

CIAAW

0.1.0

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Chapter 1

CIAAW Fortran and C API

This is the documentation of the Fortran code.

Go back to the main documentation [click here](#)

Chapter 2

Modules Index

2.1 Modules List

Here is a list of all documented modules with brief descriptions:

ciaaw	Main module for CIAAW	9
ciaaw__saw	Standard Atomic Weights - autogenerated	9
ciaaw__version	Version module	24

Chapter 3

Data Type Index

3.1 Data Types List

Here are the data types with brief descriptions:

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ciaaw_saw_element_t	C API Object representing an element	28
ciaaw__saw::element_t	Object representing an element	29

Chapter 4

File Index

4.1 File List

Here is a list of all documented files with brief descriptions:

ciaaw.h	Main C header for the CIAAW library	31
ciaaw_saw.h	C API Standard Atomic Weights - autogenerated	32
ciaaw_version.h	C API Version	51
ciaaw.f90	Main module for CIAAW	53
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Module Documentation

Main module for CIAAW.

Main module for CIAAW.

Standard Atomic Weights - autogenerated.

- type `capi_element_t`
Object representing an element.
- type `element_t`
Object representing an element.

[illegible]

- 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](#)("phosphorous", "P", 15, nan, nan, 30.973761998d0, 0.↵
000000005d0, 30.974d0, 0.001d0)
phosphorous.
- 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 phosphorous.
- 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.

- [illegible]

- [illegible]

- [illegible]

- [illegible]

C API astatine.

- `type(element_t), parameter, public rn =element_t("radon", "Rn", 86, nan, nan, nan, nan, nan, nan)`

- ```

• 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","m",  
\_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","u","m",  
\_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","o",  
\_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.*

## 5.2.1 Detailed Description

Standard Atomic Weights - autogenerated.

## 5.3 ciaaw\_\_version Module Reference

Version module.



## Functions/Subroutines

- `character(len=:)` function, pointer, public `get_version()`  
*Get the version.*

### 5.3.1 Detailed Description

Version module.

### 5.3.2 Function/Subroutine Documentation

#### 5.3.2.1 `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::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.f90](#)

## 6.2 ciaaw\_saw\_element\_t Struct Reference

C API Object representing an element.

```
#include <ciaaw_saw.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](#)

### 6.2.1 Detailed Description

C API Object representing an element.

### 6.2.2 Field Documentation

#### 6.2.2.1 asaw

```
double ciaaw_saw_element_t::asaw
```

Abridged value standard atomic weight.

#### 6.2.2.2 asaw\_u

```
double ciaaw_saw_element_t::asaw_u
```

Abridged uncertainty standard atomic weight.

#### 6.2.2.3 element

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

Element name.

#### 6.2.2.4 saw

```
double ciaaw_saw_element_t::saw
```

Value standard atomic weight.

#### 6.2.2.5 saw\_max

```
double ciaaw_saw_element_t::saw_max
```

Max standard atomic weight.

#### 6.2.2.6 saw\_min

```
double ciaaw_saw_element_t::saw_min
```

Min standard atomic weight.

#### 6.2.2.7 saw\_u

```
double ciaaw_saw_element_t::saw_u
```

Uncertainty standard atomic weight.

#### 6.2.2.8 symbol

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

Element symbol.

#### 6.2.2.9 z

```
int ciaaw_saw_element_t::z
```

Element atomic number.

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

- [ciaaw\\_saw.h](#)

## 6.3 ciaaw\_\_saw::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.*

### 6.3.1 Detailed Description

Object representing an element.

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

- [ciaaw\\_saw.f90](#)

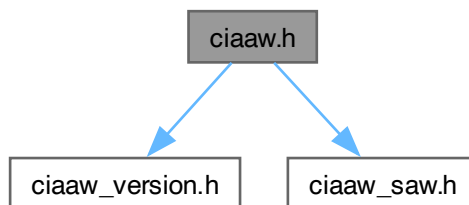
## Chapter 7

# 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

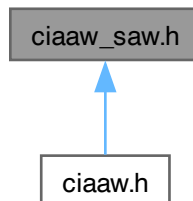
[Go to the documentation of this file.](#)

```
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 - 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 [ciaaw\\_saw\\_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](#)



- Generated by Doxygen

- 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

### 7.3.1 Detailed Description

C API Standard Atomic Weights - autogenerated.

### 7.3.2 Variable Documentation

#### 7.3.2.1 ciaaw\_saw\_Ac

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ac [extern]
```

C API Ac.

### 7.3.2.2 ciaaw\_saw\_Ag

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ag [extern]

C API Ag.

### 7.3.2.3 ciaaw\_saw\_Al

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Al [extern]

C API Al.

### 7.3.2.4 ciaaw\_saw\_Am

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Am [extern]

C API Am.

### 7.3.2.5 ciaaw\_saw\_Ar

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ar [extern]

C API Ar.

### 7.3.2.6 ciaaw\_saw\_As

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_As [extern]

C API As.

### 7.3.2.7 ciaaw\_saw\_At

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_At [extern]

C API At.

### 7.3.2.8 ciaaw\_saw\_Au

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Au [extern]

C API Au.

### 7.3.2.9 ciaaw\_saw\_B

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_B [extern]

C API B.

#### 7.3.2.10 ciaaw\_saw\_Ba

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ba [extern]
```

C API Ba.

#### 7.3.2.11 ciaaw\_saw\_Be

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Be [extern]
```

C API Be.

#### 7.3.2.12 ciaaw\_saw\_Bh

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bh [extern]
```

C API Bh.

#### 7.3.2.13 ciaaw\_saw\_Bi

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bi [extern]
```

C API Bi.

#### 7.3.2.14 ciaaw\_saw\_Bk

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Bk [extern]
```

C API Bk.

#### 7.3.2.15 ciaaw\_saw\_Br

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Br [extern]
```

C API Br.

#### 7.3.2.16 ciaaw\_saw\_C

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_C [extern]
```

C API C.

#### 7.3.2.17 ciaaw\_saw\_Ca

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ca [extern]
```

C API Ca.

#### 7.3.2.18 ciaaw\_saw\_Cd

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cd [extern]

C API Cd.

#### 7.3.2.19 ciaaw\_saw\_Ce

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ce [extern]

C API Ce.

#### 7.3.2.20 ciaaw\_saw\_Cf

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cf [extern]

C API Cf.

#### 7.3.2.21 ciaaw\_saw\_Cl

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cl [extern]

C API Cl.

#### 7.3.2.22 ciaaw\_saw\_Cm

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cm [extern]

C API Cm.

#### 7.3.2.23 ciaaw\_saw\_Cn

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cn [extern]

C API Cn.

#### 7.3.2.24 ciaaw\_saw\_Co

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Co [extern]

C API Co.

#### 7.3.2.25 ciaaw\_saw\_Cr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Cr [extern]

C API Cr.

#### 7.3.2.26 ciaaw\_saw-Cs

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Cs [extern]
```

C API Cs.

#### 7.3.2.27 ciaaw\_saw-Cu

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Cu [extern]
```

C API Cu.

#### 7.3.2.28 ciaaw\_saw-Db

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Db [extern]
```

C API Db.

#### 7.3.2.29 ciaaw\_saw-Ds

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Ds [extern]
```

C API Ds.

#### 7.3.2.30 ciaaw\_saw-Dy

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Dy [extern]
```

C API Dy.

#### 7.3.2.31 ciaaw\_saw-Er

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Er [extern]
```

C API Er.

#### 7.3.2.32 ciaaw\_saw-Es

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Es [extern]
```

C API Es.

#### 7.3.2.33 ciaaw\_saw-Eu

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw-Eu [extern]
```

C API Eu.

#### 7.3.2.34 ciaaw\_saw\_F

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_F [extern]

C API F.

#### 7.3.2.35 ciaaw\_saw\_Fe

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Fe [extern]

C API Fe.

#### 7.3.2.36 ciaaw\_saw\_Fl

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Fl [extern]

C API Fl.

#### 7.3.2.37 ciaaw\_saw\_Fm

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Fm [extern]

C API Fm.

#### 7.3.2.38 ciaaw\_saw\_Fr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Fr [extern]

C API Fr.

#### 7.3.2.39 ciaaw\_saw\_Ga

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ga [extern]

C API Ga.

#### 7.3.2.40 ciaaw\_saw\_Gd

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Gd [extern]

C API Gd.

#### 7.3.2.41 ciaaw\_saw\_Ge

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ge [extern]

C API Ge.

#### 7.3.2.42 ciaaw\_saw\_H

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_H [extern]

C API H.

#### 7.3.2.43 ciaaw\_saw\_He

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_He [extern]

C API He.

#### 7.3.2.44 ciaaw\_saw\_Hf

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Hf [extern]

C API Hf.

#### 7.3.2.45 ciaaw\_saw\_Hg

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Hg [extern]

C API Hg.

#### 7.3.2.46 ciaaw\_saw\_Ho

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ho [extern]

C API Ho.

#### 7.3.2.47 ciaaw\_saw\_Hs

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Hs [extern]

C API Hs.

#### 7.3.2.48 ciaaw\_saw\_I

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_I [extern]

C API I.

#### 7.3.2.49 ciaaw\_saw\_In

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_In [extern]

C API In.



#### 7.3.2.50 ciaaw\_saw\_Ir

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ir [extern]

C API Ir.

#### 7.3.2.51 ciaaw\_saw\_K

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_K [extern]

C API K.

#### 7.3.2.52 ciaaw\_saw\_Kr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Kr [extern]

C API Kr.

#### 7.3.2.53 ciaaw\_saw\_La

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_La [extern]

C API La.

#### 7.3.2.54 ciaaw\_saw\_Li

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Li [extern]

C API Li.

#### 7.3.2.55 ciaaw\_saw\_Lr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Lr [extern]

C API Lr.

#### 7.3.2.56 ciaaw\_saw\_Lu

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Lu [extern]

C API Lu.

#### 7.3.2.57 ciaaw\_saw\_Lv

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Lv [extern]

C API Lv.

#### 7.3.2.58 ciaaw\_saw\_Mc

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Mc [extern]

C API Mc.

#### 7.3.2.59 ciaaw\_saw\_Md

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Md [extern]

C API Md.

#### 7.3.2.60 ciaaw\_saw\_Mg

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Mg [extern]

C API Mg.

#### 7.3.2.61 ciaaw\_saw\_Mn

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Mn [extern]

C API Mn.

#### 7.3.2.62 ciaaw\_saw\_Mo

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Mo [extern]

C API Mo.

#### 7.3.2.63 ciaaw\_saw\_Mt

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Mt [extern]

C API Mt.

#### 7.3.2.64 ciaaw\_saw\_N

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_N [extern]

C API N.

#### 7.3.2.65 ciaaw\_saw\_Na

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Na [extern]

C API Na.

#### 7.3.2.66 ciaaw\_saw\_Nb

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Nb [extern]

C API Nb.

#### 7.3.2.67 ciaaw\_saw\_Nd

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Nd [extern]

C API Nd.

#### 7.3.2.68 ciaaw\_saw\_Ne

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ne [extern]

C API Ne.

#### 7.3.2.69 ciaaw\_saw\_Nh

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Nh [extern]

C API Nh.

#### 7.3.2.70 ciaaw\_saw\_Ni

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ni [extern]

C API Ni.

#### 7.3.2.71 ciaaw\_saw\_No

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_No [extern]

C API No.

#### 7.3.2.72 ciaaw\_saw\_Np

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Np [extern]

C API Np.

#### 7.3.2.73 ciaaw\_saw\_O

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_O [extern]

C API O.

#### 7.3.2.74 ciaaw\_saw\_Og

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Og [extern]

C API Og.

#### 7.3.2.75 ciaaw\_saw\_Os

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Os [extern]

C API Os.

#### 7.3.2.76 ciaaw\_saw\_P

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_P [extern]

C API P.

#### 7.3.2.77 ciaaw\_saw\_Pa

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pa [extern]

C API Pa.

#### 7.3.2.78 ciaaw\_saw\_Pb

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pb [extern]

C API Pb.

#### 7.3.2.79 ciaaw\_saw\_Pd

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pd [extern]

C API Pd.

#### 7.3.2.80 ciaaw\_saw\_Pm

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pm [extern]

C API Pm.

#### 7.3.2.81 ciaaw\_saw\_Po

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Po [extern]

C API Po.

#### 7.3.2.82 ciaaw\_saw\_Pr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pr [extern]

C API Pr.

#### 7.3.2.83 ciaaw\_saw\_Pt

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pt [extern]

C API Pt.

#### 7.3.2.84 ciaaw\_saw\_Pu

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Pu [extern]

C API Pu.

#### 7.3.2.85 ciaaw\_saw\_Ra

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ra [extern]

C API Ra.

#### 7.3.2.86 ciaaw\_saw\_Rb

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Rb [extern]

C API Rb.

#### 7.3.2.87 ciaaw\_saw\_Re

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Re [extern]

C API Re.

#### 7.3.2.88 ciaaw\_saw\_Rf

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Rf [extern]

C API Rf.

#### 7.3.2.89 ciaaw\_saw\_Rg

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Rg [extern]

C API Rg.

### 7.3.2.90 ciaaw\_saw\_Rh

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rh [extern]
```

C API Rh.

### 7.3.2.91 ciaaw\_saw\_Rn

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Rn [extern]
```

C API Rn.

### 7.3.2.92 ciaaw\_saw\_Ru

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Ru [extern]
```

C API Ru.

### 7.3.2.93 ciaaw\_saw\_S

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_S [extern]
```

C API S.

### 7.3.2.94 ciaaw\_saw\_Sb

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sb [extern]
```

C API Sb.

### 7.3.2.95 ciaaw\_saw\_Sc

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sc [extern]
```

C API Sc.

### 7.3.2.96 ciaaw\_saw\_Se

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Se [extern]
```

C API Se.

### 7.3.2.97 ciaaw\_saw\_Sg

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Sg [extern]
```

C API Sg.

#### 7.3.2.98 ciaaw\_saw\_Si

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Si [extern]

C API Si.

#### 7.3.2.99 ciaaw\_saw\_Sm

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Sm [extern]

C API Sm.

#### 7.3.2.100 ciaaw\_saw\_Sn

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Sn [extern]

C API Sn.

#### 7.3.2.101 ciaaw\_saw\_Sr

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Sr [extern]

C API Sr.

#### 7.3.2.102 ciaaw\_saw-Ta

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw-Ta [extern]

C API Ta.

#### 7.3.2.103 ciaaw\_saw\_Tb

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Tb [extern]

C API Tb.

#### 7.3.2.104 ciaaw\_saw\_Tc

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Tc [extern]

C API Tc.

#### 7.3.2.105 ciaaw\_saw\_Te

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Te [extern]

C API Te.

### 7.3.2.106 ciaaw\_saw\_Th

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Th [extern]

C API Th.

### 7.3.2.107 ciaaw\_saw\_Ti

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ti [extern]

C API Ti.

### 7.3.2.108 ciaaw\_saw\_Tl

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Tl [extern]

C API Tl.

### 7.3.2.109 ciaaw\_saw\_Tm

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Tm [extern]

C API Tm.

### 7.3.2.110 ciaaw\_saw\_Ts

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_Ts [extern]

C API Ts.

### 7.3.2.111 ciaaw\_saw\_U

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_U [extern]

C API U.

### 7.3.2.112 ciaaw\_saw\_V

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_V [extern]

C API V.

### 7.3.2.113 ciaaw\_saw\_W

ADD\_IMPORT const struct [ciaaw\\_saw\\_element\\_t](#) ciaaw\_saw\_W [extern]

C API W.



#### 7.3.2.114 ciaaw\_saw\_Xe

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Xe [extern]
```

C API Xe.

#### 7.3.2.115 ciaaw\_saw\_Y

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Y [extern]
```

C API Y.

#### 7.3.2.116 ciaaw\_saw\_Yb

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Yb [extern]
```

C API Yb.

#### 7.3.2.117 ciaaw\_saw\_YEAR

```
ADD_IMPORT const int ciaaw_saw_YEAR [extern]
```

C API Publication year.

#### 7.3.2.118 ciaaw\_saw\_Zn

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zn [extern]
```

C API Zn.

#### 7.3.2.119 ciaaw\_saw\_Zr

```
ADD_IMPORT const struct ciaaw_saw_element_t ciaaw_saw_Zr [extern]
```

C API Zr.

## 7.4 ciaaw\_saw.h

[Go to the documentation of this file.](#)

```

00001
00006 #ifndef CIAAW_SAW_H
00007 #define CIAAW_SAW_H
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 ciaaw_saw_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;

```

```

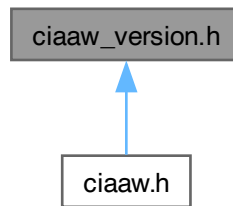
00089 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Eu;
00090 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Gd;
00091 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Th;
00092 ADD_IMPORT extern const struct ciaaw_saw_element_t ciaaw_saw_Dy;
00093 ADD_IMPORT 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

```

## 7.5 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)  
*Get the version.*

### 7.5.1 Detailed Description

C API Version.

### 7.5.2 Function Documentation

#### 7.5.2.1 ciaaw\_get\_version()

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

Get the version.

#### Returns

char pointer of the version string.

## 7.6 ciaaw\_version.h

[Go to the documentation of this file.](#)

```
00001
00006 #ifndef ciaaw_VERSION_H
00007 #define ciaaw_VERSION_H
00008
00013 extern char* ciaaw_get_version(void);
00014 #endif
00015
```





- ```
type(element_t), parameter, public ciaaw__saw::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::capi_ne=capi_eleme
_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::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::capi_na=capi_eleme
_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::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::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::al =element_t("aluminium", "Al", 13, nan, nan, 26.↵
9815384d0, 0.00000003d0, 26.982d0, 0.001d0)

    aluminium.

• type(capi_element_t), bind(C, name="ciaaw_saw_Al"), public, protected ciaaw__saw::capi_al=capi_elemen
_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::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::capi_si=capi_elemen
_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::p =element_t("phosphorous", "P", 15, nan, nan, 30.↵
973761998d0, 0.000000005d0, 30.974d0, 0.001d0)

    phosphorous.

• type(capi_element_t), bind(C, name="ciaaw_saw_P"), public, protected ciaaw__saw::capi_p=capi_element
_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 phosphorous.

• type(element_t), parameter, public ciaaw__saw::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::capi_s=capi_element
_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::cl =element_t("chlorine", "Cl", 17, 35.446d0, 35.457d0, ↵
35.451d0, 0.004d0, 35.45d0, 0.01d0)

    chlorine.
```


- Generated by Doxygen

- ```
• type(element_t), parameter, public ciaaw__saw::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::capi_zr=capi_element_t(["z","i","r","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::nb =element_t("niobium", "Nb", 41, nan, nan, 92.90637d0,
0.00001d0, 92.906d0, 0.001d0)

 niobium.
• type(capi_element_t), bind(C, name="ciaaw_saw_Nb"), public, protected ciaaw__saw::capi_nb=capi_element_t(["n","o","b"],
_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 niobium.
• type(element_t), parameter, public ciaaw__saw::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::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::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::capi_tc=capi_element_t(["t","e","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::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::capi_ru=capi_element_t(["r","u","t"],
_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::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::capi_rh=capi_element_t(["r","h","o"],
_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::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::capi_pd=capi_element_t(["p","a","l"],
_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::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::capi\_ag=capi\_element\_t**(["s","i","l","v",  
\_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::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::capi\_cd=capi\_element\_t**(["c","a","d","n",  
\_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::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::capi\_in=capi\_element\_t**(["i","n","d","i","u",  
\_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::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::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::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::capi\_sb=capi\_element\_t**(["a","n","t","i",  
\_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::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::capi\_te=capi\_element\_t**(["t","e","l","l","u",  
\_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::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::capi\_i=capi\_element\_t**(["i","o","d","i","n",  
\_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::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::capi\_xe=capi\_element\_t**(["x","e","n",  
\_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.*

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- type([capi\\_element\\_t](#)), bind(C, name="ciaaw\_saw\_lr"), public, protected **ciaaw\_\_saw::capi\_lr**=[capi\\_element\\_t](#)(["i","r","i","d","i",  
\_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 iridium.*
- type([element\\_t](#)), parameter, public **ciaaw\_\_saw::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::capi\_pt**=[capi\\_element\\_t](#)(["p","l","a","t",  
\_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::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::capi\_au**=[capi\\_element\\_t](#)(["g","o","l","d",  
\_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::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::capi\_hg**=[capi\\_element\\_t](#)(["m","e","r",  
\_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::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::capi\_tl**=[capi\\_element\\_t](#)(["t","h","a","l",  
\_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::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::capi\_pb**=[capi\\_element\\_t](#)(["l","e","a",  
\_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::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::capi\_bi**=[capi\\_element\\_t](#)(["b","i",  
\_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::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::capi\_po**=[capi\\_element\\_t](#)(["p",  
\_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::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::capi\_at = capi\_element\_t(["a","s","t","a",  
_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::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::capi\_rn = capi\_element\_t(["r","a","d","o",  
_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::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::capi\_fr = capi\_element\_t(["f","r","a","n","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::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::capi\_ra = capi\_element\_t(["r","a","d","i",  
_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::ac = element\_t("actinium", "Ac", 89, nan, nan, nan, nan, nan,  
nan, nan)  
actinium.  
• type(capi\_element\_t), bind(C, name="ciaaw_saw_Ac"), public, protected ciaaw\_\_saw::capi\_ac = capi\_element\_t(["a","c","t","i",  
_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::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::capi\_th = capi\_element\_t(["t","h","o", "r",  
_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::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::capi\_pa = capi\_element\_t(["p","r","o","t",  
_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::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_Bh"), public, protected **ciaaw__saw::capi_bh**=[capi_element_t](#)(["b","o","h","r",
_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::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::capi_hs**=[capi_element_t](#)(["h","a","s","s",
_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::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::capi_mt**=[capi_element_t](#)(["m","e","i","t",
_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::ds**=[element_t](#)("darmstadtium", "Ds", 110, nan, nan, nan, nan,
nan, nan, nan)
darmstadtium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Ds"), public, protected **ciaaw__saw::capi_ds**=[capi_element_t](#)(["d","a","r","m",
_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::rg**=[element_t](#)("roentgenium", "Rg", 111, nan, nan, nan, nan,
nan, nan, nan)
roentgenium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Rg"), public, protected **ciaaw__saw::capi_rg**=[capi_element_t](#)(["r","o","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 **ciaaw__saw::cn**=[element_t](#)("copernicium", "Cn", 112, nan, nan, nan, nan,
nan, nan, nan)
copernicium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Cn"), public, protected **ciaaw__saw::capi_cn**=[capi_element_t](#)(["c","o","p","e",
_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::nh**=[element_t](#)("nihonium", "Nh", 113, nan, nan, nan, nan, nan,
nan, nan)
nihonium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Nh"), public, protected **ciaaw__saw::capi_nh**=[capi_element_t](#)(["n","i","h","o",
_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::fl**=[element_t](#)("flerovium", "Fl", 114, nan, nan, nan, nan, nan,
nan, nan)
flerovium.
- type([capi_element_t](#)), bind(C, name="ciaaw_saw_Fl"), public, protected **ciaaw__saw::capi_fl**=[capi_element_t](#)(["f","l","e","r",
_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::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::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%saw, Mc%saw_u)
```

*C API moscovium.*

- `type(element_t)`, parameter, public `ciaaw__saw::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::capi_lv=capi_element_t(["l","i","v","e"],  
_null_char, "", ",", ";", ":", "\n", "\t", "<!-->", "&", "%"], ["L","V", c_null_char, "", ",", ";", ":", "\n", "\t", "&", "%"], 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::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::capi_ts=capi_element_t(["t","e","n","n",
_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::og =element_t("organesson", "Og", 118, nan, nan, nan, nan, nan, nan)`

*organnesson.*

- [illegible]

*C API organesson.*

### 7.8.1 Detailed Description

Standard Atomic Weights Module.

## 7.9 ciaaw version.f90 File Reference

Version module.

## Modules

- module `ciaaw` version

*Version module.*

## Functions/Subroutines

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

*Get the version.*

### 7.9.1 Detailed Description

Version module.



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