

NAME

saw - get the standard atomic weight

LIBRARY

ciaaw - (**-libciaaw**, **-lciaaw**)

SYNOPSIS

```
function get_saw(s, abridged, uncertainty)result(res)
```

DESCRIPTION

This function returns the standard atomic weight.

Parameters:

o character(len=*), **intent(in) :: s**

Element symbol.

o logical, **intent(in)**, **optional :: abridged**

Flag for returning the *abridged* standard atomic weight. Default to TRUE.

o logical, **intent(in)**, **optional :: uncertainty**

Flag for returning the uncertainty instead of the value. Default to FALSE.

RETURN VALUE

real(dp) :: res

NOTES

The C API is defined by the following prototype:

```
double ciaaw_get_saw(char *s, int n, bool abridged, bool uncertainty)
```

The python wrapper is defined by the following prototype:

```
def get_saw(s: str, abridged: bool=True, uncertainty: bool=False)->float
```

EXAMPLE

Fortran

```
print '(A10, F10.5)', 'ASAW H    = ', get_saw("H")
```

C

```
printf("%s %10.5f0, "ASAW H    = ", ciaaw_get_saw("H", 1, true, false));
```

Python

```
print("ASAW H    = ", pyciaaw.get_saw("H"))
```

SEE ALSO

ciaaw(3)