c","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "], ["S","i",c_null_char, " "," "," "," "," "," "], Si%z, Si%saw_max, Si%saw_min, Si%saw, Si%saw_u, Si%asaw,
  Si%asaw_u)

  C API silicon.
- type(element_t), parameter, public **ciaaw__saw_latest::p** =element_t("phosphorus", "P", 15, nan, nan, 30.↩
  973761998d0, 0.000000005d0, 30.974d0, 0.001d0)

  phosphorus.
- type(capi_element_t), bind(C, name="ciaaw_saw_P"), public, protected **ciaaw__saw_latest::capi_↩
  p** =capi_element_t(["p","h","o","s","p","h","o","r","u","s",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "], ["P",c_null_char, " "," "," "," "," "," "," "], P%z, P%saw_max, P%saw_min, P%saw, P%saw_u, P%asaw,
  P%asaw_u)

  C API phosphorus.
- type(element_t), parameter, public **ciaaw__saw_latest::s** =element_t("sulfur", "S", 16, 32.059d0, 32.076d0,
  32.067d0, 0.005d0, 32.06d0, 0.02d0)

  sulfur.
- type(capi_element_t), bind(C, name="ciaaw_saw_S"), public, protected **ciaaw__saw_latest::capi_↩
  s** =capi_element_t(["s","u","l","f","u","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "], ["S",c_null_char, " "," "," "," "," "," "], S%z, S%saw_max, S%saw_min, S%saw, S%saw_u, S%asaw,
  S%asaw_u)

  C API sulfur.
- type(element_t), parameter, public **ciaaw__saw_latest::cl** =element_t("chlorine", "Cl", 17, 35.446d0, 35.↩
  457d0, 35.451d0, 0.004d0, 35.45d0, 0.01d0)

  chlorine.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cl"), public, protected **ciaaw__saw_latest::capi_↩
  cl** =capi_element_t(["c","h","l","o","r","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "], ["C","l",c_null_char, " "," "," "," "," "," "], Cl%z, Cl%saw_max, Cl%saw_min, Cl%saw, Cl%saw_u, Cl%asaw,
  Cl%asaw_u)

  C API chlorine.
- type(element_t), parameter, public **ciaaw__saw_latest::ar** =element_t("argon", "Ar", 18, 39.792d0, 39.↩
  963d0, 39.88d0, 0.05d0, 39.95d0, 0.16d0)

  argon.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ar"), public, protected **ciaaw__saw_latest::capi_ar**
  =capi_element_t(["a","r","g","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
  "], ["A","r",c_null_char, " "," "," "," "," "," "], Ar%z, Ar%saw_max, Ar%saw_min, Ar%saw, Ar%saw_u, Ar%asaw,
  Ar%asaw_u)

  C API argon.
- type(element_t), parameter, public **ciaaw__saw_latest::k** =element_t("potassium", "K", 19, nan, nan, 39.↩
  0983d0, 0.0001d0, 39.098d0, 0.001d0)

  potassium.
- type(capi_element_t), bind(C, name="ciaaw_saw_K"), public, protected **ciaaw__saw_latest::capi_↩
  k** =capi_element_t(["p","o","t","a","s","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," ","
  "," "], ["K",c_null_char, " "," "," "," "," "," "," "], K%z, K%saw_max, K%saw_min, K%saw, K%saw_u, K%asaw,
  K%asaw_u)

    C API potassium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::ca** =[element_t](#)("calcium", "Ca", 20, nan, nan, 40.↩
078d0, 0.004d0, 40.078d0, 0.004d0)

    calcium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ca"), public, protected **ciaaw__saw_latest::capi_ca** =[capi_element_t](#)(["c","a","l","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","a",c_null_char, " "," "," "," "," "," "], Ca%z, Ca%saw_max, Ca%saw_min, Ca%saw, Ca%saw_u, Ca%asaw, Ca%asaw_u)

    C API calcium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sc** =[element_t](#)("scandium", "Sc", 21, nan, nan, 44.↩
955907d0, 0.000004d0, 44.956d0, 0.001d0)

    scandium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sc"), public, protected **ciaaw__saw_latest::capi_sc** =[capi_element_t](#)(["s","c","a","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","c",c_null_char, " "," "," "," "," "," "], Sc%z, Sc%saw_max, Sc%saw_min, Sc%saw, Sc%saw_u, Sc%asaw, Sc%asaw_u)

    C API scandium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::ti** =[element_t](#)("titanium", "Ti", 22, nan, nan, 47.↩
867d0, 0.001d0, 47.867d0, 0.001d0)

    titanium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ti"), public, protected **ciaaw__saw_latest::capi_↩
ti** =[capi_element_t](#)(["t","i","t","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","i",c_null_char, " "," "," "," "," "," "], Ti%z, Ti%saw_max, Ti%saw_min, Ti%saw, Ti%saw_u, Ti%asaw, Ti%asaw_u)

    C API titanium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::v** =[element_t](#)("vanadium", "V", 23, nan, nan, 50.↩
9415d0, 0.0001d0, 50.942d0, 0.001d0)

    vanadium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_V"), public, protected **ciaaw__saw_latest::capi_↩
v** =[capi_element_t](#)(["v","a","n","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["V",c_null_char, " "," "," "," "," "," "," "], V%z, V%saw_max, V%saw_min, V%saw, V%saw_u, V%asaw, V%asaw_u)

    C API vanadium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::cr** =[element_t](#)("chromium", "Cr", 24, nan, nan, 51.↩
9961d0, 0.0006d0, 51.996d0, 0.001d0)

    chromium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Cr"), public, protected **ciaaw__saw_latest::capi_↩
cr** =[capi_element_t](#)(["c","h","r","o","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","r",c_null_char, " "," "," "," "," "," "], Cr%z, Cr%saw_max, Cr%saw_min, Cr%saw, Cr%saw_u, Cr%asaw, Cr%asaw_u)

    C API chromium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::mn** =[element_t](#)("manganese", "Mn", 25, nan, nan, 54.938043d0, 0.000002d0, 54.938d0, 0.001d0)

    manganese.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Mn"), public, protected **ciaaw__saw_latest::capi_mn** =[capi_element_t](#)(["m","a","n","g","a","n","e","s","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","n",c_null_char, " "," "," "," "," "," "], Mn%z, Mn%saw_max, Mn%saw_min, Mn%saw, Mn%saw_u, Mn%asaw, Mn%asaw_u)

    C API manganese.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::fe** =[element_t](#)("iron", "Fe", 26, nan, nan, 55.845d0, 0.002d0, 55.845d0, 0.002d0)

    iron.

- type(capi_element_t), bind(C, name="ciaaw_saw_Fe"), public, protected **ciaaw__saw_latest::capi_←**
  fe =capi_element_t(["i","r","o","n",c_null_char, " "," " "],
  ["F","e",c_null_char, " "," "," "," "," "," " "]), Fe%z, Fe%saw_max, Fe%saw_min, Fe%saw, Fe%saw_u, Fe%asaw,
  Fe%asaw_u)

  C API iron.

- type(element_t), parameter, public **ciaaw__saw_latest::co** =element_t("cobalt", "Co", 27, nan, nan, 58.←
  933194d0, 0.000003d0, 58.933d0, 0.001d0)

  cobalt.

- type(capi_element_t), bind(C, name="ciaaw_saw_Co"), public, protected **ciaaw__saw_latest::capi_co**
  =capi_element_t(["c","o","b","a","l","t",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["C","o",c_null_char, " "," "," "," "," "," " "]), Co%z, Co%saw_max, Co%saw_min, Co%saw, Co%saw_u,
  Co%asaw, Co%asaw_u)

  C API cobalt.

- type(element_t), parameter, public **ciaaw__saw_latest::ni** =element_t("nickel", "Ni", 28, nan, nan, 58.←
  6934d0, 0.0004d0, 58.693d0, 0.001d0)

  nickel.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ni"), public, protected **ciaaw__saw_latest::capi_←**
  ni =capi_element_t(["n","i","c","k","e","l",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["N","i",c_null_char, " "," "," "," "," "," " "]), Ni%z, Ni%saw_max, Ni%saw_min, Ni%saw, Ni%saw_u, Ni%asaw,
  Ni%asaw_u)

  C API nickel.

- type(element_t), parameter, public **ciaaw__saw_latest::cu** =element_t("copper", "Cu", 29, nan, nan, 63.←
  546d0, 0.003d0, 63.546d0, 0.003d0)

  copper.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cu"), public, protected **ciaaw__saw_latest::capi_cu**
  =capi_element_t(["c","o","p","p","e","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["C","u",c_null_char, " "," "," "," "," "," " "]), Cu%z, Cu%saw_max, Cu%saw_min, Cu%saw, Cu%saw_u,
  Cu%asaw, Cu%asaw_u)

  C API copper.

- type(element_t), parameter, public **ciaaw__saw_latest::zn** =element_t("zinc", "Zn", 30, nan, nan, 65.38d0,
  0.02d0, 65.38d0, 0.02d0)

  zinc.

- type(capi_element_t), bind(C, name="ciaaw_saw_Zn"), public, protected **ciaaw__saw_latest::capi_zn**
  =capi_element_t(["z","i","n","c",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["Z","n",c_null_char, " "," "," "," "," "," " "]), Zn%z, Zn%saw_max, Zn%saw_min, Zn%saw, Zn%saw_u, Zn%asaw,
  Zn%asaw_u)

  C API zinc.

- type(element_t), parameter, public **ciaaw__saw_latest::ga** =element_t("gallium", "Ga", 31, nan, nan, 69.←
  723d0, 0.001d0, 69.723d0, 0.001d0)

  gallium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ga"), public, protected **ciaaw__saw_latest::capi_ga**
  =capi_element_t(["g","a","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["G","a",c_null_char, " "," "," "," "," "," " "]), Ga%z, Ga%saw_max, Ga%saw_min, Ga%saw, Ga%saw_u,
  Ga%asaw, Ga%asaw_u)

  C API gallium.

- type(element_t), parameter, public **ciaaw__saw_latest::ge** =element_t("germanium", "Ge", 32, nan, nan,
  72.630d0, 0.008d0, 72.630d0, 0.008d0)

  germanium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ge"), public, protected **ciaaw__saw_latest::capi_ge**
  =capi_element_t(["g","e","r","m","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "
  "], ["G","e",c_null_char, " "," "," "," "," "," " "]), Ge%z, Ge%saw_max, Ge%saw_min, Ge%saw, Ge%saw_u,
  Ge%asaw, Ge%asaw_u)

  C API germanium.

- type(element_t), parameter, public **ciaaw__saw_latest::as** =element_t("arsenic", "As", 33, nan, nan, 74.←
  921595d0, 0.000006d0, 74.922d0, 0.001d0)

arsenic.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_As"), public, protected **ciaaw__saw_latest::capi_as** =[capi_element_t](#)(["a","r","s","e","n","i","c",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["A","s",c_null_char," "," "," "," "," "," " "], As%z, As%saw_max, As%saw_min, As%saw, As%saw_u, As%asaw, As%asaw_u)

    C API arsenic.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::se** =[element_t](#)("selenium", "Se", 34, nan, nan, 78.↩ 971d0, 0.008d0, 78.971d0, 0.008d0)

    selenium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Se"), public, protected **ciaaw__saw_latest::capi_se** =[capi_element_t](#)(["s","e","l","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["S","e",c_null_char," "," "," "," "," "," " "], Se%z, Se%saw_max, Se%saw_min, Se%saw, Se%saw_u, Se%asaw, Se%asaw_u)

    C API selenium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::br** =[element_t](#)("bromine", "Br", 35, 79.901d0, 79.↩ 907d0, 79.904d0, 0.002d0, 79.904d0, 0.003d0)

    bromine.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Br"), public, protected **ciaaw__saw_latest::capi_br** =[capi_element_t](#)(["b","r","o","m","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["B","r",c_null_char," "," "," "," "," "," " "], Br%z, Br%saw_max, Br%saw_min, Br%saw, Br%saw_u, Br%asaw, Br%asaw_u)

    C API bromine.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::kr** =[element_t](#)("krypton", "Kr", 36, nan, nan, 83.↩ 798d0, 0.002d0, 83.798d0, 0.002d0)

    krypton.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Kr"), public, protected **ciaaw__saw_latest::capi_kr** =[capi_element_t](#)(["k","r","y","p","t","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["K","r",c_null_char," "," "," "," "," "," " "], Kr%z, Kr%saw_max, Kr%saw_min, Kr%saw, Kr%saw_u, Kr%asaw, Kr%asaw_u)

    C API krypton.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::rb** =[element_t](#)("rubidium", "Rb", 37, nan, nan, 85.↩ 4678d0, 0.0003d0, 85.468d0, 0.001d0)

    rubidium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Rb"), public, protected **ciaaw__saw_latest::capi_rb** =[capi_element_t](#)(["r","u","b","i","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["R","b",c_null_char," "," "," "," "," "," " "], Rb%z, Rb%saw_max, Rb%saw_min, Rb%saw, Rb%saw_u, Rb%asaw, Rb%asaw_u)

    C API rubidium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sr** =[element_t](#)("strontium", "Sr", 38, nan, nan, 87.↩ 62d0, 0.01d0, 87.62d0, 0.01d0)

    strontium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sr"), public, protected **ciaaw__saw_latest::capi_sr** =[capi_element_t](#)(["s","t","r","o","n","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["S","r",c_null_char," "," "," "," "," "," " "], Sr%z, Sr%saw_max, Sr%saw_min, Sr%saw, Sr%saw_u, Sr%asaw, Sr%asaw_u)

    C API strontium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::y** =[element_t](#)("yttrium", "Y", 39, nan, nan, 88.↩ 905838d0, 0.000002d0, 88.906d0, 0.001d0)

    yttrium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Y"), public, protected **ciaaw__saw_latest::capi_↩ y** =[capi_element_t](#)(["y","t","t","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["Y",c_null_char," "," "," "," "," "," " "], Y%z, Y%saw_max, Y%saw_min, Y%saw, Y%saw_u, Y%asaw, Y%asaw_u)

    C API yttrium.

- type(element_t), parameter, public **ciaaw__saw_latest::zr** =element_t("zirconium", "Zr", 40, nan, nan, 91.↩
  224d0, 0.002d0, 91.224d0, 0.002d0)

    zirconium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Zr"), public, protected **ciaaw__saw_latest::capi_zr**
  =capi_element_t(["z","i","r","c","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["Z","r",c_null_char, " "," "," "," "," "," "], Zr%z, Zr%saw_max, Zr%saw_min, Zr%saw, Zr%saw_u, Zr%asaw,
  Zr%asaw_u)

    C API zirconium.
- type(element_t), parameter, public **ciaaw__saw_latest::nb** =element_t("nobium", "Nb", 41, nan, nan, 92.↩
  90637d0, 0.00001d0, 92.906d0, 0.001d0)

    nobium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Nb"), public, protected **ciaaw__saw_latest::capi_nb**
  =capi_element_t(["n","o","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["N","b",c_null_char, " "," "," "," "," "," "], Nb%z, Nb%saw_max, Nb%saw_min, Nb%saw, Nb%saw_u,
  Nb%asaw, Nb%asaw_u)

    C API nobium.
- type(element_t), parameter, public **ciaaw__saw_latest::mo** =element_t("molybdenum", "Mo", 42, nan, nan,
  95.95d0, 0.01d0, 95.95d0, 0.01d0)

    molybdenum.
- type(capi_element_t), bind(C, name="ciaaw_saw_Mo"), public, protected **ciaaw__saw_latest::capi_mo**
  =capi_element_t(["m","o","l","y","b","d","e","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "
  "], ["M","o",c_null_char, " "," "," "," "," "," "], Mo%z, Mo%saw_max, Mo%saw_min, Mo%saw, Mo%saw_u,
  Mo%asaw, Mo%asaw_u)

    C API molybdenum.
- type(element_t), parameter, public **ciaaw__saw_latest::tc** =element_t("technetium", "Tc", 43, nan, nan, nan,
  nan, nan, nan)

    technetium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Tc"), public, protected **ciaaw__saw_latest::capi_↩
  tc** =capi_element_t(["t","e","c","h","n","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "],
  ["T","c",c_null_char, " "," "," "," "," "," "], Tc%z, Tc%saw_max, Tc%saw_min, Tc%saw, Tc%saw_u, Tc%asaw,
  Tc%asaw_u)

    C API technetium.
- type(element_t), parameter, public **ciaaw__saw_latest::ru** =element_t("ruthenium", "Ru", 44, nan, nan,
  101.07d0, 0.02d0, 101.07d0, 0.02d0)

    ruthenium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ru"), public, protected **ciaaw__saw_latest::capi_ru**
  =capi_element_t(["r","u","t","h","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["R","u",c_null_char, " "," "," "," "," "," "], Ru%z, Ru%saw_max, Ru%saw_min, Ru%saw, Ru%saw_u,
  Ru%asaw, Ru%asaw_u)

    C API ruthenium.
- type(element_t), parameter, public **ciaaw__saw_latest::rh** =element_t("rhodium", "Rh", 45, nan, nan, 102.↩
  90549d0, 0.00002d0, 102.91d0, 0.01d0)

    rhodium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Rh"), public, protected **ciaaw__saw_latest::capi_rh**
  =capi_element_t(["r","h","o","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["R","h",c_null_char, " "," "," "," "," "," "], Rh%z, Rh%saw_max, Rh%saw_min, Rh%saw, Rh%saw_u,
  Rh%asaw, Rh%asaw_u)

    C API rhodium.
- type(element_t), parameter, public **ciaaw__saw_latest::pd** =element_t("palladium", "Pd", 46, nan, nan,
  106.42d0, 0.01d0, 106.42d0, 0.01d0)

    palladium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Pd"), public, protected **ciaaw__saw_latest::capi_pd**
  =capi_element_t(["p","a","l","l","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "],
  ["P","d",c_null_char, " "," "," "," "," "," "], Pd%z, Pd%saw_max, Pd%saw_min, Pd%saw, Pd%saw_u, Pd%asaw,
  Pd%asaw_u)

    C API palladium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::ag** =[element_t](#)("silver", "Ag", 47, nan, nan, 107.↩
8682d0, 0.0002d0, 107.87d0, 0.01d0)

    silver.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ag"), public, protected **ciaaw__saw_latest::capi_↩
ag** =[capi_element_t](#)(["s","i","l","v","e","r",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
"], ["A","g",c_null_char, " "," "," "," "," "," "], Ag%z, Ag%saw_max, Ag%saw_min, Ag%saw, Ag%saw_u,
Ag%asaw, Ag%asaw_u)

    C API silver.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::cd** =[element_t](#)("cadmium", "Cd", 48, nan, nan,
112.414d0, 0.004d0, 112.41d0, 0.01d0)

    cadmium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Cd"), public, protected **ciaaw__saw_latest::capi_cd**
=[capi_element_t](#)(["c","a","d","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
"], ["C","d",c_null_char, " "," "," "," "," "," "], Cd%z, Cd%saw_max, Cd%saw_min, Cd%saw, Cd%saw_u,
Cd%asaw, Cd%asaw_u)

    C API cadmium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::in** =[element_t](#)("indium", "In", 49, nan, nan, 114.↩
818d0, 0.001d0, 114.82d0, 0.01d0)

    indium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_In"), public, protected **ciaaw__saw_latest::capi_↩
in** =[capi_element_t](#)(["i","n","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," ","
"," "], ["I","n",c_null_char, " "," "," "," "," "," "], In%z, In%saw_max, In%saw_min, In%saw, In%saw_u, In%asaw,
In%asaw_u)

    C API indium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sn** =[element_t](#)("tin", "Sn", 50, nan, nan, 118.70d0,
0.007d0, 118.71d0, 0.01d0)

    tin.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sn"), public, protected **ciaaw__saw_latest::capi_sn**
=[capi_element_t](#)(["t","i","n",c_null_char, " ","
"], ["S","n",c_null_char, " "," "," "," "," "," "], Sn%z, Sn%saw_max, Sn%saw_min, Sn%saw, Sn%saw_u,
Sn%asaw, Sn%asaw_u)

    C API tin.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sb** =[element_t](#)("antimony", "Sb", 51, nan, nan,
121.760d0, 0.001d0, 121.76d0, 0.01d0)

    antimony.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sb"), public, protected **ciaaw__saw_latest::capi_sb**
=[capi_element_t](#)(["a","n","t","i","m","o","n","y",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "],
["S","b",c_null_char, " "," "," "," "," "," "], Sb%z, Sb%saw_max, Sb%saw_min, Sb%saw, Sb%saw_u, Sb%asaw,
Sb%asaw_u)

    C API antimony.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::te** =[element_t](#)("tellurium", "Te", 52, nan, nan, 127.↩
60d0, 0.03d0, 127.60d0, 0.03d0)

    tellurium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Te"), public, protected **ciaaw__saw_latest::capi_te**
=[capi_element_t](#)(["t","e","l","l","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "],
["T","e",c_null_char, " "," "," "," "," "," "], Te%z, Te%saw_max, Te%saw_min, Te%saw, Te%saw_u, Te%asaw,
Te%asaw_u)

    C API tellurium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::i** =[element_t](#)("iodine", "I", 53, nan, nan, 126.↩
90447d0, 0.00003d0, 126.90d0, 0.01d0)

    iodine.

- type(capi_element_t), bind(C, name="ciaaw_saw_I"), public, protected **ciaaw__saw_latest::capi_↩**
  i =capi_element_t(["i","o","d","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["I",c_null_char, " "," "," "," "," "," "," " "], I%z, I%saw_max, I%saw_min, I%saw, I%saw_u, I%asaw, I%asaw↩
  _u)

    C API iodine.
- type(element_t), parameter, public **ciaaw__saw_latest::xe** =element_t("xenon", "Xe", 54, nan, nan, 131.↩
  293d0, 0.006d0, 131.29d0, 0.01d0)

    xenon.
- type(capi_element_t), bind(C, name="ciaaw_saw_Xe"), public, protected **ciaaw__saw_latest::capi_xe**
  =capi_element_t(["x","e","n","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["X","e",c_null_char, " "," "," "," "," "," " "], Xe%z, Xe%saw_max, Xe%saw_min, Xe%saw, Xe%saw_u, Xe%asaw,
  Xe%asaw_u)

    C API xenon.
- type(element_t), parameter, public **ciaaw__saw_latest::cs** =element_t("caesium", "Cs", 55, nan, nan, 132.↩
  90545196d0, 0.00000006d0, 132.91d0, 0.01d0)

    caesium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cs"), public, protected **ciaaw__saw_latest::capi_cs**
  =capi_element_t(["c","a","e","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["C","s",c_null_char, " "," "," "," "," "," " "], Cs%z, Cs%saw_max, Cs%saw_min, Cs%saw, Cs%saw_u, Cs%asaw,
  Cs%asaw_u)

    C API caesium.
- type(element_t), parameter, public **ciaaw__saw_latest::ba** =element_t("barium", "Ba", 56, nan, nan, 137.↩
  327d0, 0.007d0, 137.33d0, 0.01d0)

    barium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ba"), public, protected **ciaaw__saw_latest::capi_ba**
  =capi_element_t(["b","a","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["B","a",c_null_char, " "," "," "," "," "," " "], Ba%z, Ba%saw_max, Ba%saw_min, Ba%saw, Ba%saw_u, Ba%asaw,
  Ba%asaw_u)

    C API barium.
- type(element_t), parameter, public **ciaaw__saw_latest::la** =element_t("lanthanum", "La", 57, nan, nan,
  138.90547d0, 0.00007d0, 138.91d0, 0.01d0)

    lanthanum.
- type(capi_element_t), bind(C, name="ciaaw_saw_La"), public, protected **ciaaw__saw_latest::capi_↩**
  la =capi_element_t(["l","a","n","t","h","a","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "],
  ["L","a",c_null_char, " "," "," "," "," "," " "], La%z, La%saw_max, La%saw_min, La%saw, La%saw_u, La%asaw,
  La%asaw_u)

    C API lanthanum.
- type(element_t), parameter, public **ciaaw__saw_latest::ce** =element_t("cerium", "Ce", 58, nan, nan, 140.↩
  116d0, 0.001d0, 140.12d0, 0.01d0)

    cerium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ce"), public, protected **ciaaw__saw_latest::capi_ce**
  =capi_element_t(["c","e","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
  "], ["C","e",c_null_char, " "," "," "," "," "," " "], Ce%z, Ce%saw_max, Ce%saw_min, Ce%saw, Ce%saw_u,
  Ce%asaw, Ce%asaw_u)

    C API cerium.
- type(element_t), parameter, public **ciaaw__saw_latest::pr** =element_t("praseodymium", "Pr", 59, nan, nan,
  140.90766d0, 0.00001d0, 140.91d0, 0.01d0)

    praseodymium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Pr"), public, protected **ciaaw__saw_latest::capi_pr**
  =capi_element_t(["p","r","a","s","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "
  "," " "], ["P","r",c_null_char, " "," "," "," "," "," " "], Pr%z, Pr%saw_max, Pr%saw_min, Pr%saw, Pr%saw_u,
  Pr%asaw, Pr%asaw_u)

    C API praseodymium.
- type(element_t), parameter, public **ciaaw__saw_latest::nd** =element_t("neodymium", "Nd", 60, nan, nan,
  144.242d0, 0.003d0, 144.24d0, 0.01d0)

neodymium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Nd"), public, protected **ciaaw__saw_latest::capi_nd** =[capi_element_t](#)(["n","e","o","d","y","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","d",c_null_char, " "," "," "," "," "," "], Nd%z, Nd%saw_max, Nd%saw_min, Nd%saw, Nd%saw_u, Nd%asaw, Nd%asaw_u)

    C API neodymium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::pm** =[element_t](#)("promethium", "Pm", 61, nan, nan, nan, nan, nan, nan)

    promethium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Pm"), public, protected **ciaaw__saw_latest::capi_pm** =[capi_element_t](#)(["p","r","o","m","e","t","h","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","m",c_null_char, " "," "," "," "," "," "], Pm%z, Pm%saw_max, Pm%saw_min, Pm%saw, Pm%saw_u, Pm%asaw, Pm%asaw_u)

    C API promethium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sm** =[element_t](#)("samarium", "Sm", 62, nan, nan, 150.36d0, 0.02d0, 150.36d0, 0.02d0)

    samarium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sm"), public, protected **ciaaw__saw_latest::capi_sm** =[capi_element_t](#)(["s","a","m","a","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","m",c_null_char, " "," "," "," "," "," "], Sm%z, Sm%saw_max, Sm%saw_min, Sm%saw, Sm%saw_u, Sm%asaw, Sm%asaw_u)

    C API samarium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::eu** =[element_t](#)("europium", "Eu", 63, nan, nan, 151.964d0, 0.001d0, 151.96d0, 0.01d0)

    europium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Eu"), public, protected **ciaaw__saw_latest::capi_eu** =[capi_element_t](#)(["e","u","r","o","p","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["E","u",c_null_char, " "," "," "," "," "," "], Eu%z, Eu%saw_max, Eu%saw_min, Eu%saw, Eu%saw_u, Eu%asaw, Eu%asaw_u)

    C API europium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::gd** =[element_t](#)("gadolinium", "Gd", 64, nan, nan, 157.25d0, 0.03d0, 157.25d0, 0.03d0)

    gadolinium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Gd"), public, protected **ciaaw__saw_latest::capi_gd** =[capi_element_t](#)(["g","a","d","o","l","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["G","d",c_null_char, " "," "," "," "," "," "], Gd%z, Gd%saw_max, Gd%saw_min, Gd%saw, Gd%saw_u, Gd%asaw, Gd%asaw_u)

    C API gadolinium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::tb** =[element_t](#)("terbium", "Tb", 65, nan, nan, 158.↵925354d0, 0.000007d0, 158.93d0, 0.01d0)

    terbium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Tb"), public, protected **ciaaw__saw_latest::capi_tb** =[capi_element_t](#)(["t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","b",c_null_char, " "," "," "," "," "," "], Tb%z, Tb%saw_max, Tb%saw_min, Tb%saw, Tb%saw_u, Tb%asaw, Tb%asaw_u)

    C API terbium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::dy** =[element_t](#)("dysprosium", "Dy", 66, nan, nan, 162.500d0, 0.001d0, 162.50d0, 0.01d0)

    dysprosium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Dy"), public, protected **ciaaw__saw_latest::capi_dy** =[capi_element_t](#)(["d","y","s","p","r","o","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","y",c_null_char, " "," "," "," "," "," "], Dy%z, Dy%saw_max, Dy%saw_min, Dy%saw, Dy%saw_u, Dy%asaw, Dy%asaw_u)

    C API dysprosium.

- type(element_t), parameter, public **ciaaw__saw_latest::ho** =element_t("holmium", "Ho", 67, nan, nan, 164.930329d0, 0.000005d0, 164.93d0, 0.01d0)

    holmium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ho"), public, protected **ciaaw__saw_latest::capi_ho** =capi_element_t(["h","o","l","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["H","o",c_null_char, " "," "," "," "," " "], Ho%z, Ho%saw_max, Ho%saw_min, Ho%saw, Ho%saw_u, Ho%asaw, Ho%asaw_u)

    C API holmium.
- type(element_t), parameter, public **ciaaw__saw_latest::er** =element_t("erbium", "Er", 68, nan, nan, 167.↩ 259d0, 0.003d0, 167.26d0, 0.01d0)

    erbium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Er"), public, protected **ciaaw__saw_latest::capi_er** =capi_element_t(["e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["E","r",c_null_char, " "," "," "," "," " "], Er%z, Er%saw_max, Er%saw_min, Er%saw, Er%saw_u, Er%asaw, Er%asaw_u)

    C API erbium.
- type(element_t), parameter, public **ciaaw__saw_latest::tm** =element_t("thulium", "Tm", 69, nan, nan, 168.↩ 934219d0, 0.000005d0, 168.93d0, 0.01d0)

    thulium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Tm"), public, protected **ciaaw__saw_latest::capi_tm** =capi_element_t(["t","h","u","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["T","m",c_null_char, " "," "," "," "," " "], Tm%z, Tm%saw_max, Tm%saw_min, Tm%saw, Tm%saw_u, Tm%asaw, Tm%asaw_u)

    C API thulium.
- type(element_t), parameter, public **ciaaw__saw_latest::yb** =element_t("ytterbium", "Yb", 70, nan, nan, 173.045d0, 0.010d0, 173.05d0, 0.02d0)

    ytterbium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Yb"), public, protected **ciaaw__saw_latest::capi_yb** =capi_element_t(["y","t","t","e","r","b","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "], ["Y","b",c_null_char, " "," "," "," "," " "], Yb%z, Yb%saw_max, Yb%saw_min, Yb%saw, Yb%saw_u, Yb%asaw, Yb%asaw_u)

    C API ytterbium.
- type(element_t), parameter, public **ciaaw__saw_latest::lu** =element_t("lutetium", "Lu", 71, nan, nan, 174.↩ 9668d0, 0.0001d0, 174.97d0, 0.01d0)

    lutetium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Lu"), public, protected **ciaaw__saw_latest::capi_↩ lu** =capi_element_t(["l","u","t","e","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "], ["L","u",c_null_char, " "," "," "," "," " "], Lu%z, Lu%saw_max, Lu%saw_min, Lu%saw, Lu%saw_u, Lu%asaw, Lu%asaw_u)

    C API lutetium.
- type(element_t), parameter, public **ciaaw__saw_latest::hf** =element_t("hafnium", "Hf", 72, nan, nan, 178.↩ 486d0, 0.006d0, 178.49d0, 0.01d0)

    hafnium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Hf"), public, protected **ciaaw__saw_latest::capi_hf** =capi_element_t(["h","a","f","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["H","f",c_null_char, " "," "," "," "," " "], Hf%z, Hf%saw_max, Hf%saw_min, Hf%saw, Hf%saw_u, Hf%asaw, Hf%asaw_u)

    C API hafnium.
- type(element_t), parameter, public **ciaaw__saw_latest::ta** =element_t("tantalum", "Ta", 73, nan, nan, 180.↩ 94788d0, 0.00002d0, 180.95d0, 0.01d0)

    tantalum.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ta"), public, protected **ciaaw__saw_latest::capi_↩ ta** =capi_element_t(["t","a","n","t","a","l","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "," "], ["T","a",c_null_char, " "," "," "," "," " "], Ta%z, Ta%saw_max, Ta%saw_min, Ta%saw, Ta%saw_u, Ta%asaw, Ta%asaw_u)

C API tantalum.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::w** =[element_t](#)("tungsten", "W", 74, nan, nan, 183.↩
84d0, 0.01d0, 183.84d0, 0.01d0)

    tungsten.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_W"), public, protected **ciaaw__saw_latest::capi_↩
w** =[capi_element_t](#)(["t","u","n","g","s","t","e","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," ","
"," "], ["W",c_null_char, " "," "," "," "," "," "], W%z, W%saw_max, W%saw_min, W%saw, W%saw_u,
W%asaw, W%asaw_u)

    C API tungsten.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::re** =[element_t](#)("rhenium", "Re", 75, nan, nan, 186.↩
207d0, 0.001d0, 186.21d0, 0.01d0)

    rhenium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Re"), public, protected **ciaaw__saw_latest::capi_re**
=[capi_element_t](#)(["r","h","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"], ["R","e",c_null_char, " "," "," "," "," "," "], Re%z, Re%saw_max, Re%saw_min, Re%saw, Re%saw_u,
Re%asaw, Re%asaw_u)

    C API rhenium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::os** =[element_t](#)("osmium", "Os", 76, nan, nan, 190.↩
23d0, 0.03d0, 190.23d0, 0.03d0)

    osmium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Os"), public, protected **ciaaw__saw_latest::capi_os**
=[capi_element_t](#)(["o","s","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "
"], ["O","s",c_null_char, " "," "," "," "," "," "], Os%z, Os%saw_max, Os%saw_min, Os%saw, Os%saw_u,
Os%asaw, Os%asaw_u)

    C API osmium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::ir** =[element_t](#)("iridium", "Ir", 77, nan, nan, 192.↩
217d0, 0.002d0, 192.22d0, 0.01d0)

    iridium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ir"), public, protected **ciaaw__saw_latest::capi_↩
ir** =[capi_element_t](#)(["i","r","i","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," ","
"], ["I","r",c_null_char, " "," "," "," "," "," "], Ir%z, Ir%saw_max, Ir%saw_min, Ir%saw, Ir%saw_u, Ir%asaw,
Ir%asaw_u)

    C API iridium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::pt** =[element_t](#)("platinum", "Pt", 78, nan, nan, 195.↩
084d0, 0.009d0, 195.08d0, 0.02d0)

    platinum.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Pt"), public, protected **ciaaw__saw_latest::capi_pt**
=[capi_element_t](#)(["p","l","a","t","i","n","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," ","
"], ["P","t",c_null_char, " "," "," "," "," "," "], Pt%z, Pt%saw_max, Pt%saw_min, Pt%saw, Pt%saw_u, Pt%asaw,
Pt%asaw_u)

    C API platinum.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::au** =[element_t](#)("gold", "Au", 79, nan, nan, 196.↩
966570d0, 0.000004d0, 196.97d0, 0.01d0)

    gold.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Au"), public, protected **ciaaw__saw_latest::capi_↩
au** =[capi_element_t](#)(["g","o","l","d",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "],
["A","u",c_null_char, " "," "," "," "," "," "], Au%z, Au%saw_max, Au%saw_min, Au%saw, Au%saw_u, Au%asaw,
Au%asaw_u)

    C API gold.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::hg** =[element_t](#)("mercury", "Hg", 80, nan, nan, 200.↩
592d0, 0.003d0, 200.59d0, 0.01d0)

    mercury.

- type(capi_element_t), bind(C, name="ciaaw_saw_Hg"), public, protected **ciaaw__saw_latest::capi_hg** =capi_element_t(["m","e","r","c","u","r","y",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","g",c_null_char, " "," "," "," "," "," "], Hg%z, Hg%saw_max, Hg%saw_min, Hg%saw, Hg%saw_u, Hg%asaw, Hg%asaw_u)

    C API mercury.

- type(element_t), parameter, public **ciaaw__saw_latest::tl** =element_t("thallium", "Tl", 81, 204.382d0, 204.↩ 385d0, 204.3835d0, 0.0009d0, 204.38d0, 0.01d0)

    thallium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Tl"), public, protected **ciaaw__saw_latest::capi_↩ tl** =capi_element_t(["t","h","a","l","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","l",c_null_char, " "," "," "," "," "," "], Tl%z, Tl%saw_max, Tl%saw_min, Tl%saw, Tl%saw_u, Tl%asaw, Tl%asaw_u)

    C API thallium.

- type(element_t), parameter, public **ciaaw__saw_latest::pb** =element_t("lead", "Pb", 82, 206.14d0, 207.↩ 94d0, 207.0d0, 0.6d0, 207.2d0, 1.1d0)

    lead.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pb"), public, protected **ciaaw__saw_latest::capi_pb** =capi_element_t(["l","e","a","d",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","b",c_null_char, " "," "," "," "," "," "], Pb%z, Pb%saw_max, Pb%saw_min, Pb%saw, Pb%saw_u, Pb%asaw, Pb%asaw_u)

    C API lead.

- type(element_t), parameter, public **ciaaw__saw_latest::bi** =element_t("bismuth", "Bi", 83, nan, nan, 208.↩ 98040d0, 0.00001d0, 208.98d0, 0.01d0)

    bismuth.

- type(capi_element_t), bind(C, name="ciaaw_saw_Bi"), public, protected **ciaaw__saw_latest::capi_bi** =capi_element_t(["b","i","s","m","u","t","h",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","i",c_null_char, " "," "," "," "," "," "], Bi%z, Bi%saw_max, Bi%saw_min, Bi%saw, Bi%saw_u, Bi%asaw, Bi%asaw_u)

    C API bismuth.

- type(element_t), parameter, public **ciaaw__saw_latest::po** =element_t("polonium", "Po", 84, nan, nan, nan, nan, nan, nan)

    polonium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Po"), public, protected **ciaaw__saw_latest::capi_po** =capi_element_t(["p","o","l","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","o",c_null_char, " "," "," "," "," "," "], Po%z, Po%saw_max, Po%saw_min, Po%saw, Po%saw_u, Po%asaw, Po%asaw_u)

    C API polonium.

- type(element_t), parameter, public **ciaaw__saw_latest::at** =element_t("astatine", "At", 85, nan, nan, nan, nan, nan, nan)

    astatine.

- type(capi_element_t), bind(C, name="ciaaw_saw_At"), public, protected **ciaaw__saw_latest::capi_↩ at** =capi_element_t(["a","s","t","a","t","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","t",c_null_char, " "," "," "," "," "," "], At%z, At%saw_max, At%saw_min, At%saw, At%saw_u, At%asaw, At%asaw_u)

    C API astatine.

- type(element_t), parameter, public **ciaaw__saw_latest::rn** =element_t("radon", "Rn", 86, nan, nan, nan, nan, nan, nan)

    radon.

- type(capi_element_t), bind(C, name="ciaaw_saw_Rn"), public, protected **ciaaw__saw_latest::capi_rn** =capi_element_t(["r","a","d","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","n",c_null_char, " "," "," "," "," "," "], Rn%z, Rn%saw_max, Rn%saw_min, Rn%saw, Rn%saw_u, Rn%asaw, Rn%asaw_u)

    C API radon.

- type(element_t), parameter, public **ciaaw__saw_latest::fr** =element_t("francium", "Fr", 87, nan, nan, nan, nan, nan, nan)

francium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Fr"), public, protected **ciaaw__saw_latest::capi_↩ fr** =capi_element_t(["f","r","a","n","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","r",c_null_char, " "," "," "," "," "], Fr%z, Fr%saw_max, Fr%saw_min, Fr%saw, Fr%saw_u, Fr%asaw, Fr%asaw_u)

    C API francium.

- type(element_t), parameter, public **ciaaw__saw_latest::ra** =element_t("radium", "Ra", 88, nan, nan, nan, nan, nan, nan)

    radium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ra"), public, protected **ciaaw__saw_latest::capi_↩ ra** =capi_element_t(["r","a","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","a",c_null_char, " "," "," "," "," "], Ra%z, Ra%saw_max, Ra%saw_min, Ra%saw, Ra%saw_u, Ra%asaw, Ra%asaw_u)

    C API radium.

- type(element_t), parameter, public **ciaaw__saw_latest::ac** =element_t("actinium", "Ac", 89, nan, nan, nan, nan, nan, nan)

    actinium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Ac"), public, protected **ciaaw__saw_latest::capi_ac** =capi_element_t(["a","c","t","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["A","c",c_null_char, " "," "," "," "," "], Ac%z, Ac%saw_max, Ac%saw_min, Ac%saw, Ac%saw_u, Ac%asaw, Ac%asaw_u)

    C API actinium.

- type(element_t), parameter, public **ciaaw__saw_latest::th** =element_t("thorium", "Th", 90, nan, nan, 232.↩ 0377d0, 0.0004d0, 232.04d0, 0.01d0)

    thorium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Th"), public, protected **ciaaw__saw_latest::capi_th** =capi_element_t(["t","h","o","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","h",c_null_char, " "," "," "," "," "], Th%z, Th%saw_max, Th%saw_min, Th%saw, Th%saw_u, Th%asaw, Th%asaw_u)

    C API thorium.

- type(element_t), parameter, public **ciaaw__saw_latest::pa** =element_t("protactinium", "Pa", 91, nan, nan, 231.03588d0, 0.00001d0, 231.04d0, 0.01d0)

    protactinium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pa"), public, protected **ciaaw__saw_latest::capi_pa** =capi_element_t(["p","r","o","t","a","c","t","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "], ["P","a",c_null_char, " "," "," "," "," "], Pa%z, Pa%saw_max, Pa%saw_min, Pa%saw, Pa%saw_u, Pa%asaw, Pa%asaw_u)

    C API protactinium.

- type(element_t), parameter, public **ciaaw__saw_latest::u** =element_t("uranium", "U", 92, nan, nan, 238.↩ 02891d0, 0.00003d0, 238.03d0, 0.01d0)

    uranium.

- type(capi_element_t), bind(C, name="ciaaw_saw_U"), public, protected **ciaaw__saw_latest::capi_↩ u** =capi_element_t(["u","r","a","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["U",c_null_char, " "," "," "," "," "," "], U%z, U%saw_max, U%saw_min, U%saw, U%saw_u, U%asaw, U%asaw_u)

    C API uranium.

- type(element_t), parameter, public **ciaaw__saw_latest::np** =element_t("neptunium", "Np", 93, nan, nan, nan, nan, nan, nan)

    neptunium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Np"), public, protected **ciaaw__saw_latest::capi_np** =capi_element_t(["n","e","p","t","u","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","p",c_null_char, " "," "," "," "," "], Np%z, Np%saw_max, Np%saw_min, Np%saw, Np%saw_u, Np%asaw, Np%asaw_u)

    C API neptunium.

- type(element_t), parameter, public **ciaaw__saw_latest::pu** =element_t("plutonium", "Pu", 94, nan, nan, nan, nan, nan, nan)

    plutonium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Pu"), public, protected **ciaaw__saw_latest::capi_pu** =capi_element_t(["p","l","u","t","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["P","u",c_null_char, " "," "," "," "," "," "], Pu%z, Pu%saw_max, Pu%saw_min, Pu%saw, Pu%saw_u, Pu%asaw, Pu%asaw_u)

    C API plutonium.

- type(element_t), parameter, public **ciaaw__saw_latest::am** =element_t("americium", "Am", 95, nan, nan, nan, nan, nan, nan)

    americium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Am"), public, protected **ciaaw__saw_latest::capi_am** =capi_element_t(["a","m","e","r","i","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," " "], ["A","m",c_null_char, " "," "," "," "," "," "], Am%z, Am%saw_max, Am%saw_min, Am%saw, Am%saw_u, Am%asaw, Am%asaw_u)

    C API americium.

- type(element_t), parameter, public **ciaaw__saw_latest::cm** =element_t("curium", "Cm", 96, nan, nan, nan, nan, nan, nan)

    curium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cm"), public, protected **ciaaw__saw_latest::capi_cm** =capi_element_t(["c","u","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","m",c_null_char, " "," "," "," "," "," "], Cm%z, Cm%saw_max, Cm%saw_min, Cm%saw, Cm%saw_↩ u, Cm%asaw, Cm%asaw_u)

    C API curium.

- type(element_t), parameter, public **ciaaw__saw_latest::bk** =element_t("berkelium", "Bk", 97, nan, nan, nan, nan, nan, nan)

    berkelium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Bk"), public, protected **ciaaw__saw_latest::capi_bk** =capi_element_t(["b","e","r","k","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","k",c_null_char, " "," "," "," "," "," "], Bk%z, Bk%saw_max, Bk%saw_min, Bk%saw, Bk%saw_u, Bk%asaw, Bk%asaw_u)

    C API berkelium.

- type(element_t), parameter, public **ciaaw__saw_latest::cf** =element_t("californium", "Cf", 98, nan, nan, nan, nan, nan, nan)

    californium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Cf"), public, protected **ciaaw__saw_latest::capi_cf** =capi_element_t(["c","a","l","i","f","o","r","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "], ["C","f",c_null_char, " "," "," "," "," "," "], Cf%z, Cf%saw_max, Cf%saw_min, Cf%saw, Cf%saw_u, Cf%asaw, Cf%asaw_u)

    C API californium.

- type(element_t), parameter, public **ciaaw__saw_latest::es** =element_t("einsteinium", "Es", 99, nan, nan, nan, nan, nan, nan)

    einsteinium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Es"), public, protected **ciaaw__saw_latest::capi_es** =capi_element_t(["e","i","n","s","t","e","i","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," " "], ["E","s",c_null_char, " "," "," "," "," "," "], Es%z, Es%saw_max, Es%saw_min, Es%saw, Es%saw_u, Es%asaw, Es%asaw_u)

    C API einsteinium.

- type(element_t), parameter, public **ciaaw__saw_latest::fm** =element_t("fermium", "Fm", 100, nan, nan, nan, nan, nan, nan)

    fermium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Fm"), public, protected **ciaaw__saw_latest::capi_fm** =capi_element_t(["f","e","r","m","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","m",c_null_char, " "," "," "," "," "," "], Fm%z, Fm%saw_max, Fm%saw_min, Fm%saw, Fm%saw_u, Fm%asaw, Fm%asaw_u)

C API fermium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::md** =[element_t](#)("mendelevium", "Md", 101, nan, nan, nan, nan, nan, nan)

    mendelevium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Md"), public, protected **ciaaw__saw_latest::capi_md** =[capi_element_t](#)(["m","e","n","d","e","l","e","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "], ["M","d",c_null_char, " "," "," "," "," "," "], Md%z, Md%saw_max, Md%saw_min, Md%saw, Md%saw_u, Md%asaw, Md%asaw_u)

    C API mendelevium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::no** =[element_t](#)("nobelium", "No", 102, nan, nan, nan, nan, nan, nan)

    nobelium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_No"), public, protected **ciaaw__saw_latest::capi_no** =[capi_element_t](#)(["n","o","b","e","l","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","o",c_null_char, " "," "," "," "," "," "], No%z, No%saw_max, No%saw_min, No%saw, No%saw_u, No%asaw, No%asaw_u)

    C API nobelium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::lr** =[element_t](#)("lawrencium", "Lr", 103, nan, nan, nan, nan, nan, nan)

    lawrencium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Lr"), public, protected **ciaaw__saw_latest::capi_↩ lr** =[capi_element_t](#)(["l","a","w","r","e","n","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","r",c_null_char, " "," "," "," "," "," "], Lr%z, Lr%saw_max, Lr%saw_min, Lr%saw, Lr%saw_u, Lr%asaw, Lr%asaw_u)

    C API lawrencium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::rf** =[element_t](#)("rutherfordium", "Rf", 104, nan, nan, nan, nan, nan, nan)

    rutherfordium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Rf"), public, protected **ciaaw__saw_latest::capi_↩ rf** =[capi_element_t](#)(["r","u","t","h","e","r","f","o","r","d","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "], ["R","f",c_null_char, " "," "," "," "," "," "], Rf%z, Rf%saw_max, Rf%saw_min, Rf%saw, Rf%saw_u, Rf%asaw, Rf%asaw_u)

    C API rutherfordium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::db** =[element_t](#)("dubnium", "Db", 105, nan, nan, nan, nan, nan, nan)

    dubnium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Db"), public, protected **ciaaw__saw_latest::capi_db** =[capi_element_t](#)(["d","u","b","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","b",c_null_char, " "," "," "," "," "," "], Db%z, Db%saw_max, Db%saw_min, Db%saw, Db%saw_u, Db%asaw, Db%asaw_u)

    C API dubnium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::sg** =[element_t](#)("seaborgium", "Sg", 106, nan, nan, nan, nan, nan, nan)

    seaborgium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Sg"), public, protected **ciaaw__saw_latest::capi_sg** =[capi_element_t](#)(["s","e","a","b","o","r","g","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["S","g",c_null_char, " "," "," "," "," "," "], Sg%z, Sg%saw_max, Sg%saw_min, Sg%saw, Sg%saw_u, Sg%asaw, Sg%asaw_u)

    C API seaborgium.

- type([element_t](#)), parameter, public **ciaaw__saw_latest::bh** =[element_t](#)("bohrium", "Bh", 107, nan, nan, nan, nan, nan, nan)

    bohrium.

- type(capi_element_t), bind(C, name="ciaaw_saw_Bh"), public, protected **ciaaw__saw_latest::capi_bh** =capi_element_t(["b","o","h","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["B","h",c_null_char, " "," "," "," "," "," "], Bh%z, Bh%saw_max, Bh%saw_min, Bh%saw, Bh%saw_u, Bh%asaw, Bh%asaw_u)

    C API bohrium.
- type(element_t), parameter, public **ciaaw__saw_latest::hs** =element_t("hassium", "Hs", 108, nan, nan, nan, nan, nan, nan)

    hassium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Hs"), public, protected **ciaaw__saw_latest::capi_hs** =capi_element_t(["h","a","s","s","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["H","s",c_null_char, " "," "," "," "," "," "], Hs%z, Hs%saw_max, Hs%saw_min, Hs%saw, Hs%saw_u, Hs%asaw, Hs%asaw_u)

    C API hassium.
- type(element_t), parameter, public **ciaaw__saw_latest::mt** =element_t("meitnerium", "Mt", 109, nan, nan, nan, nan, nan, nan)

    meitnerium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Mt"), public, protected **ciaaw__saw_latest::capi_mt** =capi_element_t(["m","e","i","t","n","e","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","t",c_null_char, " "," "," "," "," "," "], Mt%z, Mt%saw_max, Mt%saw_min, Mt%saw, Mt%saw_u, Mt%asaw, Mt%asaw_u)

    C API meitnerium.
- type(element_t), parameter, public **ciaaw__saw_latest::ds** =element_t("darmstadtium", "Ds", 110, nan, nan, nan, nan, nan, nan)

    darmstadtium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Ds"), public, protected **ciaaw__saw_latest::capi_ds** =capi_element_t(["d","a","r","m","s","t","a","d","t","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["D","s",c_null_char, " "," "," "," "," "," "], Ds%z, Ds%saw_max, Ds%saw_min, Ds%saw, Ds%saw_u, Ds%asaw, Ds%asaw_u)

    C API darmstadtium.
- type(element_t), parameter, public **ciaaw__saw_latest::rg** =element_t("roentgenium", "Rg", 111, nan, nan, nan, nan, nan, nan)

    roentgenium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Rg"), public, protected **ciaaw__saw_latest::capi_rg** =capi_element_t(["r","o","e","n","t","g","e","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["R","g",c_null_char, " "," "," "," "," "," "], Rg%z, Rg%saw_max, Rg%saw_min, Rg%saw, Rg%saw_u, Rg%asaw, Rg%asaw_u)

    C API roentgenium.
- type(element_t), parameter, public **ciaaw__saw_latest::cn** =element_t("copernicium", "Cn", 112, nan, nan, nan, nan, nan, nan)

    copernicium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Cn"), public, protected **ciaaw__saw_latest::capi_cn** =capi_element_t(["c","o","p","e","r","n","i","c","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["C","n",c_null_char, " "," "," "," "," "," "], Cn%z, Cn%saw_max, Cn%saw_min, Cn%saw, Cn%saw_u, Cn%asaw, Cn%asaw_u)

    C API copernicium.
- type(element_t), parameter, public **ciaaw__saw_latest::nh** =element_t("nihonium", "Nh", 113, nan, nan, nan, nan, nan, nan)

    nihonium.
- type(capi_element_t), bind(C, name="ciaaw_saw_Nh"), public, protected **ciaaw__saw_latest::capi_nh** =capi_element_t(["n","i","h","o","n","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["N","h",c_null_char, " "," "," "," "," "," "], Nh%z, Nh%saw_max, Nh%saw_min, Nh%saw, Nh%saw_u, Nh%asaw, Nh%asaw_u)

    C API nihonium.
- type(element_t), parameter, public **ciaaw__saw_latest::fl** =element_t("flerovium", "Fl", 114, nan, nan, nan, nan, nan, nan)

flerovium.

- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Fl"), public, protected **ciaaw__saw_latest::capi_↩ fl** =[capi_element_t](#)(["f","l","e","r","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["F","l",c_null_char, " "," "," "," "," "," "], Fl%z, Fl%saw_max, Fl%saw_min, Fl%saw, Fl%saw_u, Fl%asaw, Fl%asaw_u)

    C API flerovium.
- type([element_t](#)), parameter, public **ciaaw__saw_latest::mc** =[element_t](#)("moscovium", "Mc", 115, nan, nan, nan, nan, nan, nan)

    moscovium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Mc"), public, protected **ciaaw__saw_latest::capi_mc** =[capi_element_t](#)(["m","o","s","c","o","v","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["M","c",c_null_char, " "," "," "," "," "," "], Mc%z, Mc%saw_max, Mc%saw_min, Mc%saw, Mc%saw_u, Mc%asaw, Mc%asaw_u)

    C API moscovium.
- type([element_t](#)), parameter, public **ciaaw__saw_latest::lv** =[element_t](#)("livermorium", "Lv", 116, nan, nan, nan, nan, nan, nan)

    livermorium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Lv"), public, protected **ciaaw__saw_latest::capi_↩ lv** =[capi_element_t](#)(["l","i","v","e","r","m","o","r","i","u","m",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["L","v",c_null_char, " "," "," "," "," "," "], Lv%z, Lv%saw_max, Lv%saw_min, Lv%saw, Lv%saw_u, Lv%asaw, Lv%asaw_u)

    C API livermorium.
- type([element_t](#)), parameter, public **ciaaw__saw_latest::ts** =[element_t](#)("tennesine", "Ts", 117, nan, nan, nan, nan, nan, nan)

    tennesine.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ts"), public, protected **ciaaw__saw_latest::capi_↩ ts** =[capi_element_t](#)(["t","e","n","n","e","s","i","n","e",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "," "," "], ["T","s",c_null_char, " "," "," "," "," "," "], Ts%z, Ts%saw_max, Ts%saw_min, Ts%saw, Ts%saw_u, Ts%asaw, Ts%asaw_u)

    C API tennesine.
- type([element_t](#)), parameter, public **ciaaw__saw_latest::og** =[element_t](#)("organesson", "Og", 118, nan, nan, nan, nan, nan, nan)

    organesson.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Og"), public, protected **ciaaw__saw_latest::capi_og** =[capi_element_t](#)(["o","r","g","a","n","e","s","s","o","n",c_null_char, " "," "," "," "," "," "," "," "," "," "," "," "," "], ["O","g",c_null_char, " "," "," "," "," "," "], Og%z, Og%saw_max, Og%saw_min, Og%saw, Og%saw_u, Og%asaw, Og%asaw_u)

    C API organesson.

7.14.1 Detailed Description

CIAAW Standard Atomic Weights latest -autogenerated.

7.15 ciaaw_version.f90 File Reference

CIAAW version.

Modules

- module [ciaaw__version](#)

    CIAAW version.

Functions/Subroutines

- character(len=:) function, pointer, public ciaaw__version::get_version ()

    Get the version.

7.15.1 Detailed Description

CIAAW version.

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