Example

August 6, 2020

Contents

1 SIRIUS_Fluo_2020_07_07_0070

Spectrums with Cadmium and traces of Manganese.
The compton peak is quite large, but can be well modeled with a foot at low energy (gammaA=3.7, fA=0.1).
The escape peak (or noise) around 6keV is a bit more difficult to capture.

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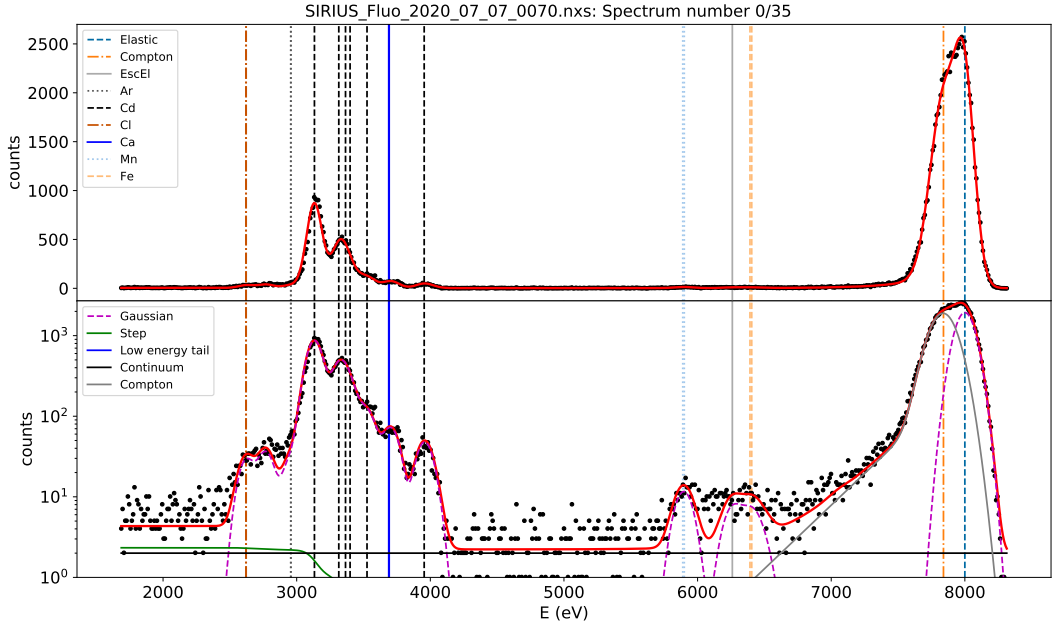
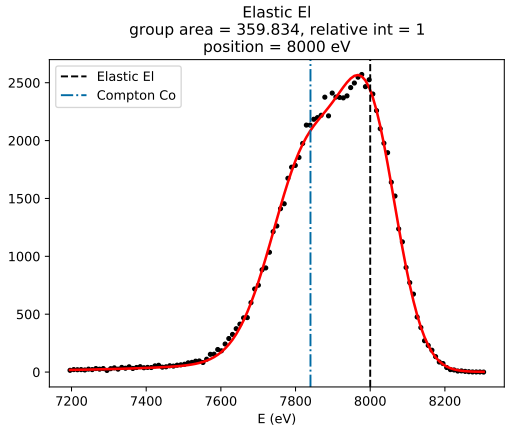
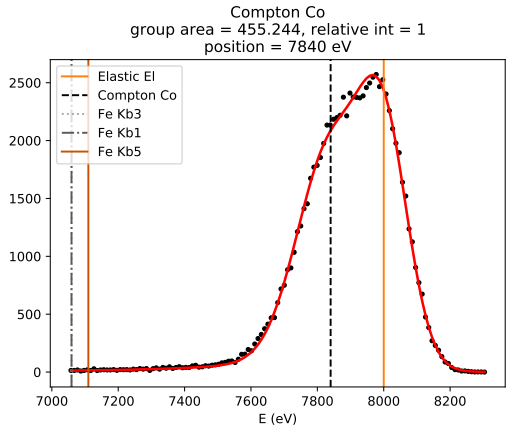
Fit results for SIRIUS_Fluo_2020_07_07_0070.nxs
Spectrum interval = [75,110]
Channel interval = [170,840]
List of chosen elements:  ['Element 4']

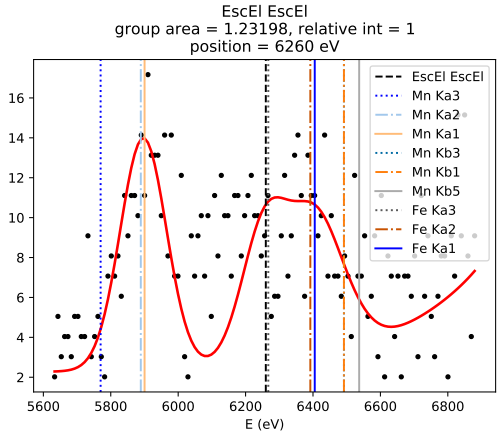
Parameters used:
gain = 9.89; eV0 = 6
List of fitted parameters: ['sfa0']

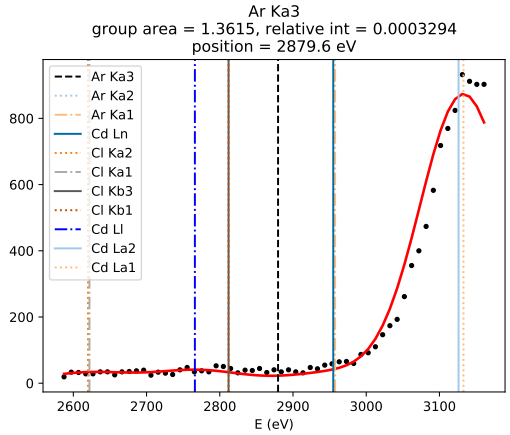
Initial fit parameters:
epsilon = 0.0036; fano = 0.115; noise = 0.110531
sl = 0; ct = 2
sfa0 = -1.67837e-06; sfa1 = 1e-05; tfb0 = 1e-05; tfb1 = 1e-05
twc0 = 1e-05; twc1 = 1e-05
fG = 1.34487
fA = 0.0968284; fB = 1e-10; gammaA = 3.72914; gammaB = 1e+10
```

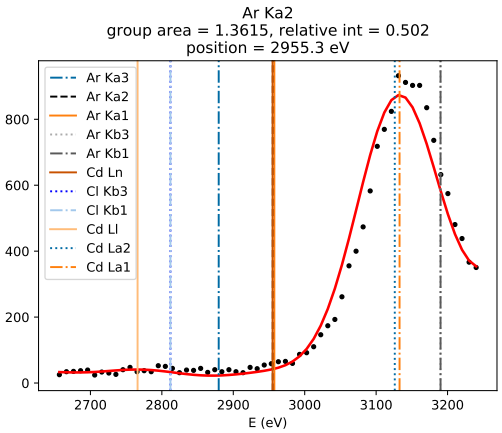

SIRIUS_Fluo_2020_07_07_0070.nxs: Spectrum number 0/35
Elastic
Compton
EscEl
Ar
Cd
Cl
Ca
Mn
Fe
Gaussian
Step
Low energy tail
Continuum
Compton
counts
E (eV)

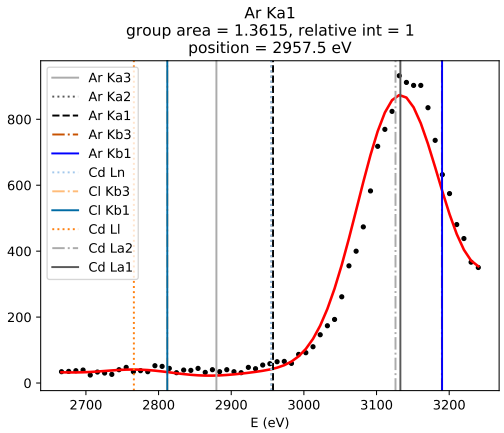

Elastic El
group area = 359.834, relative int = 1
position = 8000 eV
Elastic El
Compton Co
E (eV)

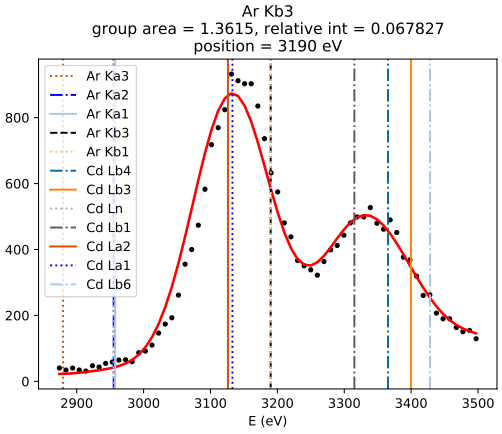

Compton Co
group area = 455.244, relative int = 1
position = 7840 eV
Elastic El
Compton Co
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

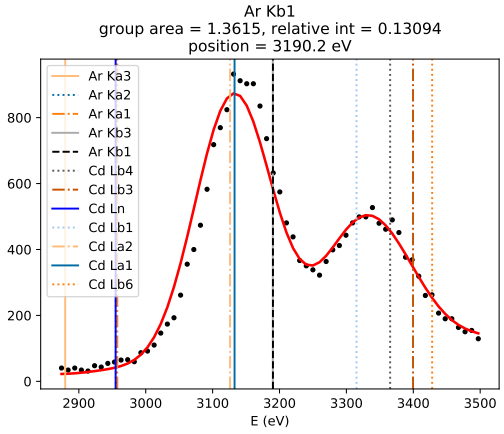

EscEl EscEl
group area = 1.23198, relative int = 1
position = 6260 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)

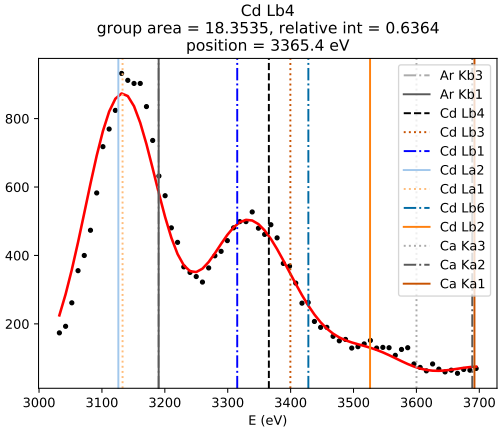

Ar Ka3
group area = 1.3615, relative int = 0.0003294
position = 2879.6 eV
Ar Ka3
Ar Ka2
Ar Ka1
Cd Ln
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
Cd La2
Cd La1
E (eV)

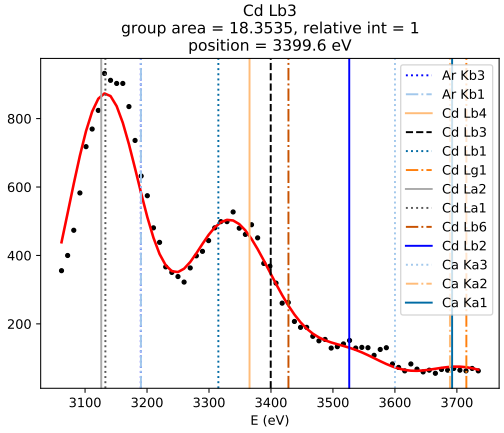

Ar Ka2
group area = 1.3615, relative int = 0.502
position = 2955.3 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Ln
Cl Kb3
Cl Kb1
Cd Ll
Cd La2
Cd La1
E (eV)

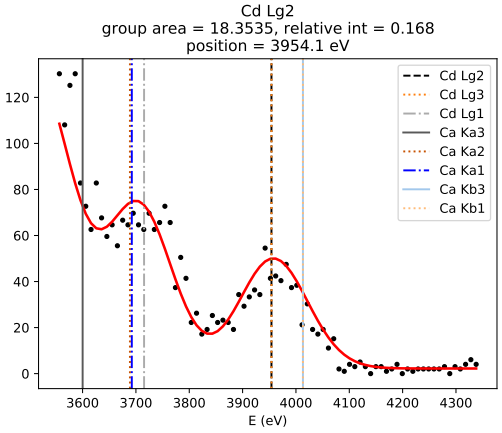

Ar Ka1
group area = 1.3615, relative int = 1
position = 2957.5 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Ln
Cl Kb3
Cl Kb1
Cd Ll
Cd La2
Cd La1
E (eV)

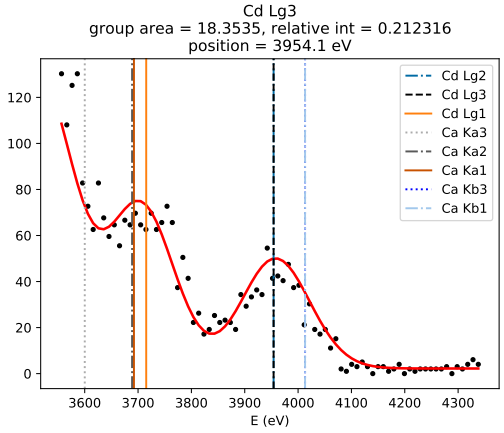

Ar Kb3
group area = 1.3615, relative int = 0.067827
position = 3190 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Ln
Cd Lb1
Cd La2
Cd La1
Cd Lb6
E (eV)

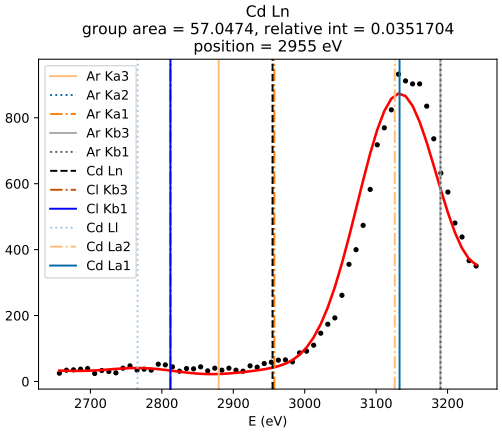

Ar Kb1
group area = 1.3615, relative int = 0.13094
position = 3190.2 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Ln
Cd Lb1
Cd La2
Cd La1
Cd Lb6
E (eV)

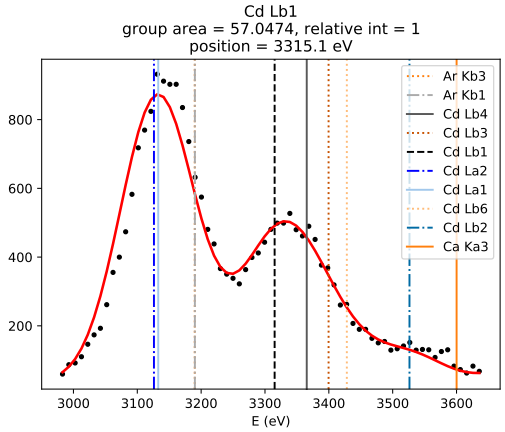

Cd Lb4
group area = 18.3535, relative int = 0.6364
position = 3365.4 eV
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Lb1
Cd La2
Cd La1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

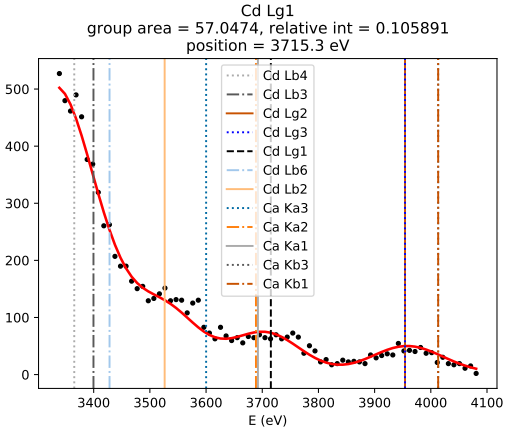

Cd Lb3
group area = 18.3535, relative int = 1
position = 3399.6 eV
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Lb1
Cd Lg1
Cd La2
Cd La1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

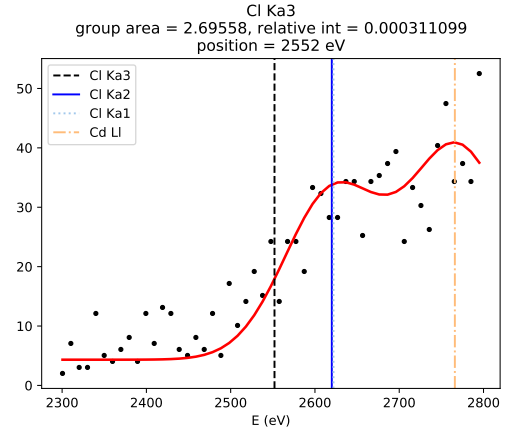

Cd Lg2
group area = 18.3535, relative int = 0.168
position = 3954.1 eV
Cd Lg2
Cd Lg3
Cd Lg1
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

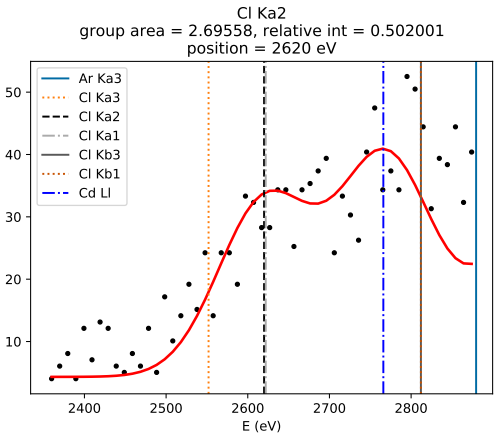

Cd Lg3
group area = 18.3535, relative int = 0.212316
position = 3954.1 eV
Cd Lg2
Cd Lg3
Cd Lg1
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

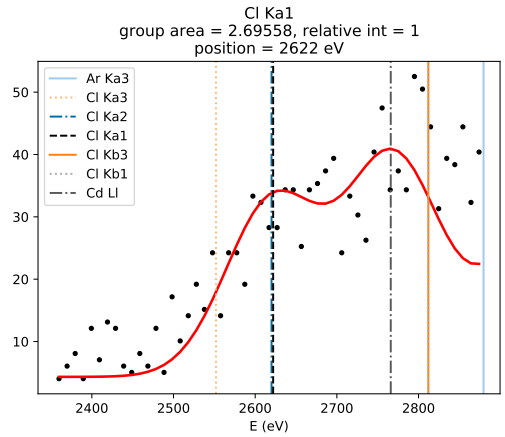

Cd Ln
group area = 57.0474, relative int = 0.0351704
position = 2955 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Ln
Cl Kb3
Cl Kb1
Cd Ll
Cd La2
Cd La1
E (eV)

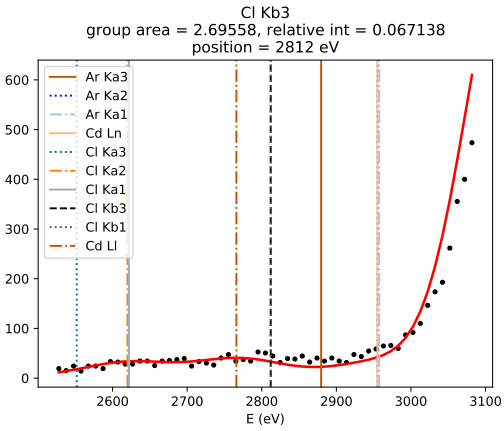

Cd Lb1
group area = 57.0474, relative int = 1
position = 3315.1 eV
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Lb1
Cd La2
Cd La1
Cd Lb6
Cd Lb2
Ca Ka3
E (eV)

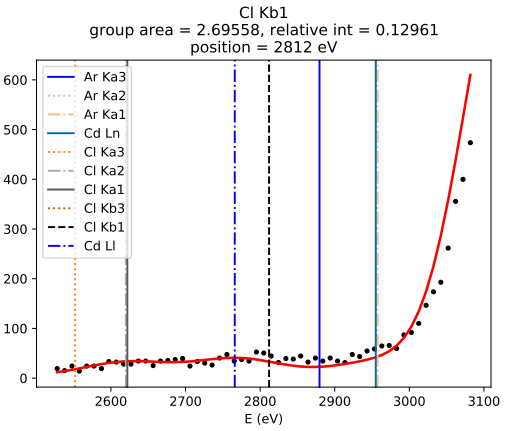

Cd Lg1
group area = 57.0474, relative int = 0.105891
position = 3715.3 eV
Cd Lb4
Cd Lb3
Cd Lg2
Cd Lg3
Cd Lg1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

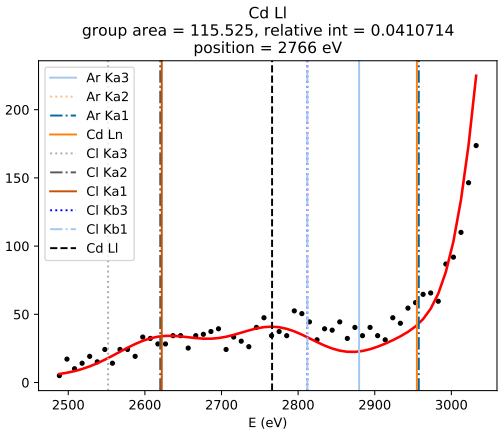

Cl Ka3
group area = 2.69558, relative int = 0.000311099
position = 2552 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cd Ll
E (eV)

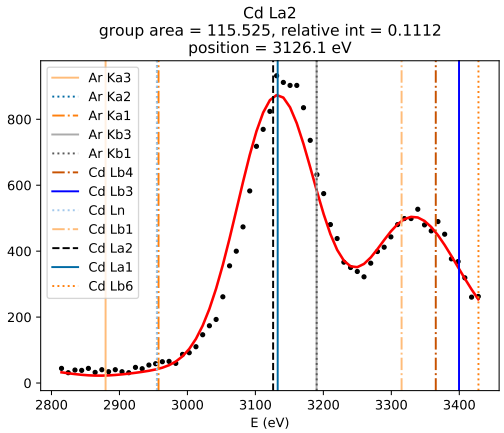

Cl Ka2
group area = 2.69558, relative int = 0.502001
position = 2620 eV
Ar Ka3
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
E (eV)

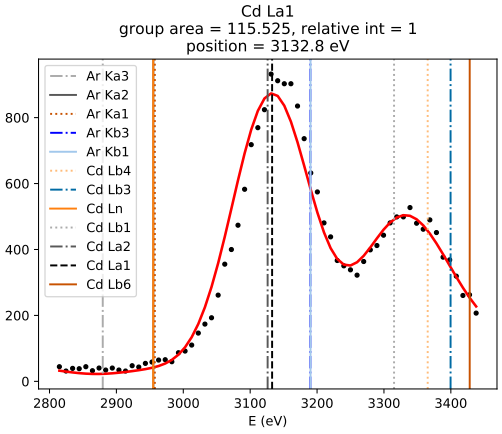

Cl Ka1
group area = 2.69558, relative int = 1
position = 2622 eV
Ar Ka3
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
E (eV)

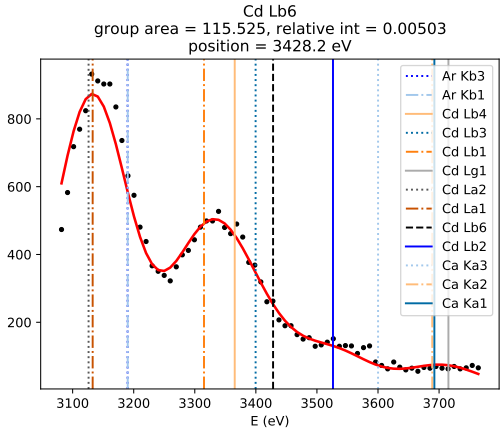

Cl Kb3
group area = 2.69558, relative int = 0.067138
position = 2812 eV
Ar Ka3
Ar Ka2
Ar Ka1
Cd Ln
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
E (eV)

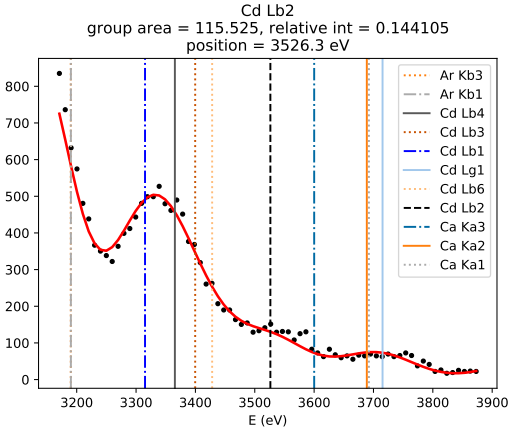

Cl Kb1
group area = 2.69558, relative int = 0.12961
position = 2812 eV
Ar Ka3
Ar Ka2
Ar Ka1
Cd Ln
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
E (eV)

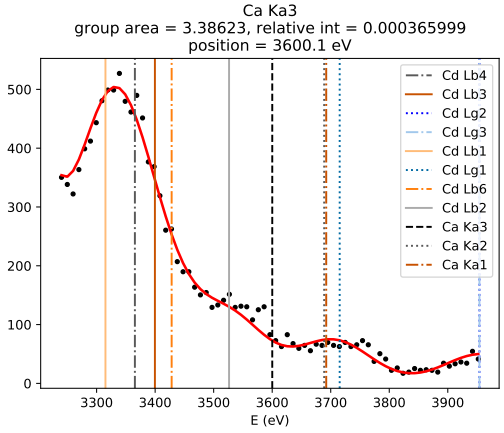

Cd Ll
group area = 115.525, relative int = 0.0410714
position = 2766 eV
Ar Ka3
Ar Ka2
Ar Ka1
Cd Ln
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Cd Ll
E (eV)

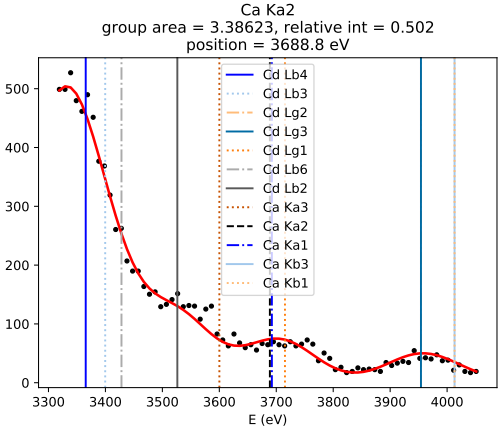

Cd La2
group area = 115.525, relative int = 0.1112
position = 3126.1 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Ln
Cd Lb1
Cd La2
Cd La1
Cd Lb6
E (eV)

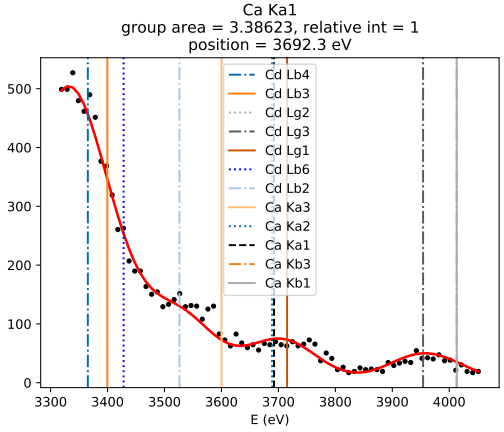

Cd La1
group area = 115.525, relative int = 1
position = 3132.8 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Ln
Cd Lb1
Cd La2
Cd La1
Cd Lb6
E (eV)

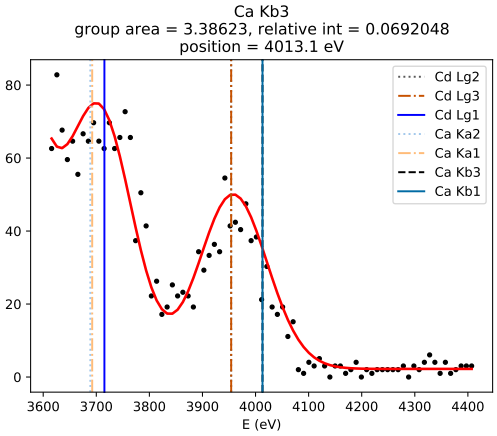

Cd Lb6
group area = 115.525, relative int = 0.00503
position = 3428.2 eV
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Lb1
Cd Lg1
Cd La2
Cd La1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

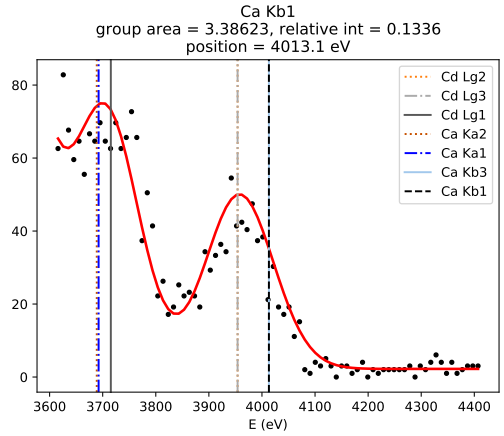

Cd Lb2
group area = 115.525, relative int = 0.144105
position = 3526.3 eV
Ar Kb3
Ar Kb1
Cd Lb4
Cd Lb3
Cd Lb1
Cd Lg1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

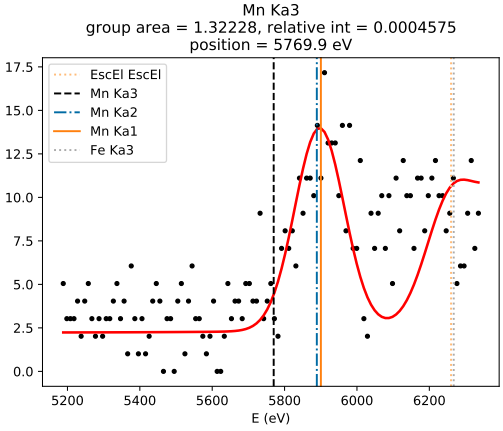

Ca Ka3
group area = 3.38623, relative int = 0.000365999
position = 3600.1 eV
Cd Lb4
Cd Lb3
Cd Lg2
Cd Lg3
Cd Lb1
Cd Lg1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

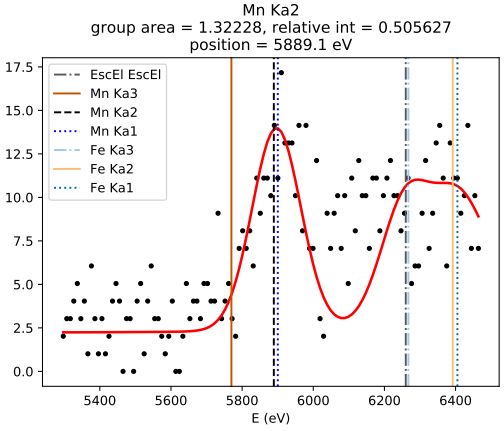

Ca Ka2
group area = 3.38623, relative int = 0.502
position = 3688.8 eV
Cd Lb4
Cd Lb3
Cd Lg2
Cd Lg3
Cd Lg1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

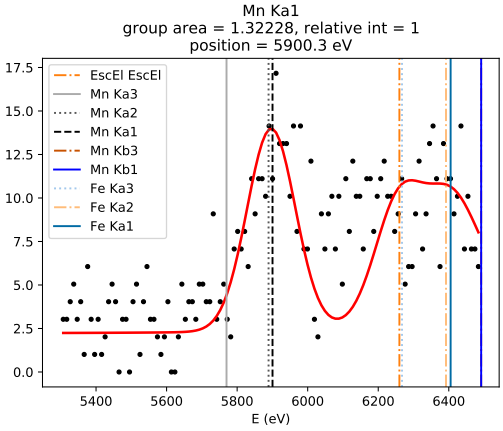

Ca Ka1
group area = 3.38623, relative int = 1
position = 3692.3 eV
Cd Lb4
Cd Lb3
Cd Lg2
Cd Lg3
Cd Lg1
Cd Lb6
Cd Lb2
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

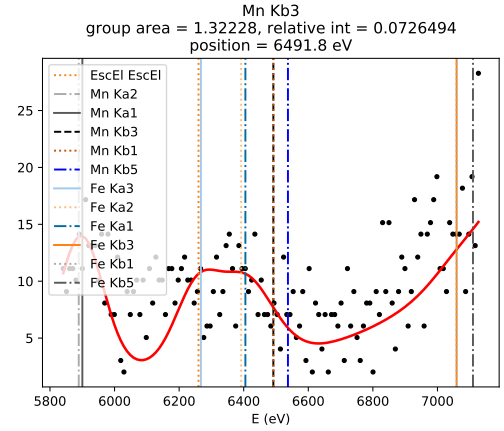

Ca Kb3
group area = 3.38623, relative int = 0.0692048
position = 4013.1 eV
Cd Lg2
Cd Lg3
Cd Lg1
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

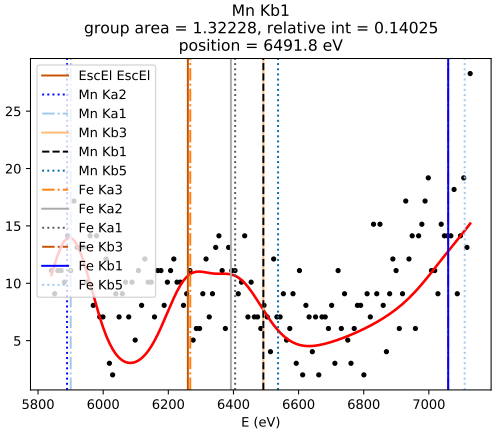

Ca Kb1
group area = 3.38623, relative int = 0.1336
position = 4013.1 eV
Cd Lg2
Cd Lg3
Cd Lg1
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

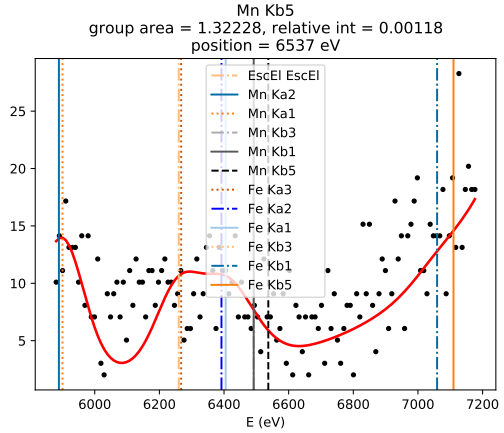

Mn Ka3
group area = 1.32228, relative int = 0.0004575
position = 5769.9 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Fe Ka3
E (eV)

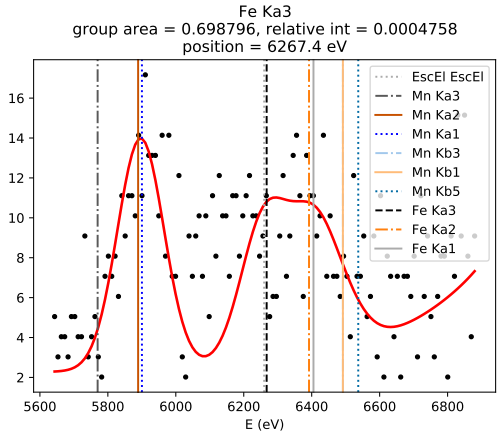

Mn Ka2
group area = 1.32228, relative int = 0.505627
position = 5889.1 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)

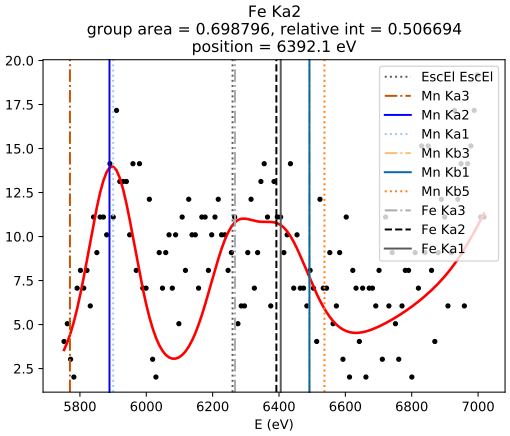

Mn Ka1
group area = 1.32228, relative int = 1
position = 5900.3 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)

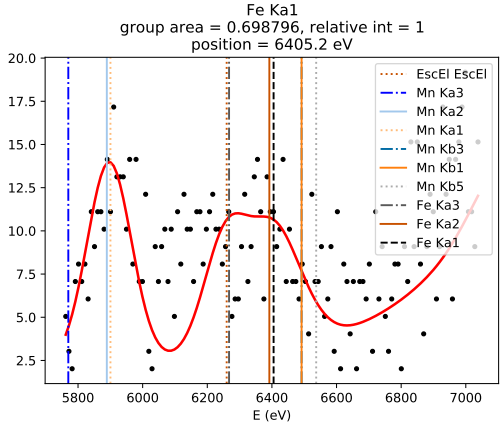

Mn Kb3
group area = 1.32228, relative int = 0.0726494
position = 6491.8 eV
EscEl EscEl
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

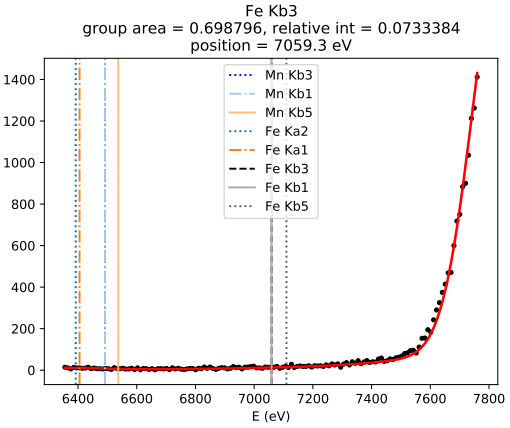

Mn Kb1
group area = 1.32228, relative int = 0.14025
position = 6491.8 eV
EscEl EscEl
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

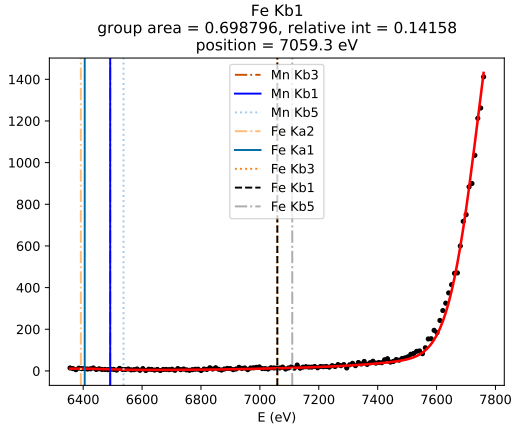

Mn Kb5
group area = 1.32228, relative int = 0.00118
position = 6537 eV
EscEl EscEl
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

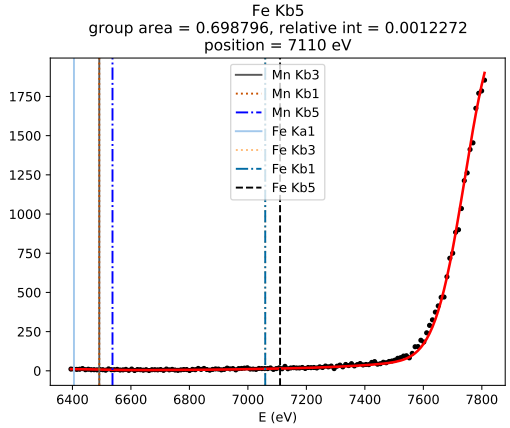

Fe Ka3
group area = 0.698796, relative int = 0.0004758
position = 6267.4 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)


Fe Ka2
group area = 0.698796, relative int = 0.506694
position = 6392.1 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)

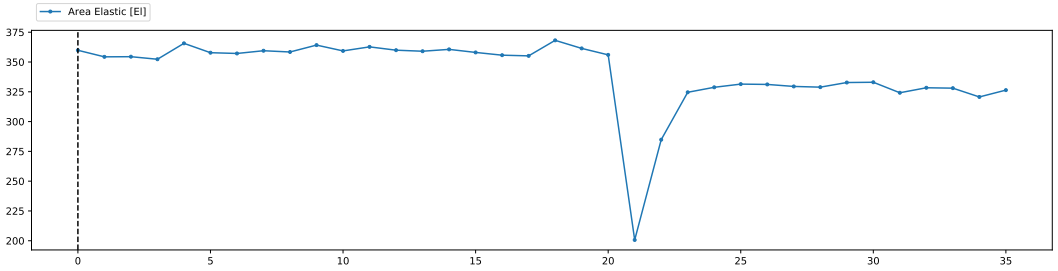

Fe Ka1
group area = 0.698796, relative int = 1
position = 6405.2 eV
EscEl EscEl
Mn Ka3
Mn Ka2
Mn Ka1
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka3
Fe Ka2
Fe Ka1
E (eV)

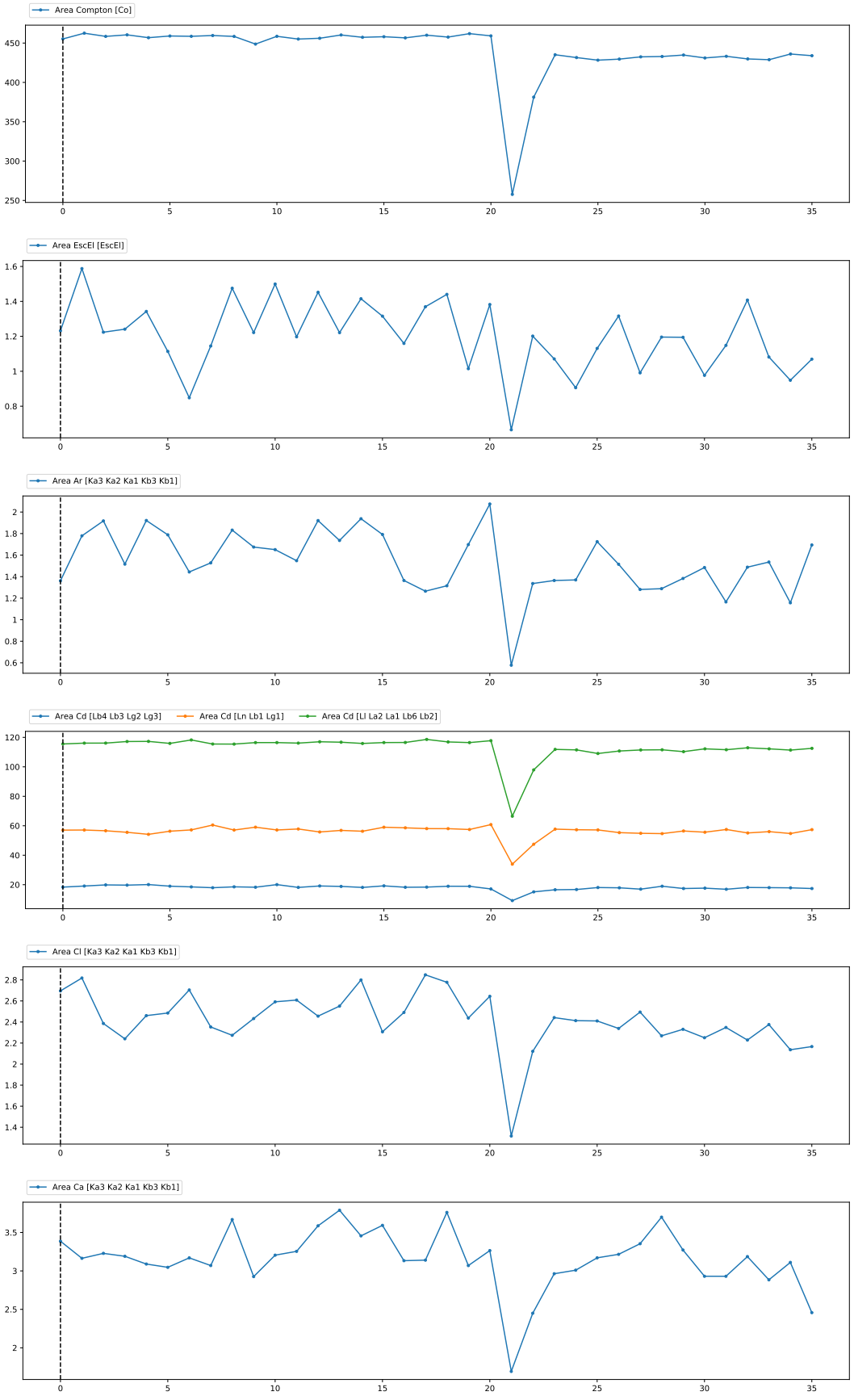

Fe Kb3
group area = 0.698796, relative int = 0.0733384
position = 7059.3 eV
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

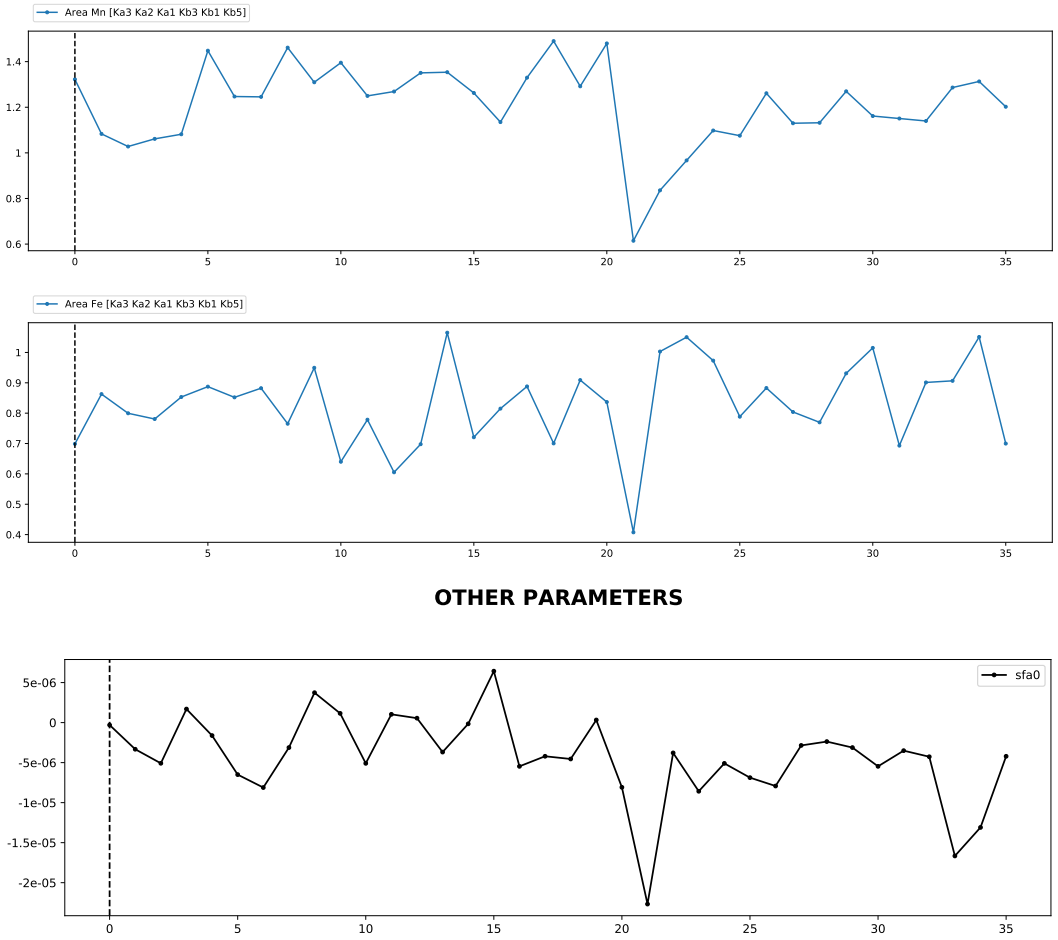

Fe Kb1
group area = 0.698796, relative int = 0.14158
position = 7059.3 eV
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)


Fe Kb5
group area = 0.698796, relative int = 0.0012272
position = 7110 eV
Mn Kb3
Mn Kb1
Mn Kb5
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

AREAS


Area Elastic [El]


Area Compton [Co]
Area EscEl [EscEl]
Area Ar [Ka3 Ka2 Ka1 Kb3 Kb1]
Area Cd [Lb4 Lb3 Lg2 Lg3]
Area Cd [Ln Lb1 Lg1]
Area Cd [Ll La2 La1 Lb6 Lb2]
Area Cl [Ka3 Ka2 Ka1 Kb3 Kb1]
Area Ca [Ka3 Ka2 Ka1 Kb3 Kb1]



2 SIRIUS_Fluo_2020_02_16_02289

A series of spectrums which is a bit more difficult to fit, due to the many different lines of gold and their high intensities.
It is required to add a Compton peak for the Au La1 line. Do not forget to name it “Compton” as well.

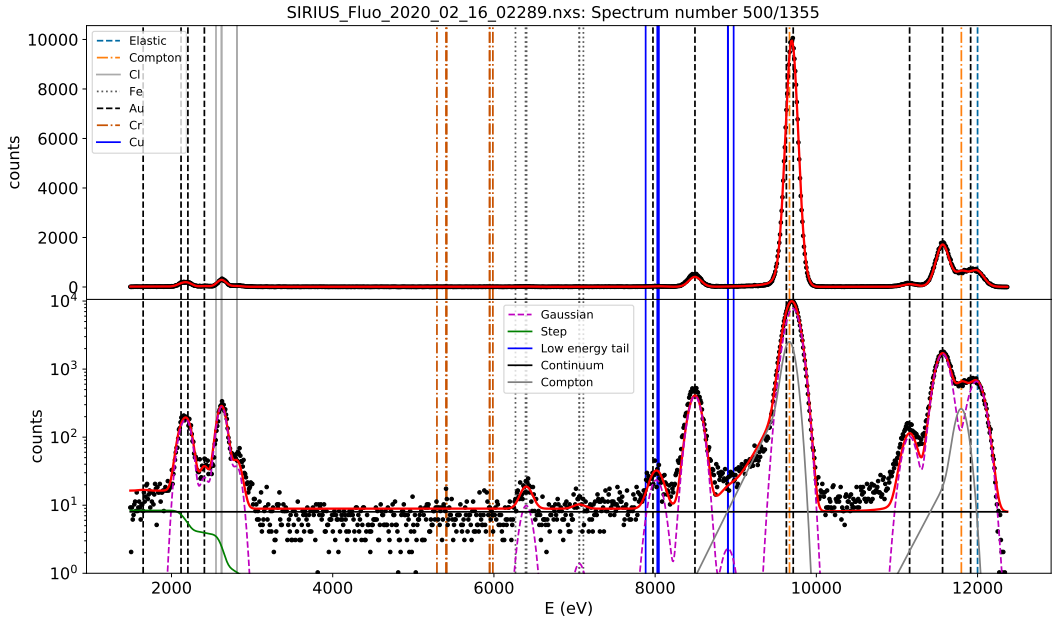
Another difficulty is the strong change of the nature of the interface, with an associated rise of the Compton scattering that I tried to capture by fitting the parameter gammaA (the slope of the Compton’s foot at low energy).

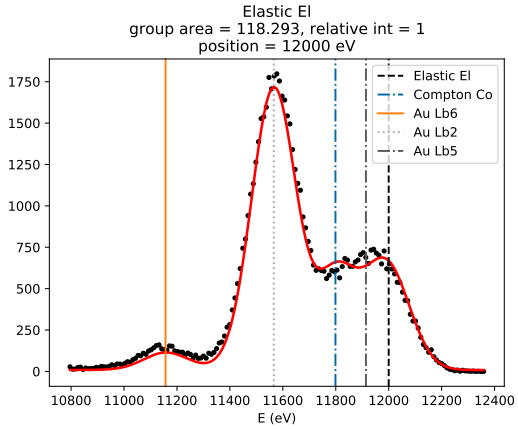
```
Fit results for SIRIUS_Fluo_2020_02_16_02289.nxs
Spectrum interval = [50,1405]
Channel interval = [150,1250]
List of chosen elements:  ['Element 4']

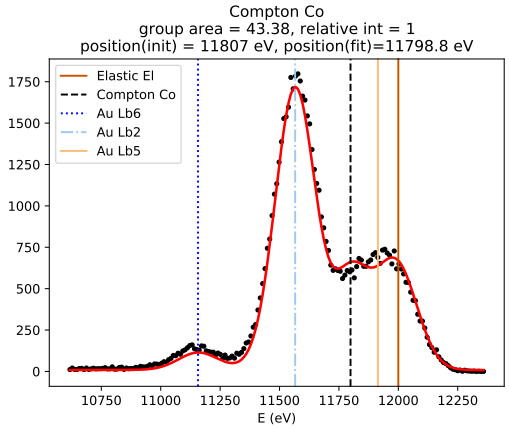
Parameters used:
gain = 9.89; eV0 = 6
List of fitted parameters: ['gammaA']

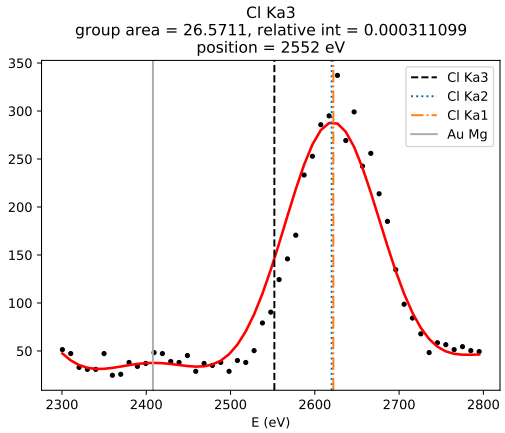
Initial fit parameters:
epsilon = 0.0036; fano = 0.115; noise = 0.110531
```

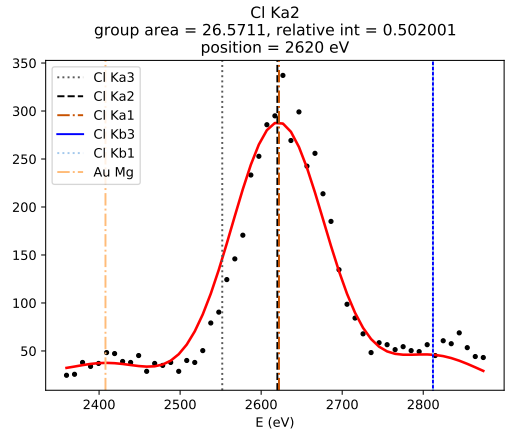
```
sl = 0; ct = 8
sfa0 = 0.000122772; sfa1 = 1e-07; tfb0 = 1e-05; tfb1 = 1e-05
twc0 = 1e-05; twc1 = 1e-05
fG = 0.849218
fA = 0.238138; fB = 1e-10; gammaA = 1.93714; gammaB = 1e+10
```

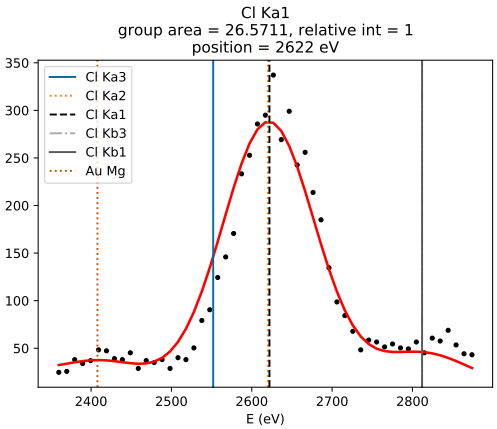


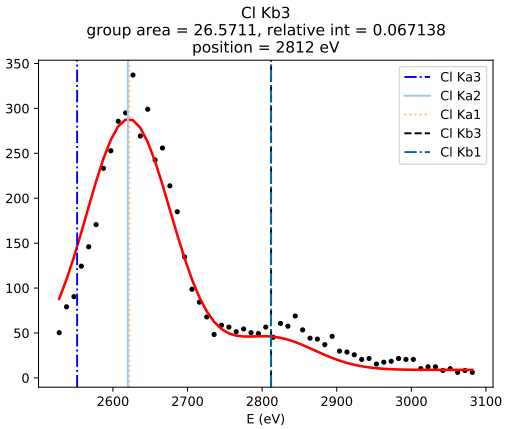


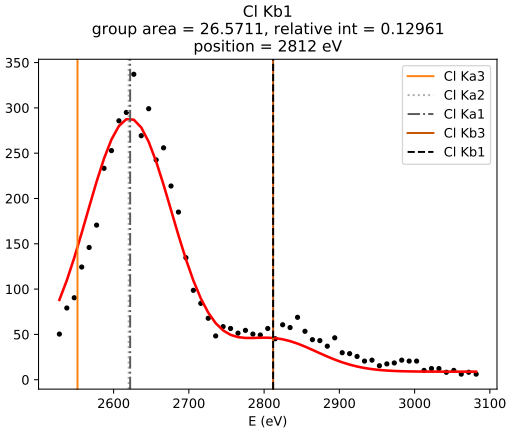


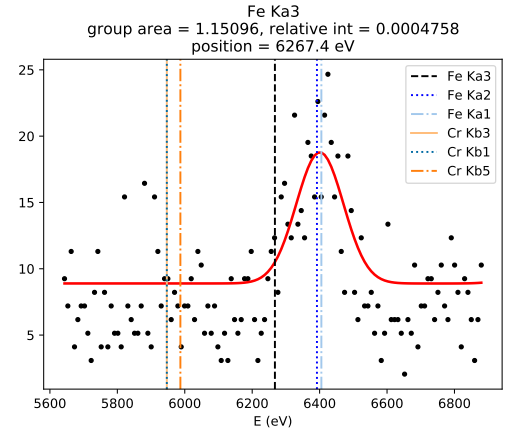


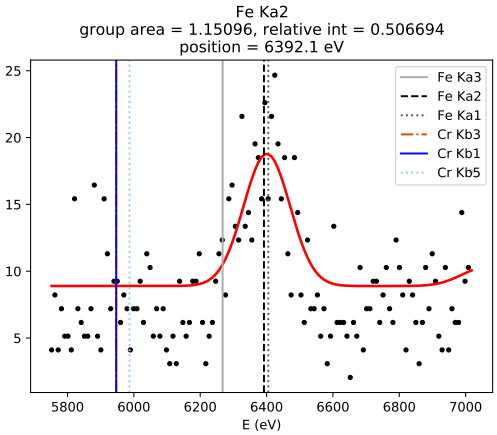


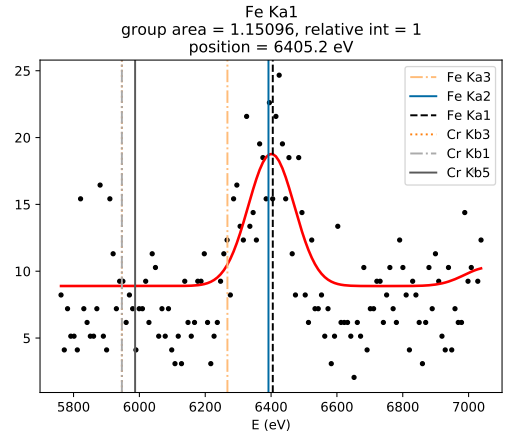

Cl Ka1
group area = 26.5711, relative int = 1
position = 2622 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Au Mg
E (eV)

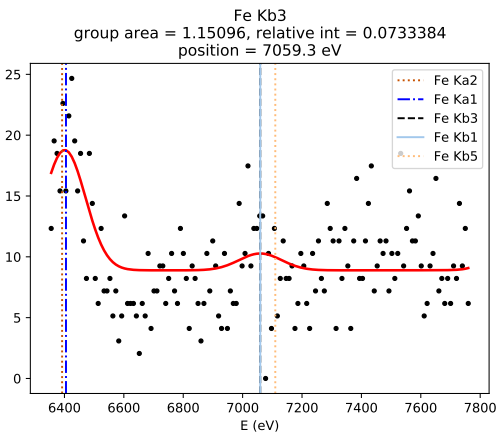

Cl Kb3
group area = 26.5711, relative int = 0.067138
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
E (eV)

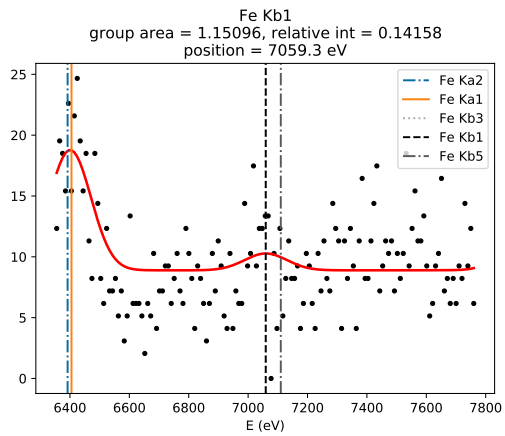

Cl Kb1
group area = 26.5711, relative int = 0.12961
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
E (eV)

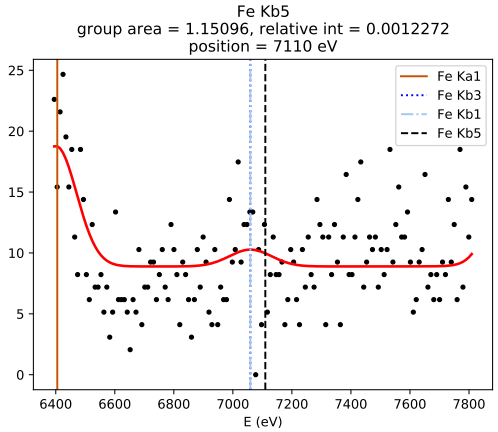

Fe Ka3
group area = 1.15096, relative int = 0.0004758
position = 6267.4 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

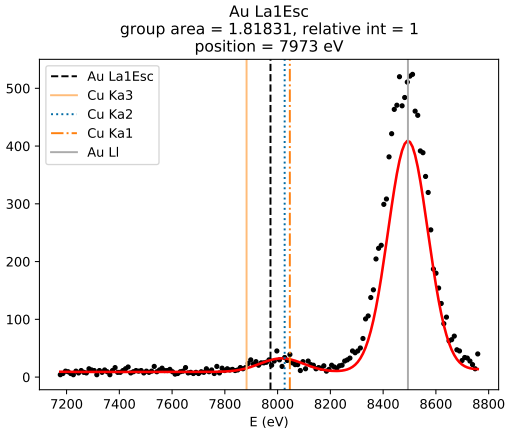

Fe Ka2
group area = 1.15096, relative int = 0.506694
position = 6392.1 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

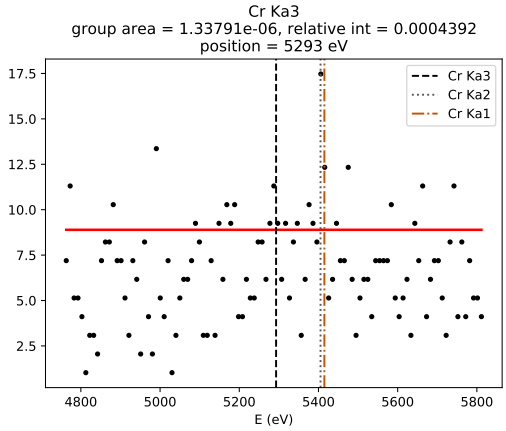

Fe Ka1
group area = 1.15096, relative int = 1
position = 6405.2 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

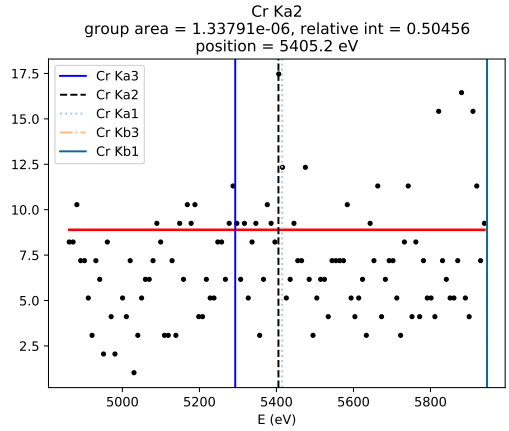

Fe Kb3
group area = 1.15096, relative int = 0.0733384
position = 7059.3 eV
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

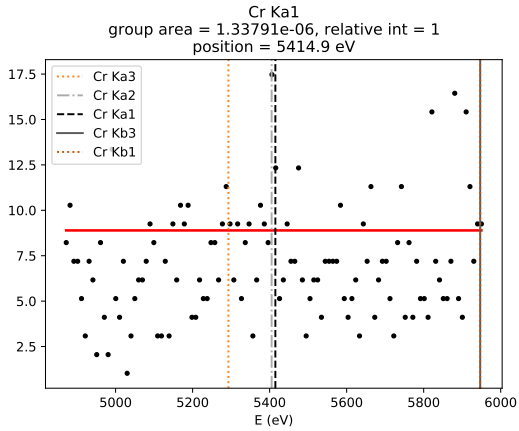

Fe Kb1
group area = 1.15096, relative int = 0.14158
position = 7059.3 eV
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

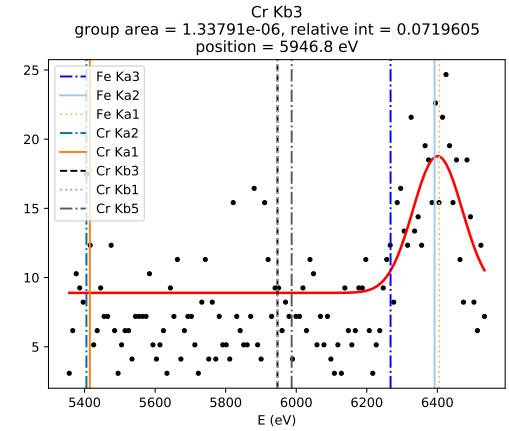

Fe Kb5
group area = 1.15096, relative int = 0.0012272
position = 7110 eV
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

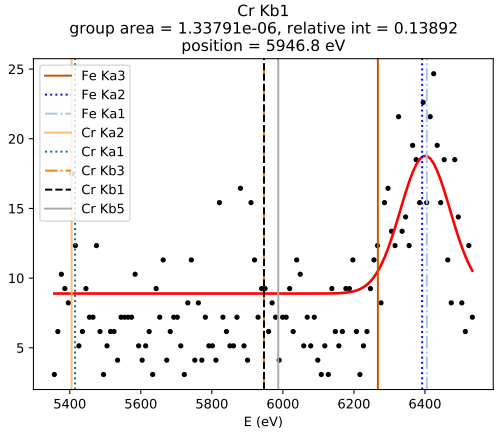

Au La1Esc
group area = 1.81831, relative int = 1
position = 7973 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

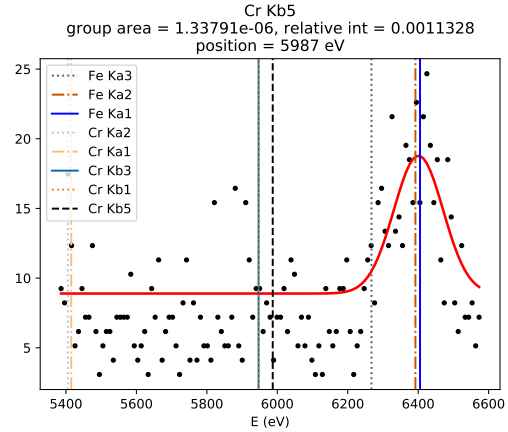

Cr Ka3
group area = 1.33791e-06, relative int = 0.0004392
position = 5293 eV
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

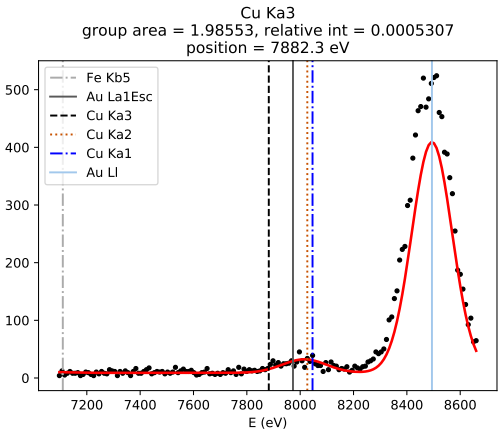

Cr Ka2
group area = 1.33791e-06, relative int = 0.50456
position = 5405.2 eV
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)

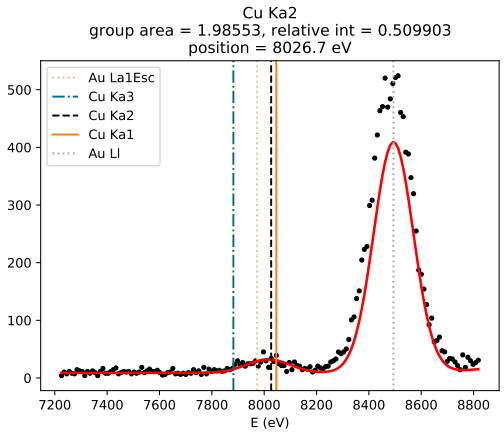

Cr Ka1
group area = 1.33791e-06, relative int = 1
position = 5414.9 eV
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)

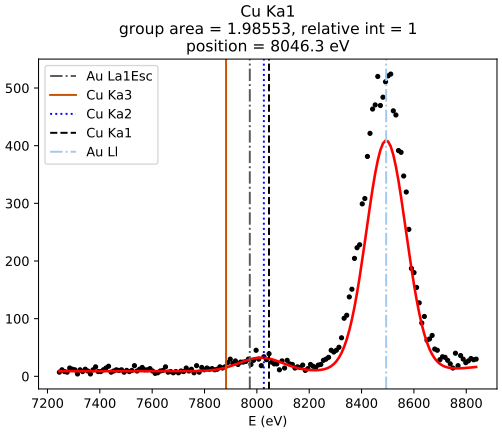

Cr Kb3
group area = 1.33791e-06, relative int = 0.0719605
position = 5946.8 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

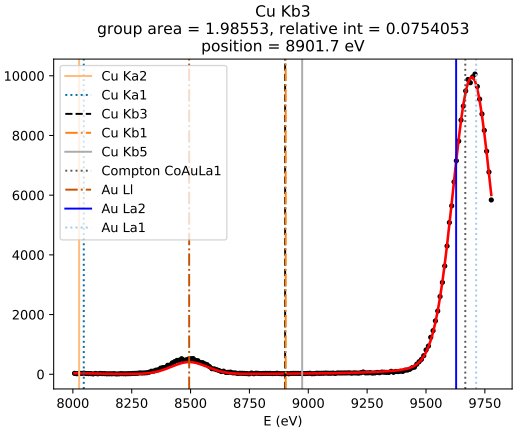

Cr Kb1
group area = 1.33791e-06, relative int = 0.13892
position = 5946.8 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

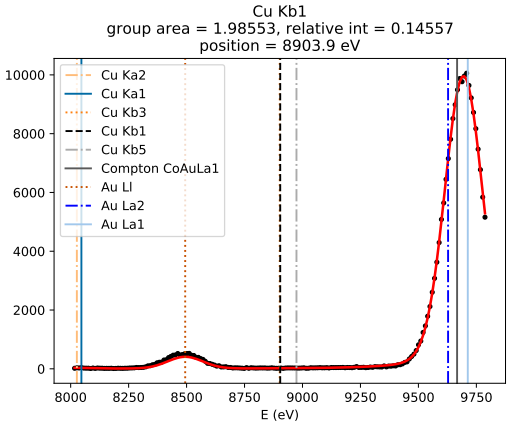

Cr Kb5
group area = 1.33791e-06, relative int = 0.0011328
position = 5987 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

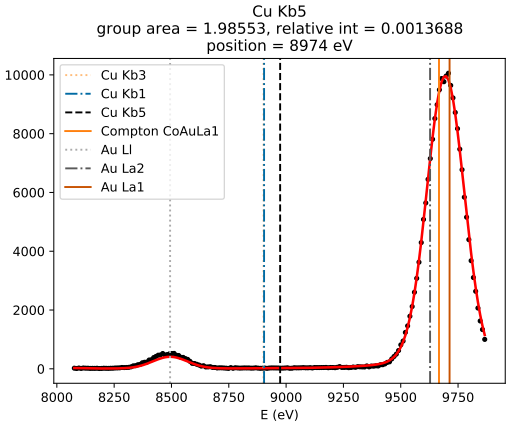

Cu Ka3
group area = 1.98553, relative int = 0.0005307
position = 7882.3 eV
Fe Kb5
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

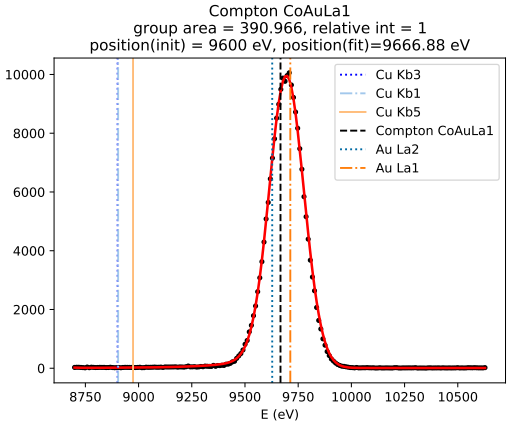

Cu Ka2
group area = 1.98553, relative int = 0.509903
position = 8026.7 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

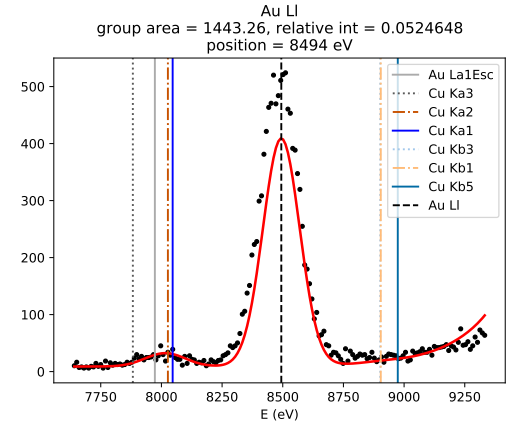

Cu Ka1
group area = 1.98553, relative int = 1
position = 8046.3 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

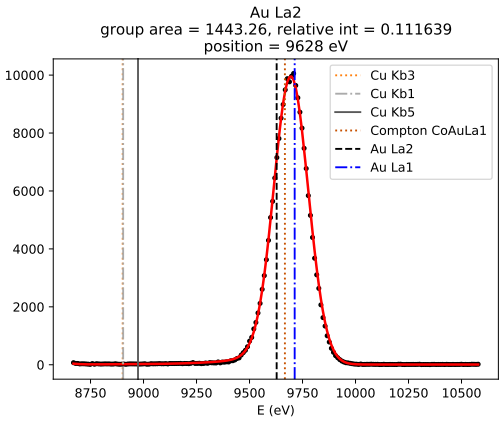

Cu Kb3
group area = 1.98553, relative int = 0.0754053
position = 8901.7 eV
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

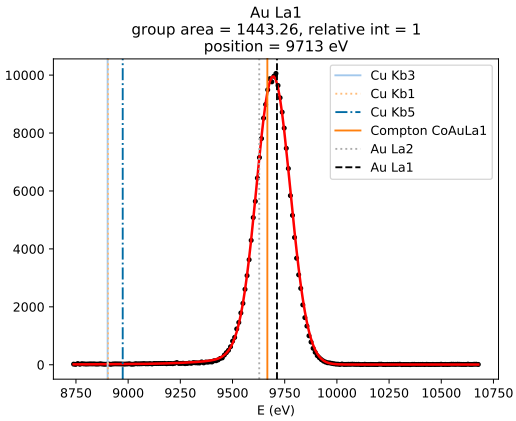

Cu Kb1
group area = 1.98553, relative int = 0.14557
position = 8903.9 eV
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

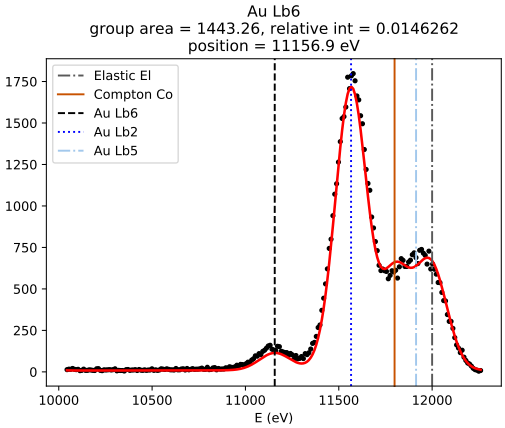

Cu Kb5
group area = 1.98553, relative int = 0.0013688
position = 8974 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

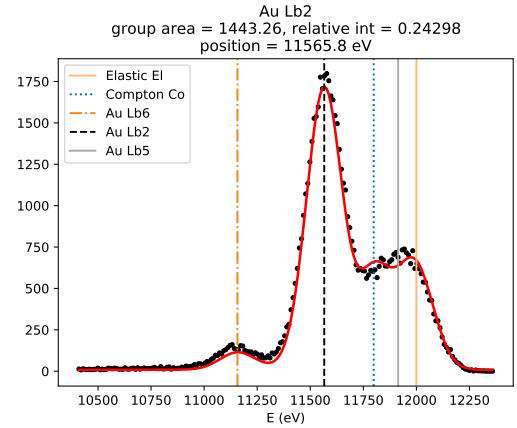

Compton CoAuLa1
group area = 390.966, relative int = 1
position(init) = 9600 eV, position(fit)=9666.88 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

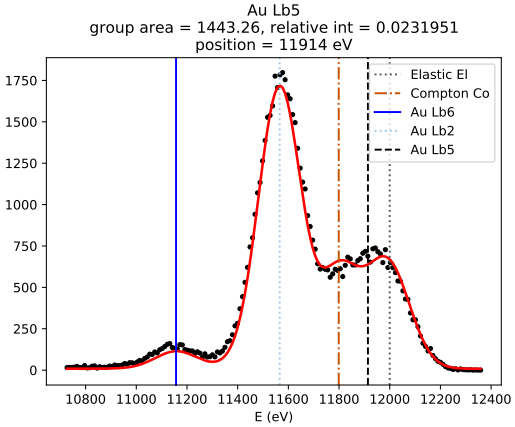

Au Ll
group area = 1443.26, relative int = 0.0524648
position = 8494 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Au Ll
E (eV)

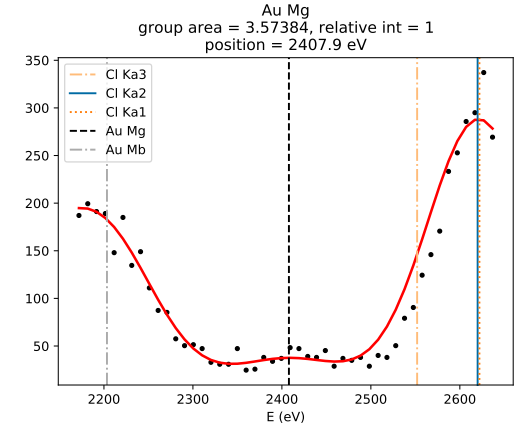

Au La2
group area = 1443.26, relative int = 0.111639
position = 9628 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

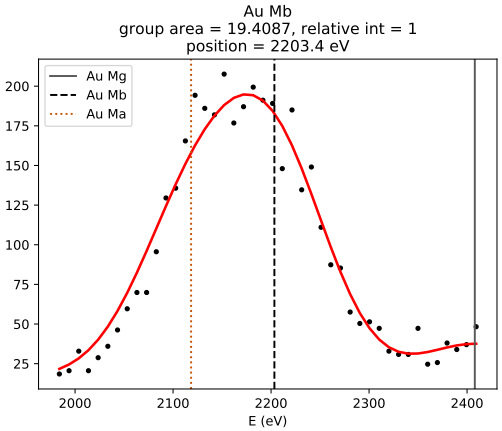

Au La1
group area = 1443.26, relative int = 1
position = 9713 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

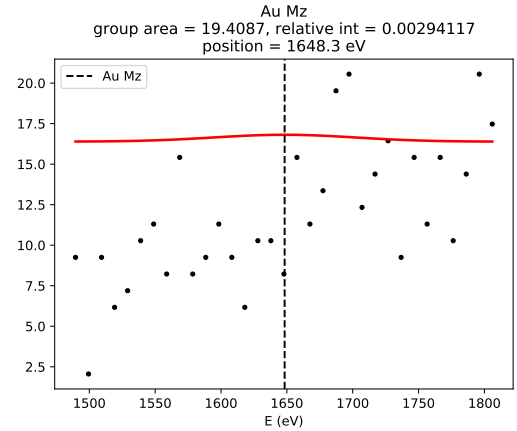

Au Lb6
group area = 1443.26, relative int = 0.0146262
position = 11156.9 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

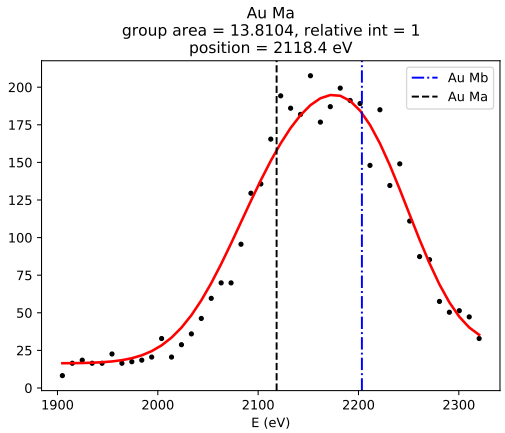

Au Lb2
group area = 1443.26, relative int = 0.24298
position = 11565.8 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)


Au Lb5
group area = 1443.26, relative int = 0.0231951
position = 11914 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

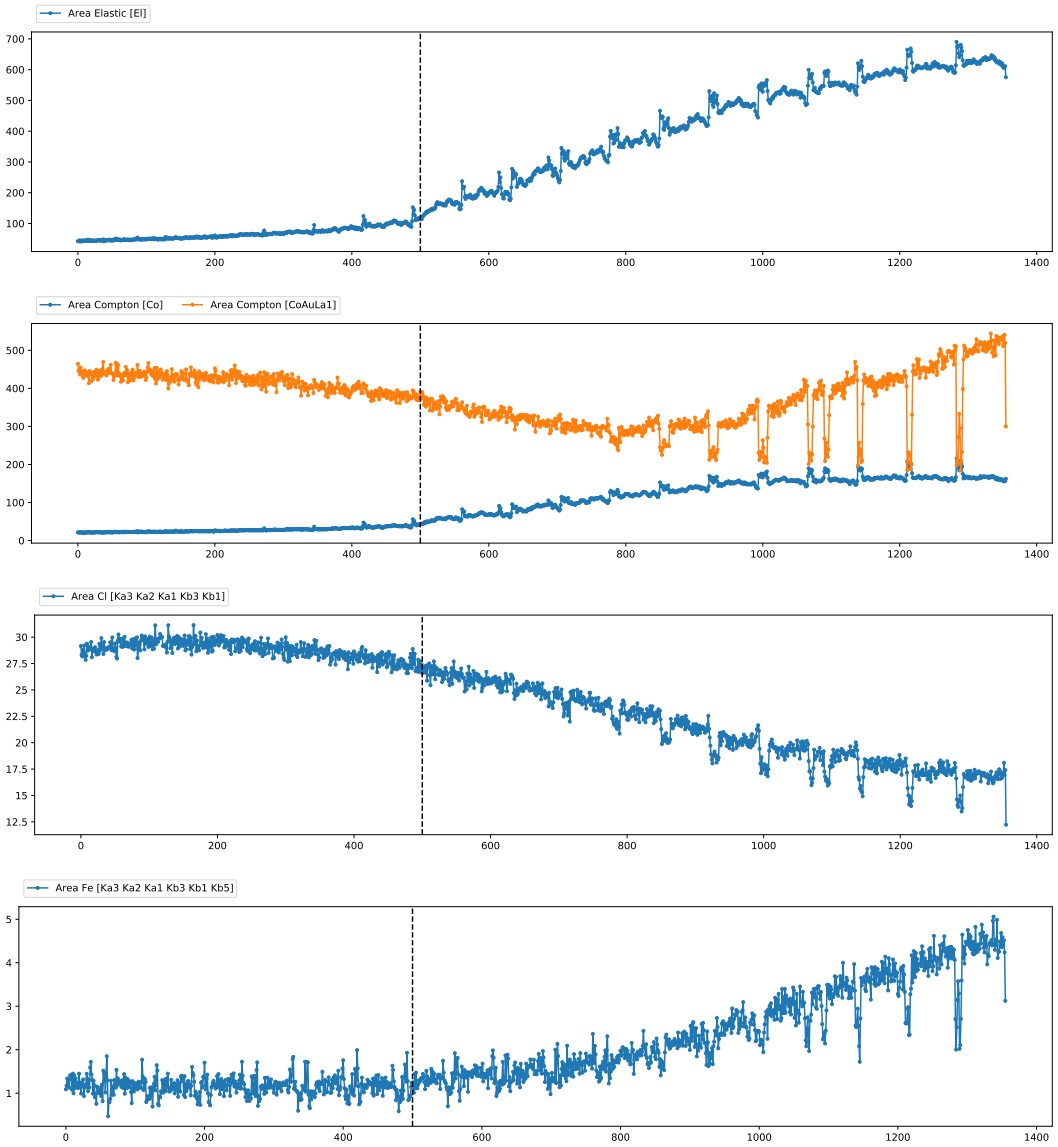

Au Mg
group area = 3.57384, relative int = 1
position = 2407.9 eV
Cl Ka3
Cl Ka2
Cl Ka1
Au Mg
Au Mb
E (eV)

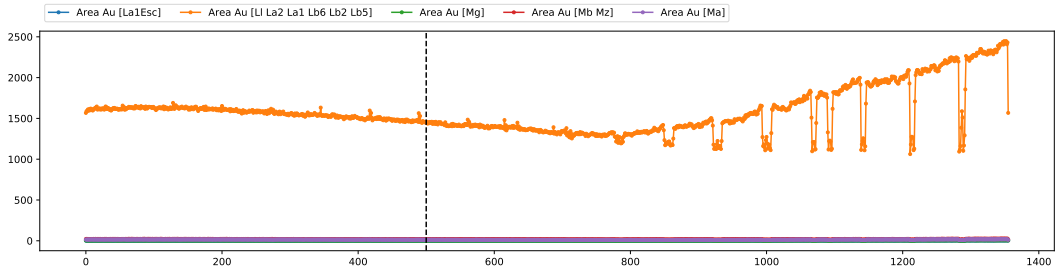

Au Mb
group area = 19.4087, relative int = 1
position = 2203.4 eV
Au Mg
Au Mb
Au Ma
E (eV)

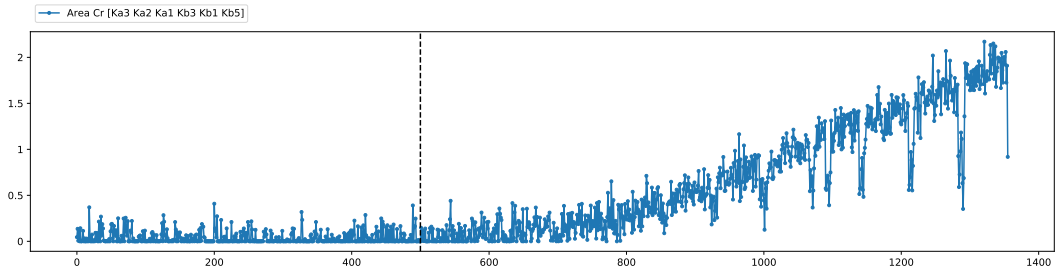

Au Mz
group area = 19.4087, relative int = 0.00294117
position = 1648.3 eV
Au Mz
E (eV)

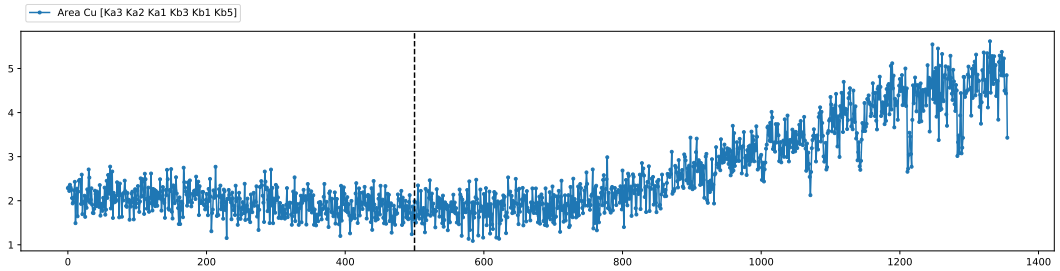

Au Ma
group area = 13.8104, relative int = 1
position = 2118.4 eV
Au Mb
Au Ma
E (eV)

AREAS

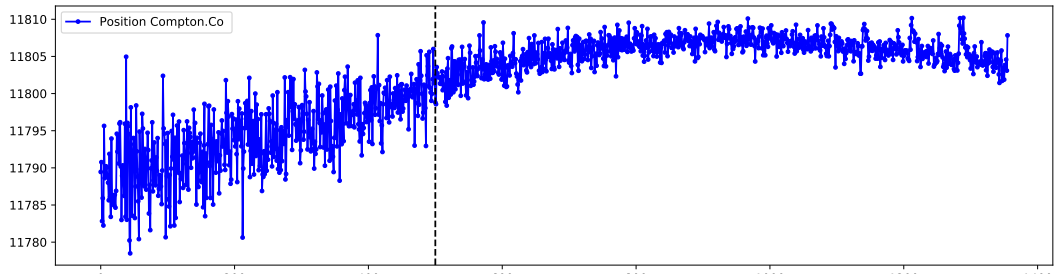

Area Elastic [El]
Area Compton [Co]
Area Compton [CoAuLa1]
Area Cl [Ka3 Ka2 Ka1 Kb3 Kb1]
Area Fe [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]

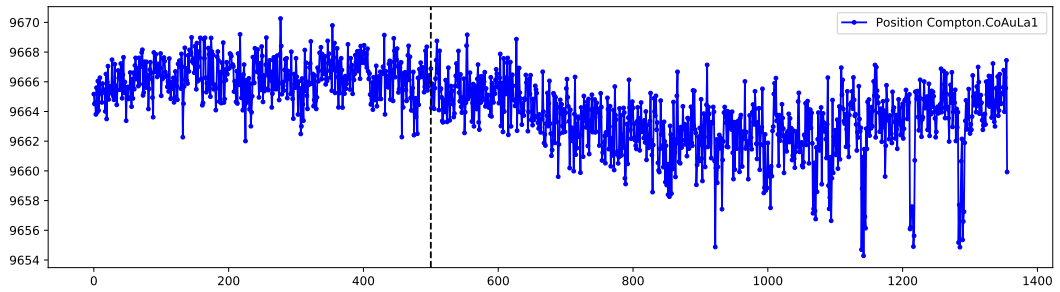

Area Au [La1Esc]
Area Au [Ll La2 La1 Lb6 Lb2 Lb5]
Area Au [Mg]
Area Au [Mb Mz]
Area Au [Ma]

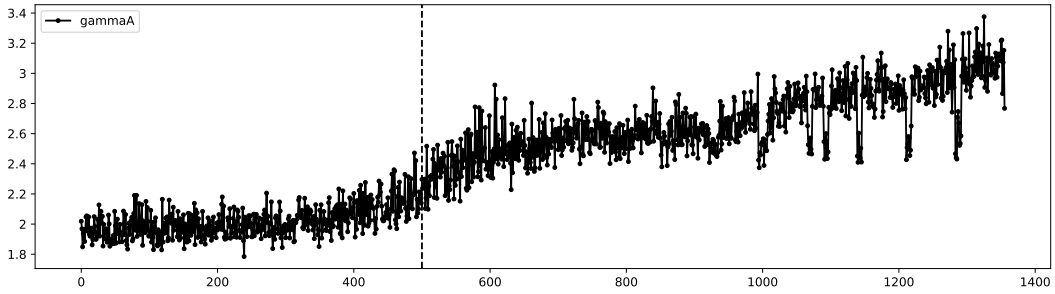

Area Cr [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]


Area Cu [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]

POSITIONS


Position Compton.Co


Position Compton.CoAuLa1



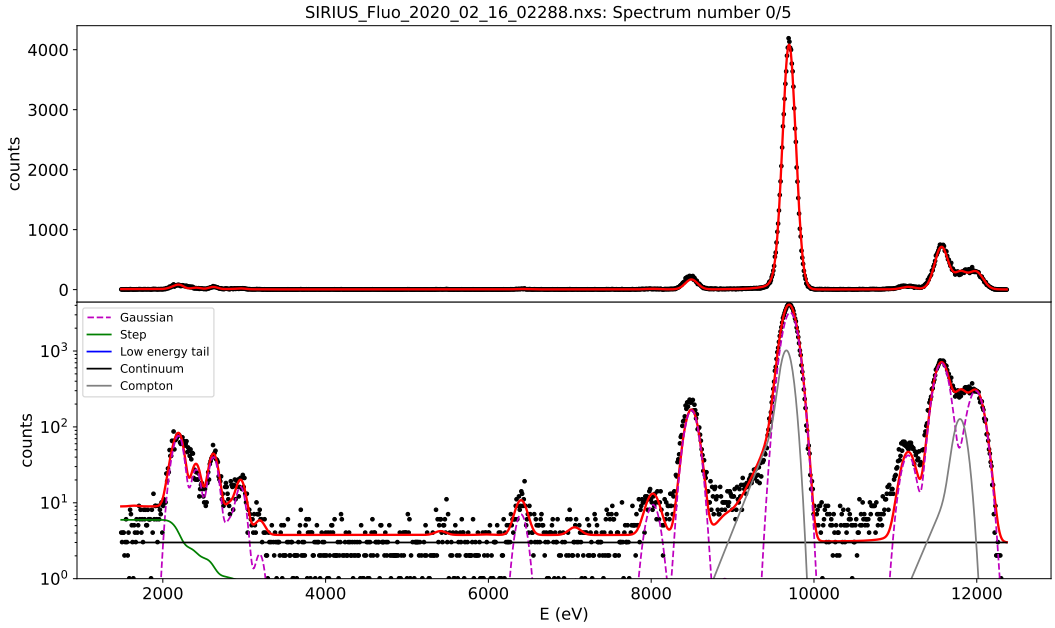
3 SIRIUS_Fluo_2020_02_16_02288

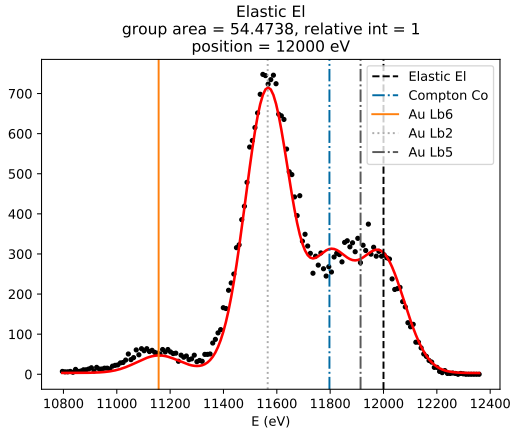
Spectrums from the same series as SIRIUS_Fluo_2020_02_16_02289.
Here to show that we can fit the curve with the same parameters as the previous one (only with a small adjustement of the noise via ct, and of the low energy step via sfa0).
Fitting all the time series may require a bit more work, with a noise continuously increasing (may be by fitting via sl and ct).

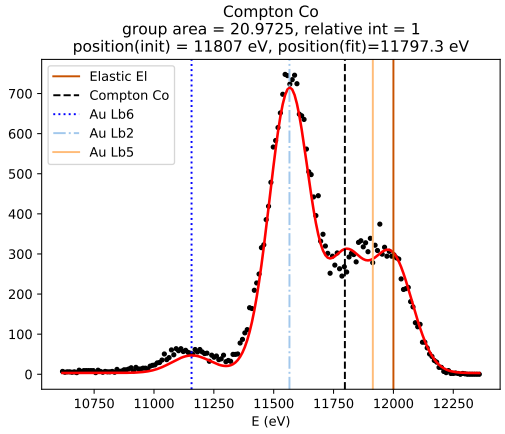
```
Fit results for SIRIUS_Fluo_2020_02_16_02288.nxs
Spectrum interval = [50,55]
Channel interval = [150,1250]
List of chosen elements:  ['Element 4']

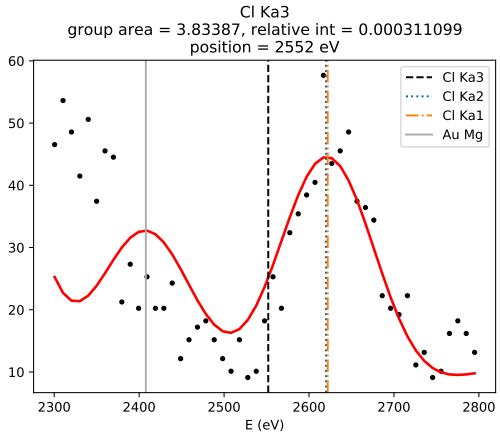
Parameters used:
gain = 9.89; eV0 = 6
List of fitted parameters: ['sfa0']

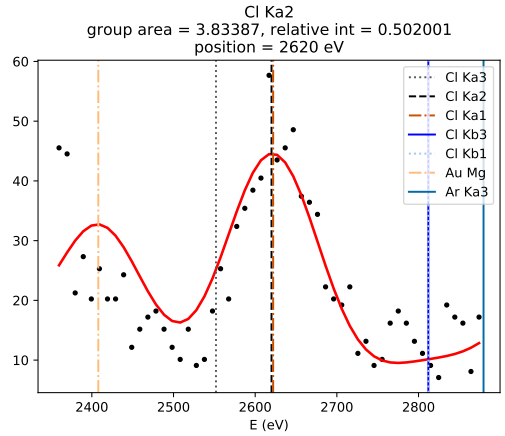
Initial fit parameters:
epsilon = 0.0036; fano = 0.115; noise = 0.110531
sl = 0; ct = 3
sfa0 = 0.000239727; sfa1 = 1e-07; tfb0 = 1e-05; tfb1 = 1e-05
twc0 = 1e-05; twc1 = 1e-05
fG = 0.849218
fA = 0.238138; fB = 1e-10; gammaA = 2.0428; gammaB = 1e+10
```

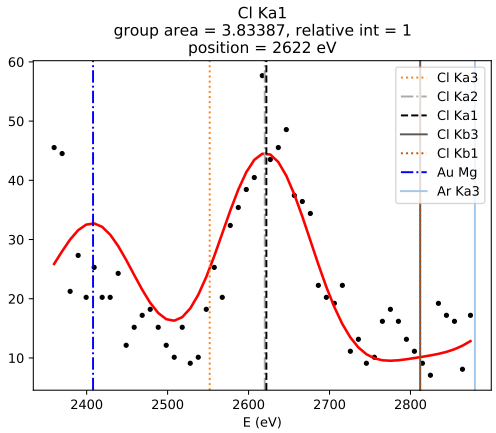

SIRIUS_Fluo_2020_02_16_02288.nxs: Spectrum number 0/5
counts
Gaussian
Step
Low energy tail
Continuum
Compton
E (eV)

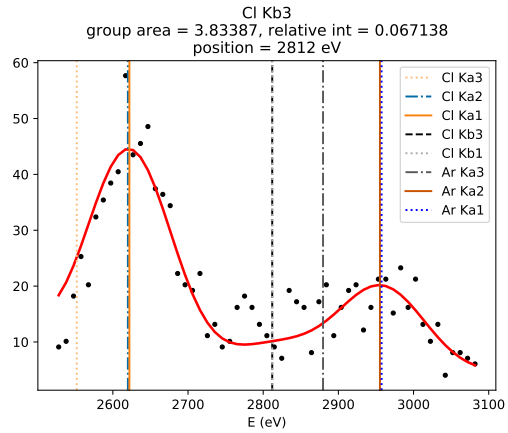

Elastic El
group area = 54.4738, relative int = 1
position = 12000 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

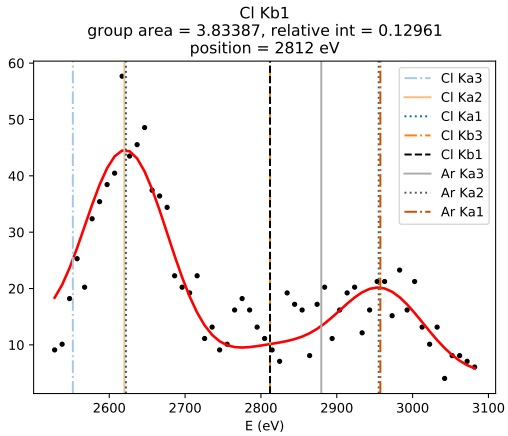

Compton Co
group area = 20.9725, relative int = 1
position(init) = 11807 eV, position(fit)=11797.3 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

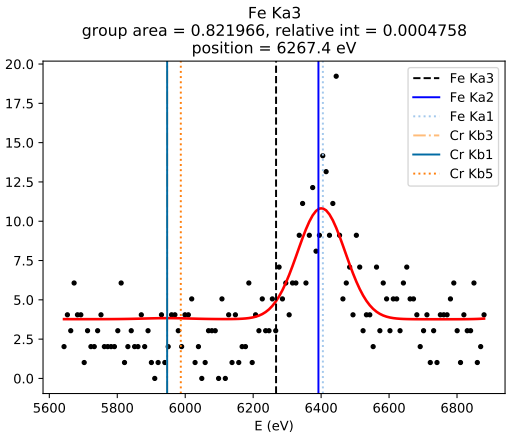

Cl Ka3
group area = 3.83387, relative int = 0.000311099
position = 2552 eV
Cl Ka3
Cl Ka2
Cl Ka1
Au Mg
E (eV)

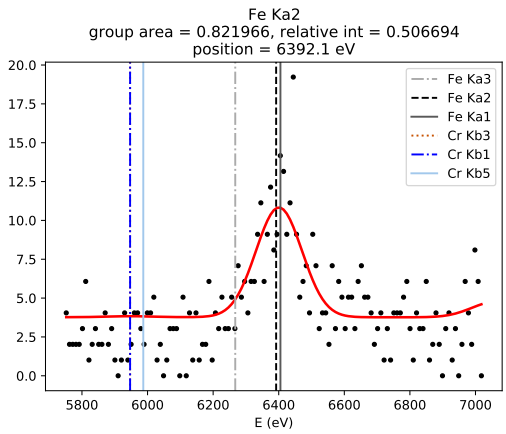

Cl Ka2
group area = 3.83387, relative int = 0.502001
position = 2620 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Au Mg
Ar Ka3
E (eV)

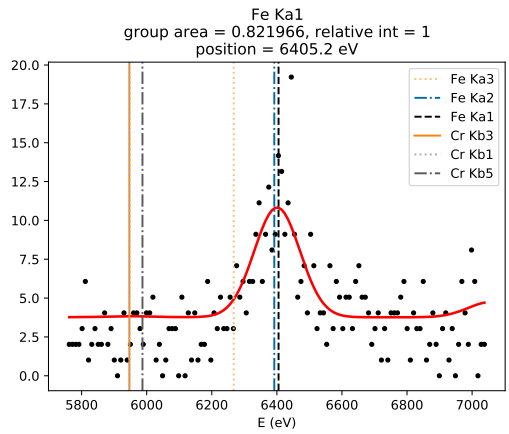

Cl Ka1
group area = 3.83387, relative int = 1
position = 2622 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Au Mg
Ar Ka3
E (eV)

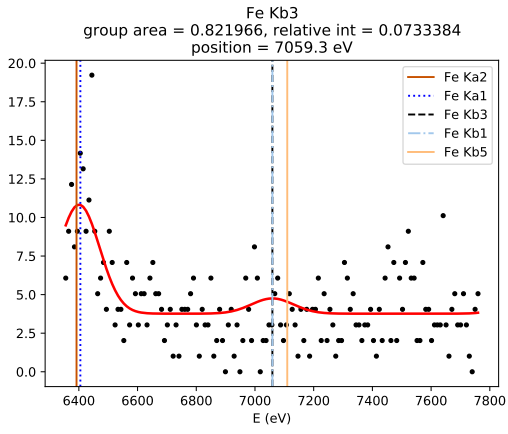

Cl Kb3
group area = 3.83387, relative int = 0.067138
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Ar Ka3
Ar Ka2
Ar Ka1
E (eV)

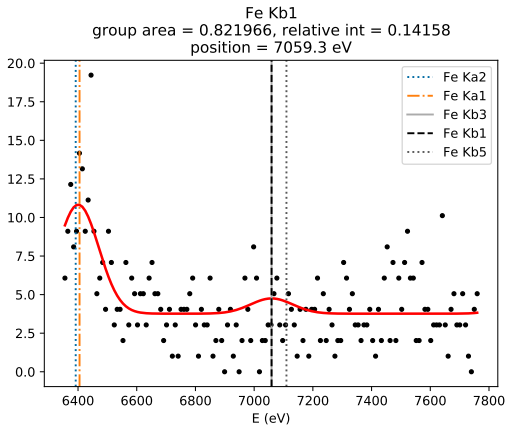

Cl Kb1
group area = 3.83387, relative int = 0.12961
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Ar Ka3
Ar Ka2
Ar Ka1
E (eV)

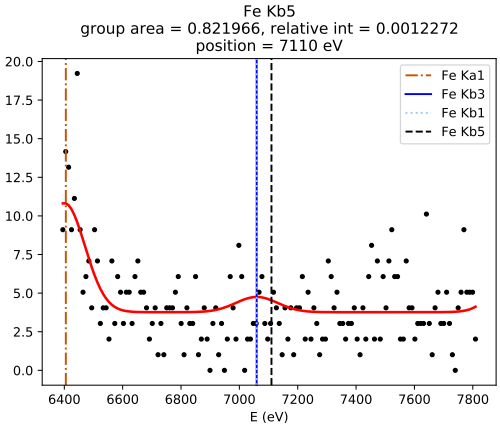

Fe Ka3
group area = 0.821966, relative int = 0.0004758
position = 6267.4 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

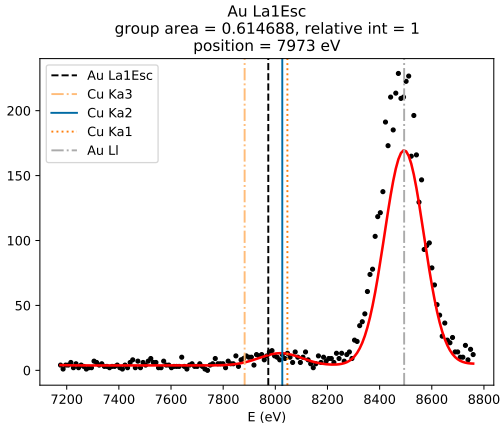

Fe Ka2
group area = 0.821966, relative int = 0.506694
position = 6392.1 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

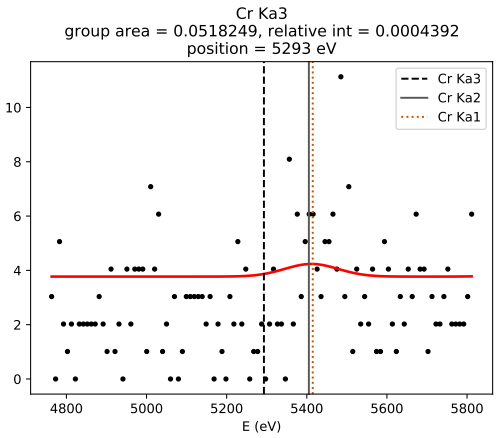

Fe Ka1
group area = 0.821966, relative int = 1
position = 6405.2 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

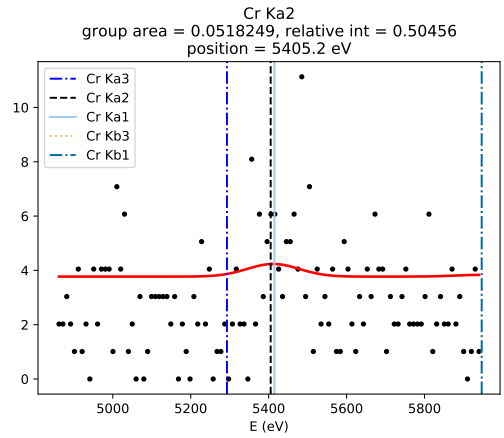

Fe Kb3
group area = 0.821966, relative int = 0.0733384
position = 7059.3 eV
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

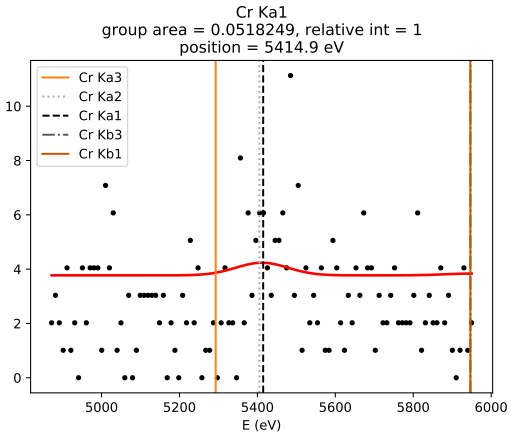

Fe Kb1
group area = 0.821966, relative int = 0.14158
position = 7059.3 eV
Fe Ka2
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

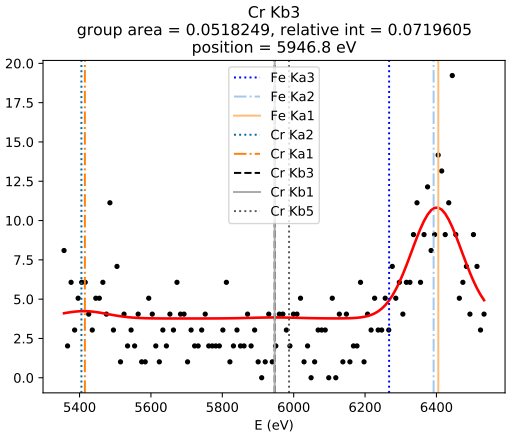

Fe Kb5
group area = 0.821966, relative int = 0.0012272
position = 7110 eV
Fe Ka1
Fe Kb3
Fe Kb1
Fe Kb5
E (eV)

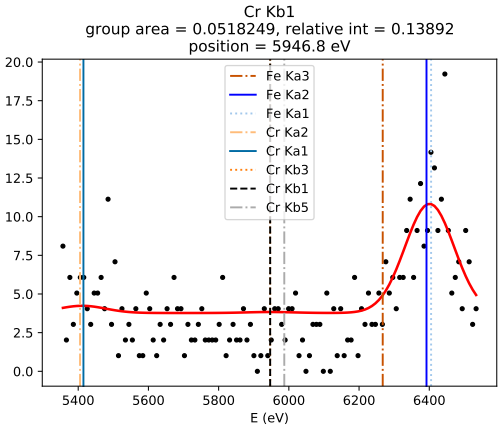

Au La1Esc
group area = 0.614688, relative int = 1
position = 7973 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

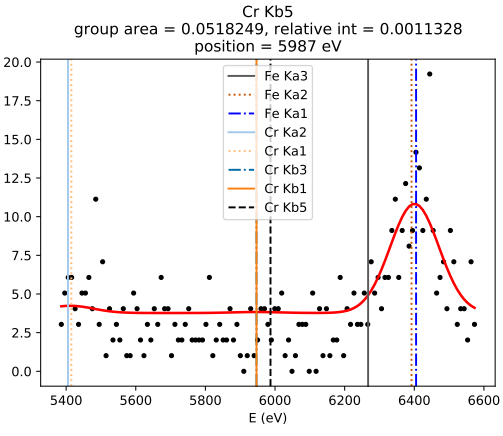

Cr Ka3
group area = 0.0518249, relative int = 0.0004392
position = 5293 eV
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

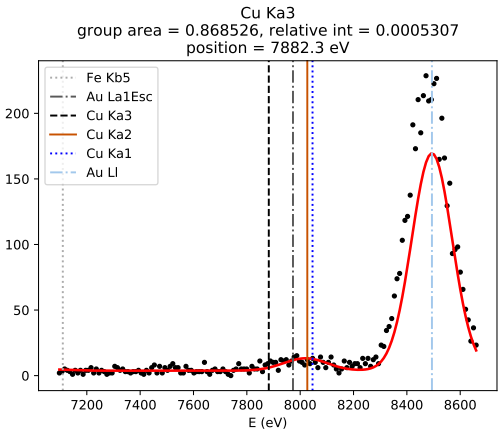

Cr Ka2
group area = 0.0518249, relative int = 0.50456
position = 5405.2 eV
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)

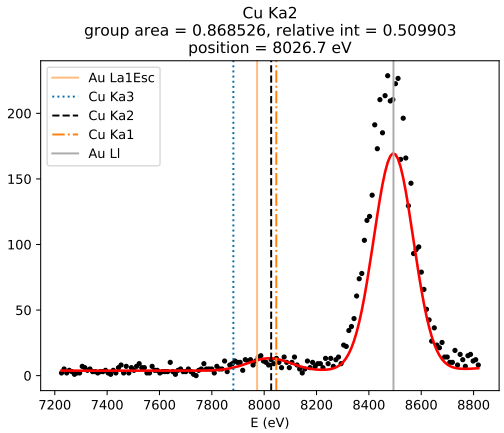

Cr Ka1
group area = 0.0518249, relative int = 1
position = 5414.9 eV
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)

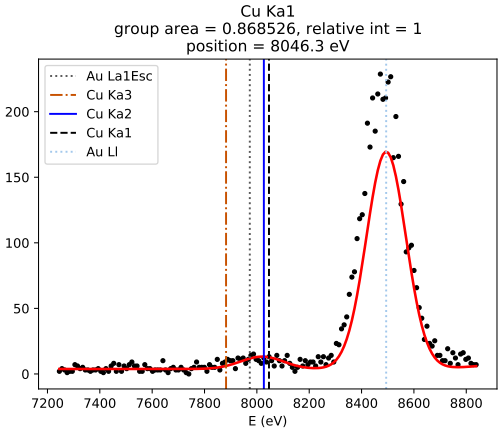

Cr Kb3
group area = 0.0518249, relative int = 0.0719605
position = 5946.8 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

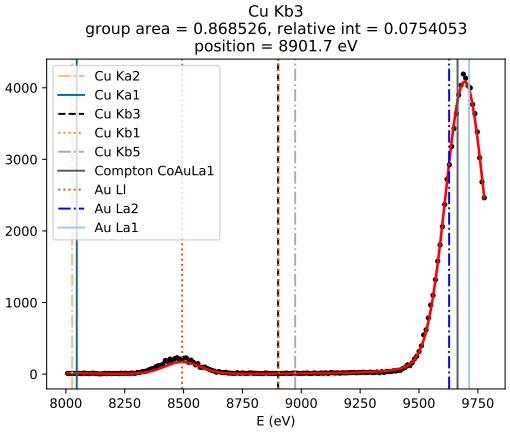

Cr Kb1
group area = 0.0518249, relative int = 0.13892
position = 5946.8 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

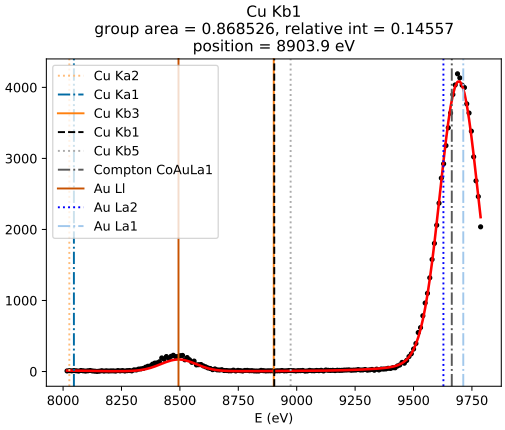

Cr Kb5
group area = 0.0518249, relative int = 0.0011328
position = 5987 eV
Fe Ka3
Fe Ka2
Fe Ka1
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

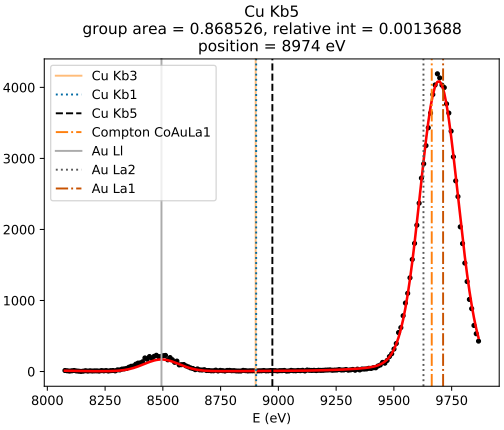

Cu Ka3
group area = 0.868526, relative int = 0.0005307
position = 7882.3 eV
Fe Kb5
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

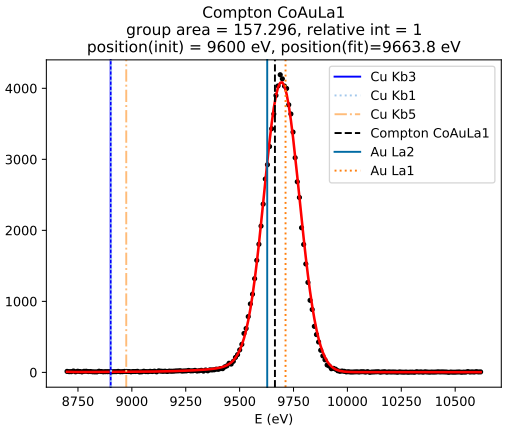

Cu Ka2
group area = 0.868526, relative int = 0.509903
position = 8026.7 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

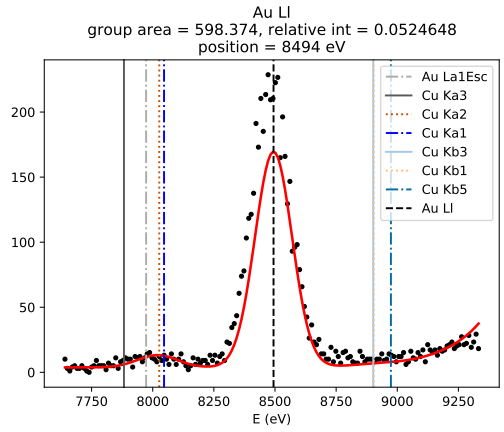

Cu Ka1
group area = 0.868526, relative int = 1
position = 8046.3 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Au Ll
E (eV)

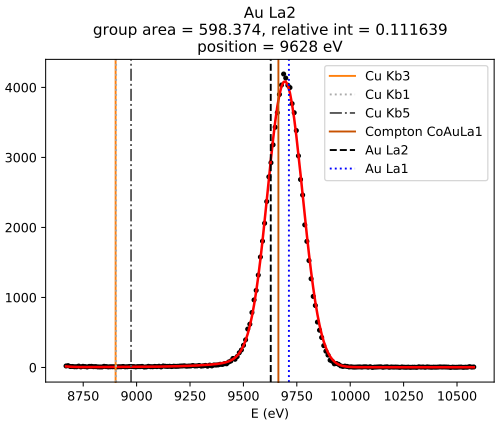

Cu Kb3
group area = 0.868526, relative int = 0.0754053
position = 8901.7 eV
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

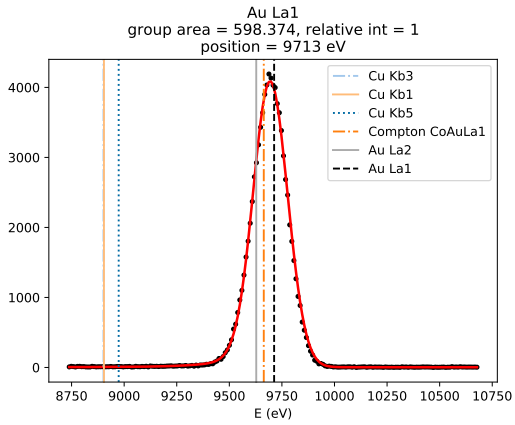

Cu Kb1
group area = 0.868526, relative int = 0.14557
position = 8903.9 eV
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

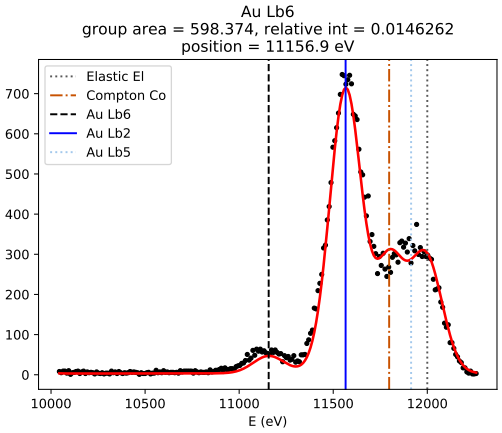

Cu Kb5
group area = 0.868526, relative int = 0.0013688
position = 8974 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au Ll
Au La2
Au La1
E (eV)

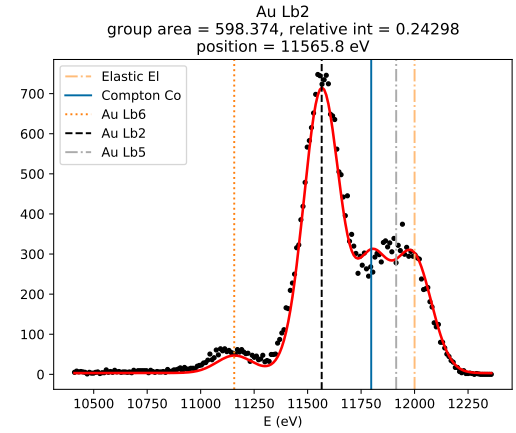

Compton CoAuLa1
group area = 157.296, relative int = 1
position(init) = 9600 eV, position(fit)=9663.8 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

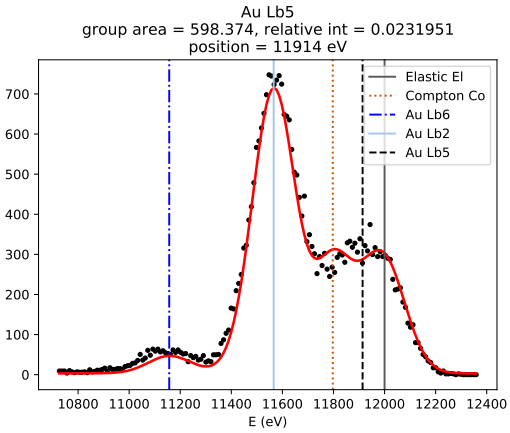

Au Ll
group area = 598.374, relative int = 0.0524648
position = 8494 eV
Au La1Esc
Cu Ka3
Cu Ka2
Cu Ka1
Cu Kb3
Cu Kb1
Cu Kb5
Au Ll
E (eV)

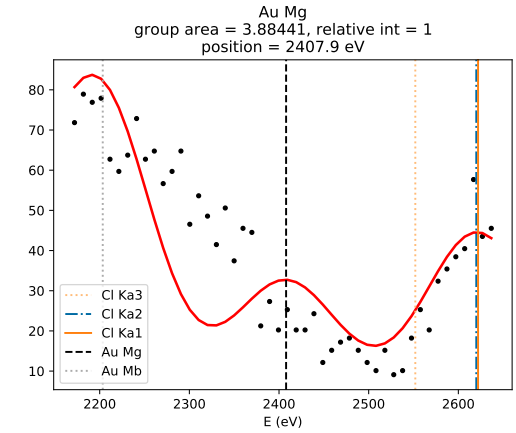

Au La2
group area = 598.374, relative int = 0.111639
position = 9628 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

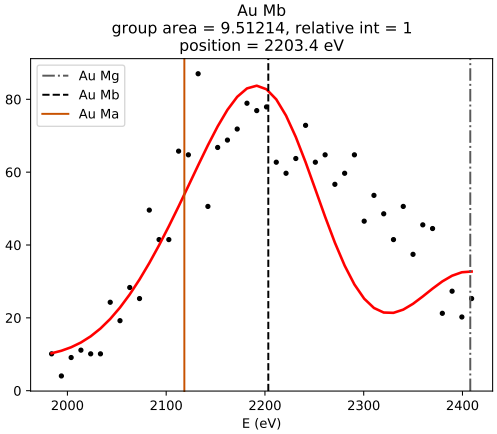

Au La1
group area = 598.374, relative int = 1
position = 9713 eV
Cu Kb3
Cu Kb1
Cu Kb5
Compton CoAuLa1
Au La2
Au La1
E (eV)

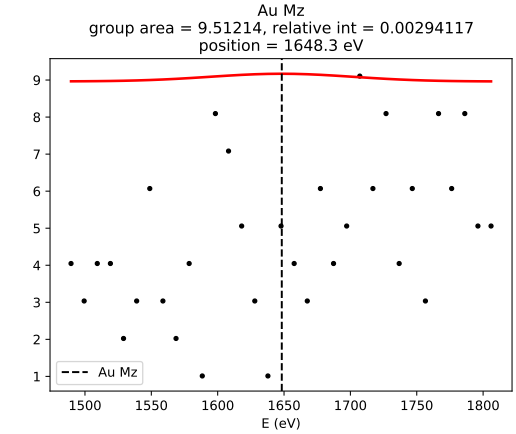

Au Lb6
group area = 598.374, relative int = 0.0146262
position = 11156.9 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

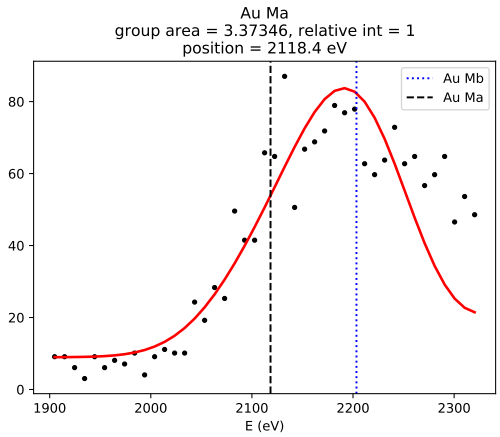

Au Lb2
group area = 598.374, relative int = 0.24298
position = 11565.8 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

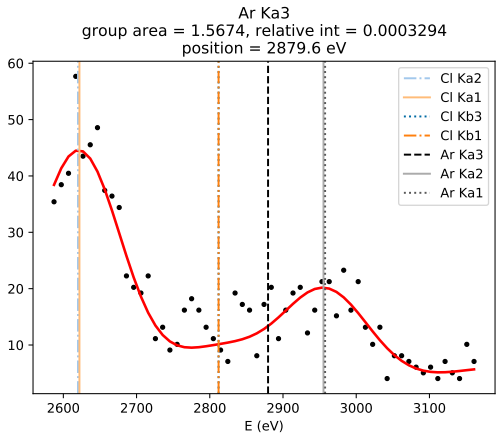

Au Lb5
group area = 598.374, relative int = 0.0231951
position = 11914 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

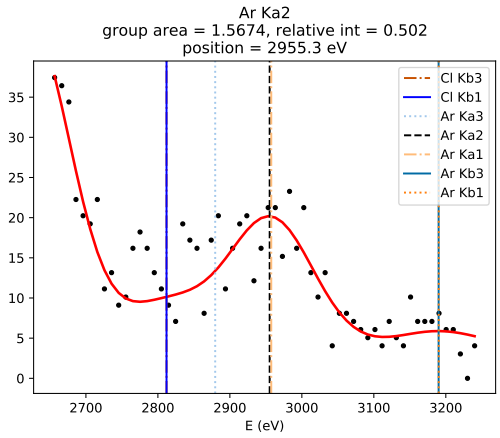

Au Mg
group area = 3.88441, relative int = 1
position = 2407.9 eV
Cl Ka3
Cl Ka2
Cl Ka1
Au Mg
Au Mb
E (eV)

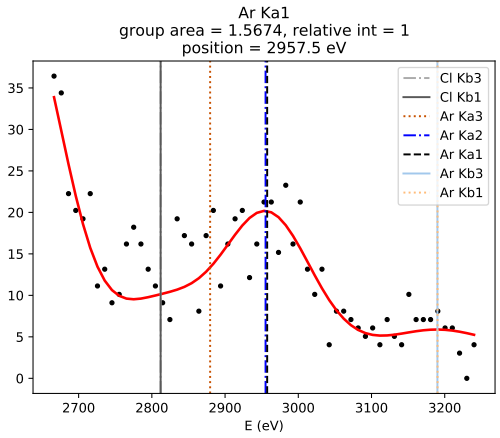

Au Mb
group area = 9.51214, relative int = 1
position = 2203.4 eV
Au Mg
Au Mb
Au Ma
E (eV)

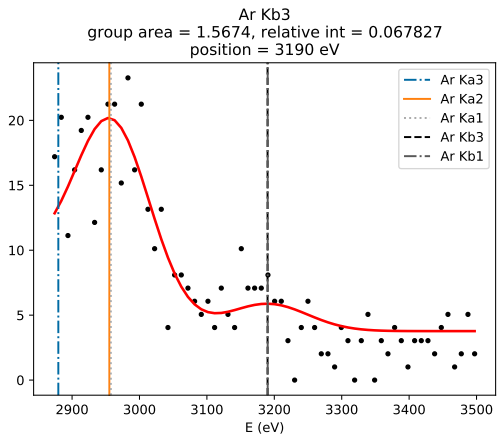

Au Mz
group area = 9.51214, relative int = 0.00294117
position = 1648.3 eV
Au Mz
E (eV)

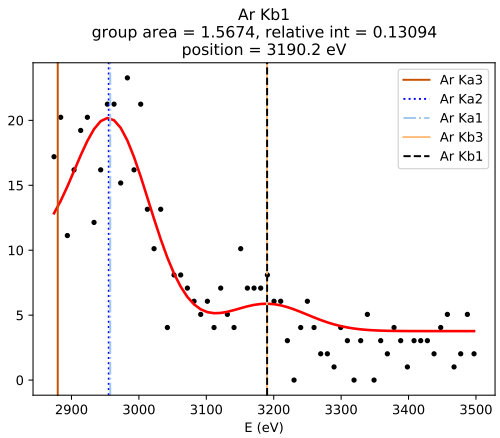

Au Ma
group area = 3.37346, relative int = 1
position = 2118.4 eV
Au Mb
Au Ma
E (eV)


Ar Ka3
group area = 1.5674, relative int = 0.0003294
position = 2879.6 eV
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
Ar Ka3
Ar Ka2
Ar Ka1
E (eV)

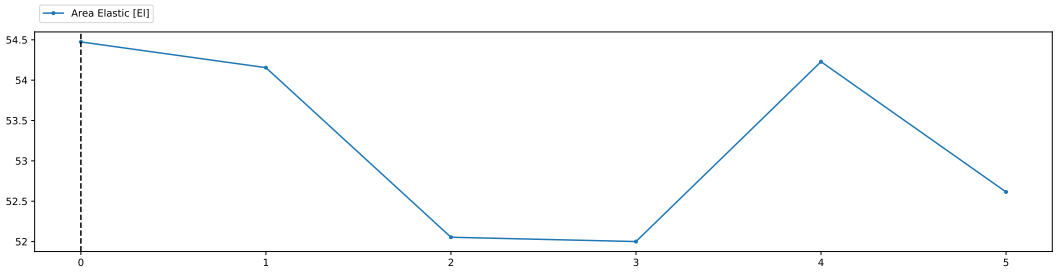

Ar Ka2
group area = 1.5674, relative int = 0.502
position = 2955.3 eV
Cl Kb3
Cl Kb1
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
E (eV)

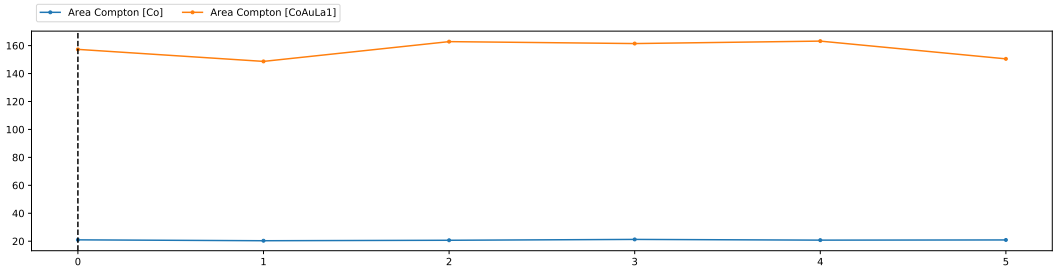

Ar Ka1
group area = 1.5674, relative int = 1
position = 2957.5 eV
Cl Kb3
Cl Kb1
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
E (eV)

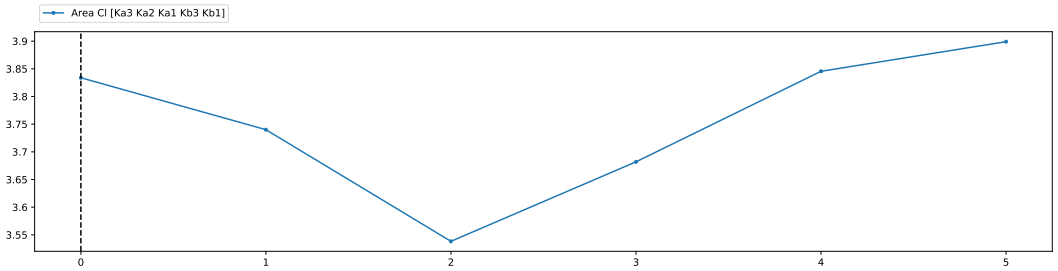

Ar Kb3
group area = 1.5674, relative int = 0.067827
position = 3190 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
E (eV)

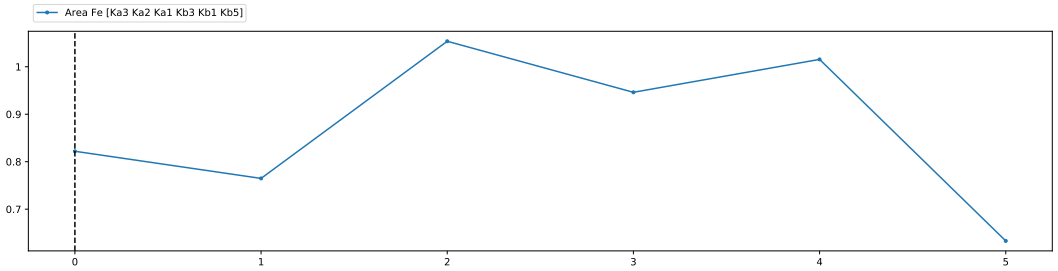

Ar Kb1
group area = 1.5674, relative int = 0.13094
position = 3190.2 eV
Ar Ka3
Ar Ka2
Ar Ka1
Ar Kb3
Ar Kb1
E (eV)

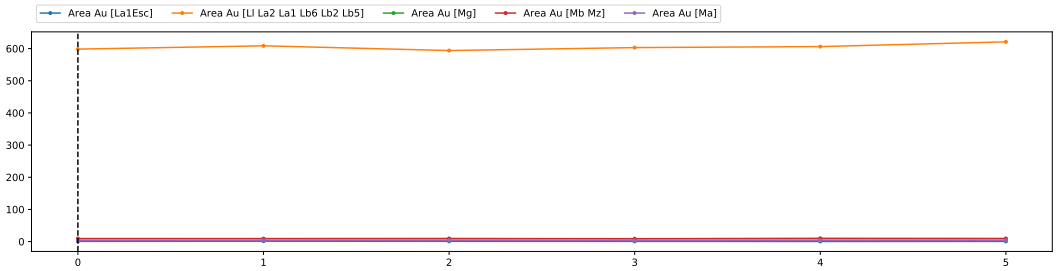
AREAS

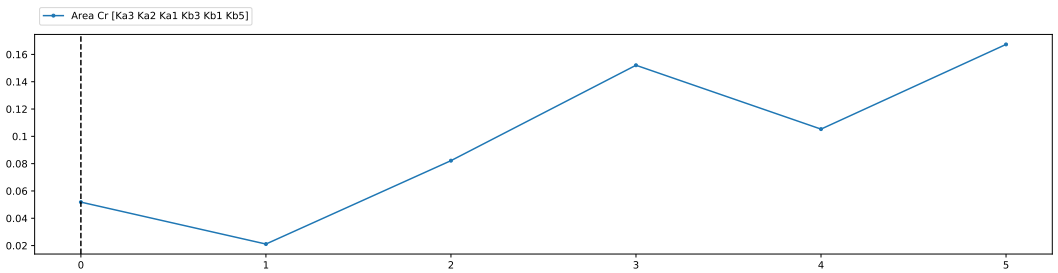

Area Elastic [El]

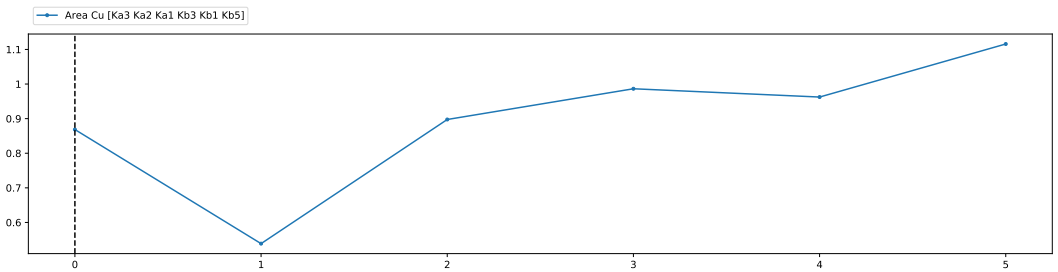

Area Compton [Co]
Area Compton [CoAuLa1]

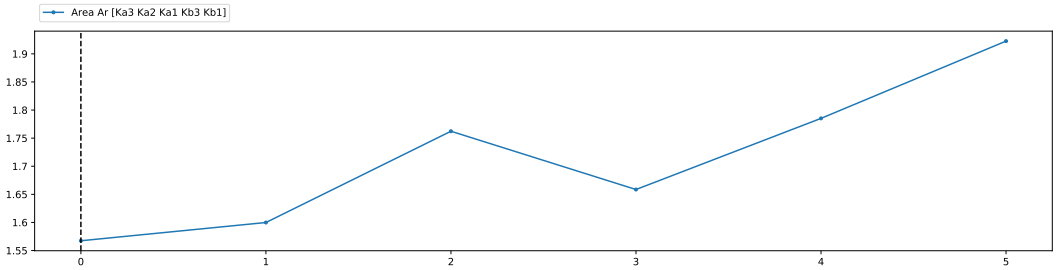

Area Cl [Ka3 Ka2 Ka1 Kb3 Kb1]


Area Fe [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]

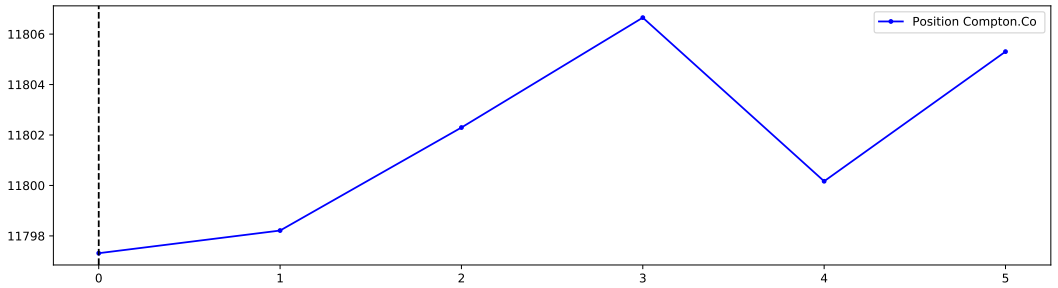

Area Au [La1Esc]
Area Au [Ll La2 La1 Lb6 Lb2 Lb5]
Area Au [Mg]
Area Au [Mb Mz]
Area Au [Ma]

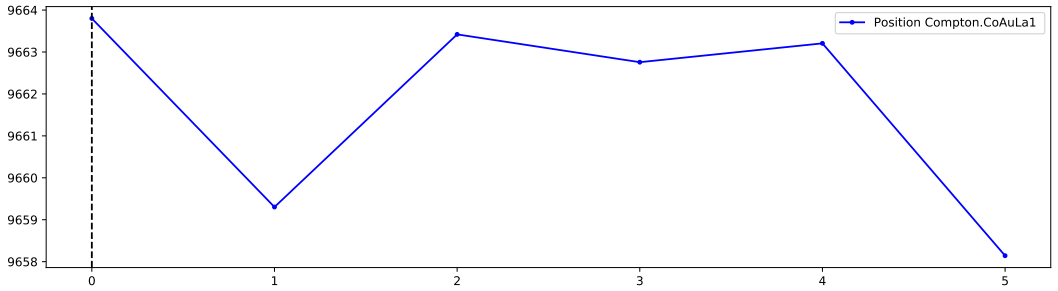

Area Cr [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]


Area Cu [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]

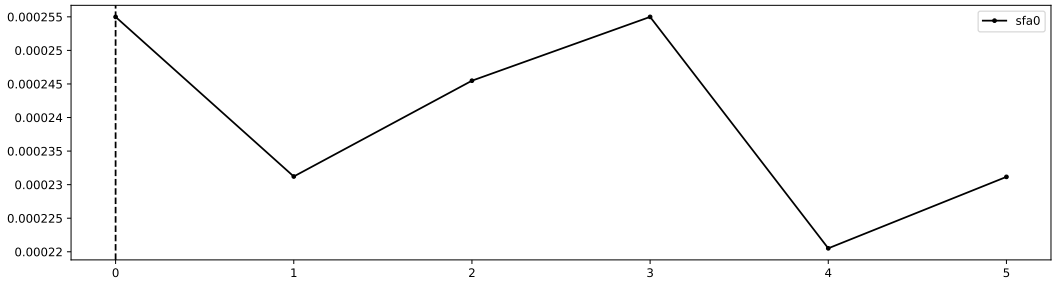


POSITIONS





OTHER PARAMETERS



4 SIRIUS_Fluo_2020_02_13_02277

An example of fits with a limited number of peaks (only one line of Au, Compton and Rayleigh). The parameters are taken from the previous analysis on the same system, and only ct (height of the background) is let free.
The fit is therefore very fast, and quite good considering the low couting time per point.

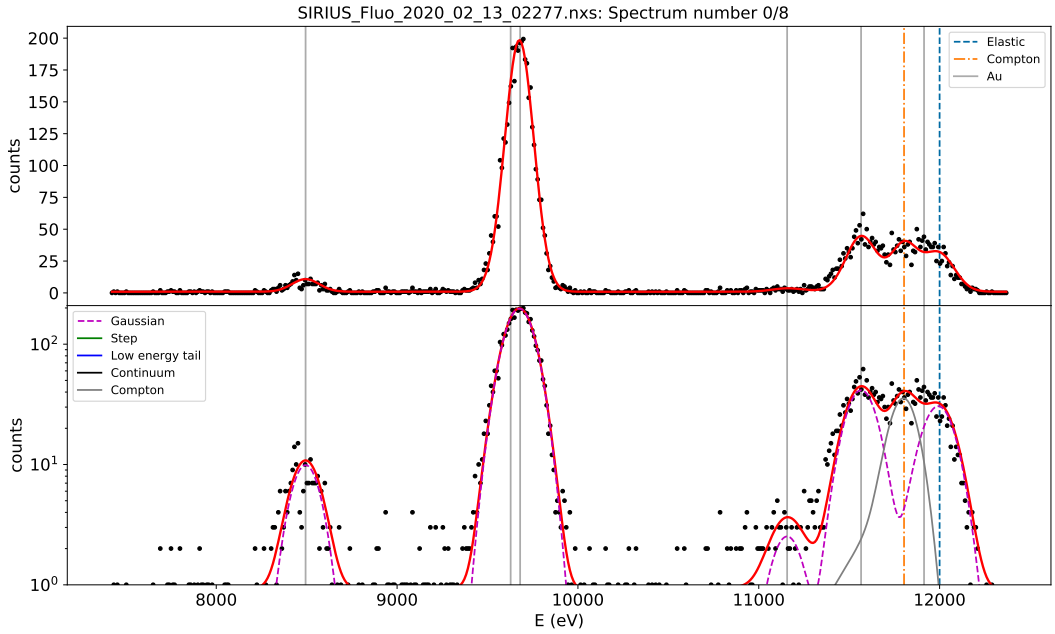
Conclusion: a quick and good analysis can be done by pointing only the most intense peaks.

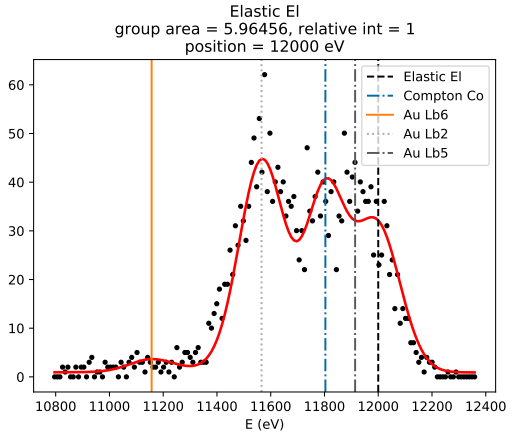
```
Fit results for SIRIUS_Fluo_2020_02_13_02277.nxs
Spectrum interval = [2,10]
```

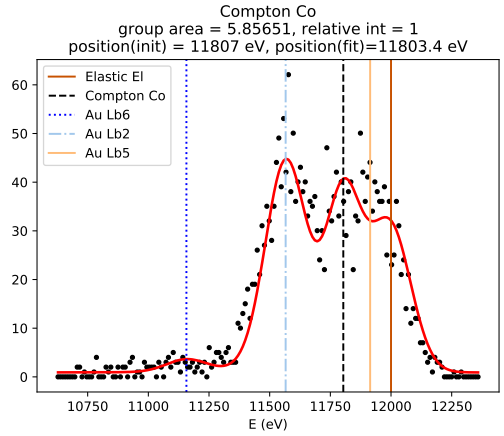
```
Channel interval = [750,1250]
List of chosen elements:  ['Element 4']

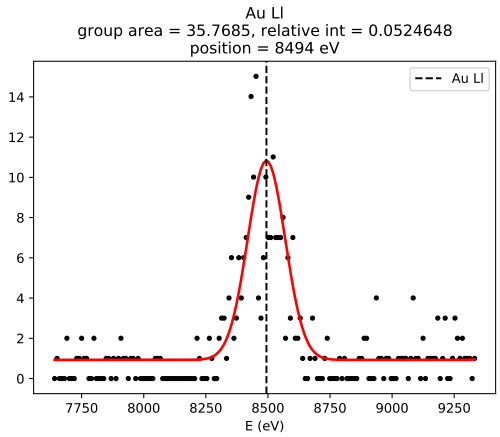
Parameters used:
gain = 9.89; eV0 = 6
List of fitted parameters: ['ct']

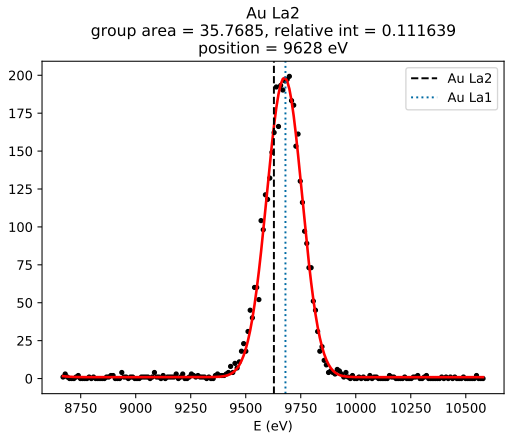
Initial fit parameters:
epsilon = 0.0036; fano = 0.115; noise = 0.110531
sl = 0; ct = 8
sfa0 = 0.000122772; sfa1 = 1e-07; tfb0 = 1e-05; tfb1 = 1e-05
twc0 = 1e-05; twc1 = 1e-05
fG = 0.849218
fA = 0.238138; fB = 1e-10; gammaA = 2.0428; gammaB = 1e+10
```

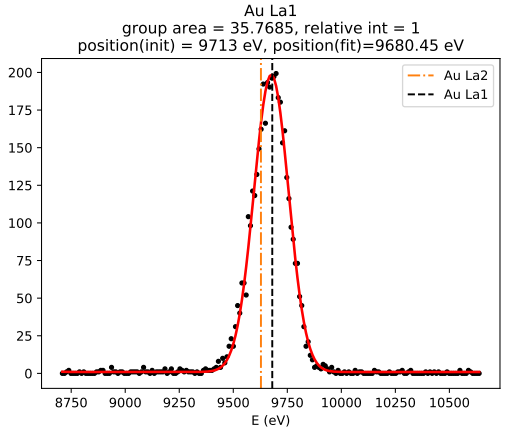


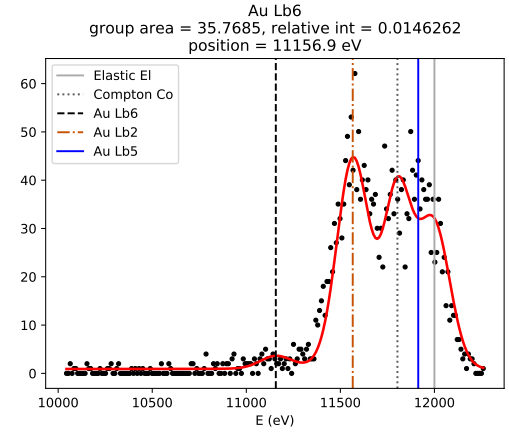


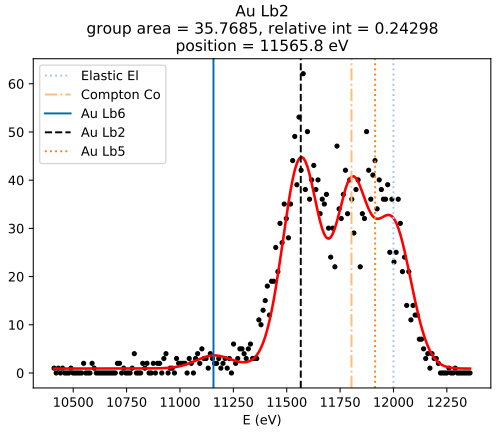


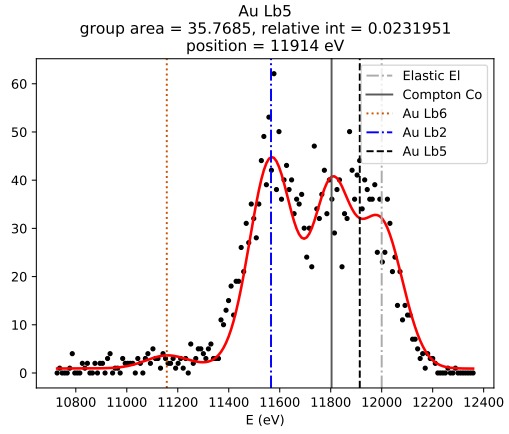

Au Ll
group area = 35.7685, relative int = 0.0524648
position = 8494 eV
Au Ll
E (eV)


Au La2
group area = 35.7685, relative int = 0.111639
position = 9628 eV
Au La2
Au La1
E (eV)

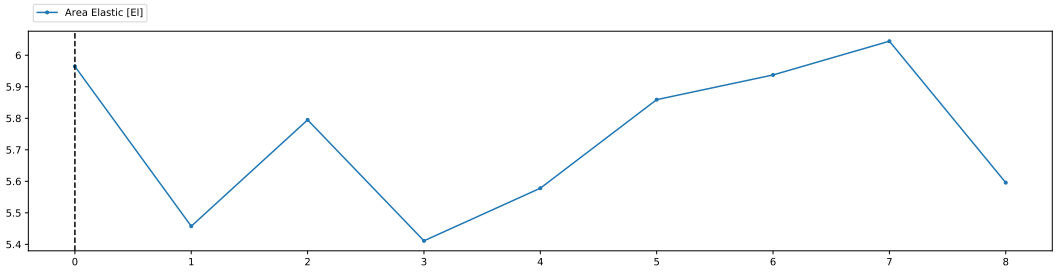

Au La1
group area = 35.7685, relative int = 1
position(init) = 9713 eV, position(fit)=9680.45 eV
Au La2
Au La1
E (eV)

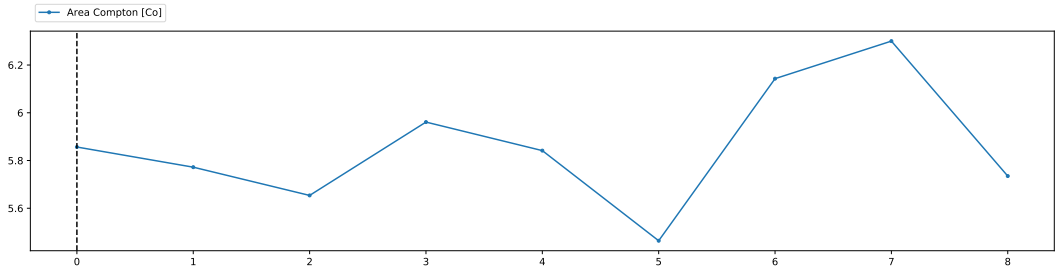

Au Lb6
group area = 35.7685, relative int = 0.0146262
position = 11156.9 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

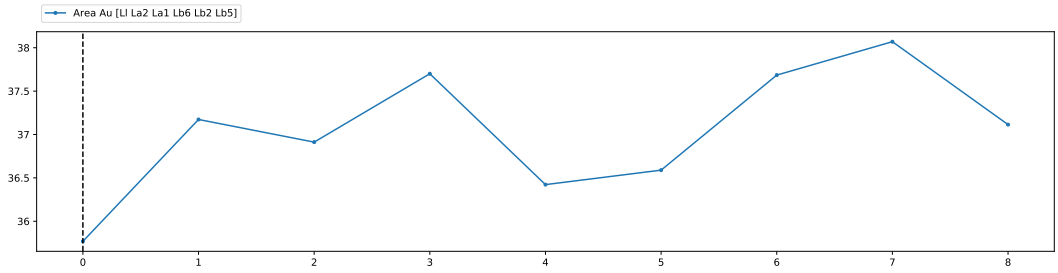

Au Lb2
group area = 35.7685, relative int = 0.24298
position = 11565.8 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)


Au Lb5
group area = 35.7685, relative int = 0.0231951
position = 11914 eV
Elastic El
Compton Co
Au Lb6
Au Lb2
Au Lb5
E (eV)

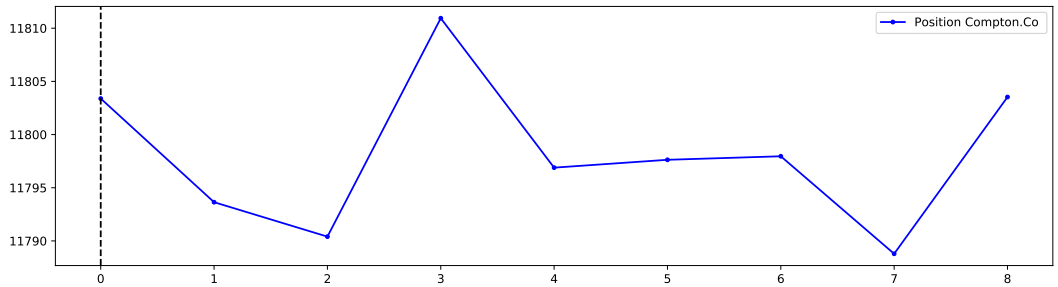
AREAS

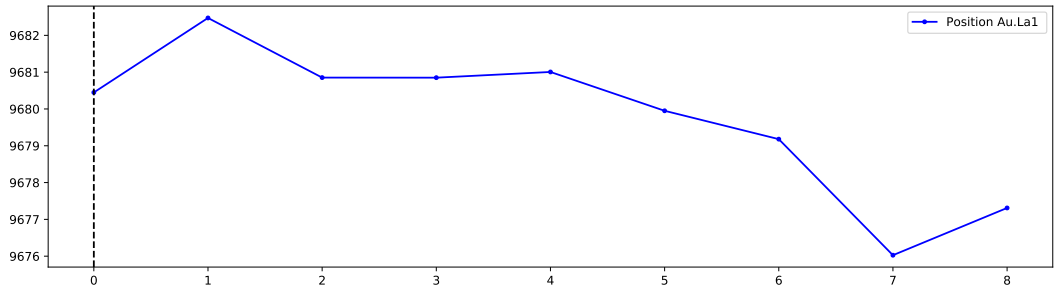

Area Elastic [El]



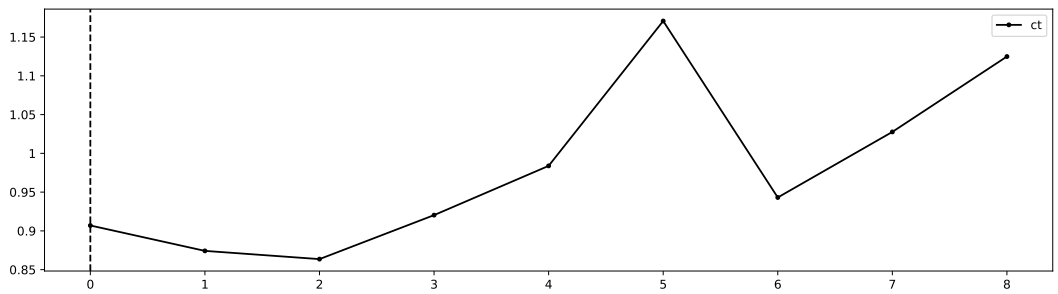


POSITIONS





OTHER PARAMETERS



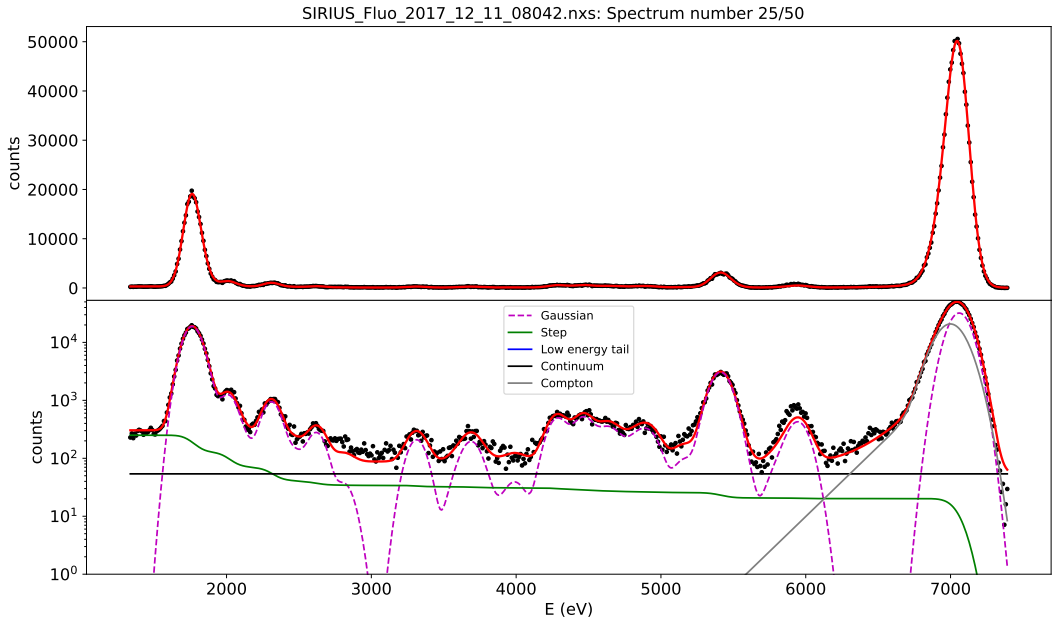
5 SIRIUS_Fluo_2017_12_11_08042

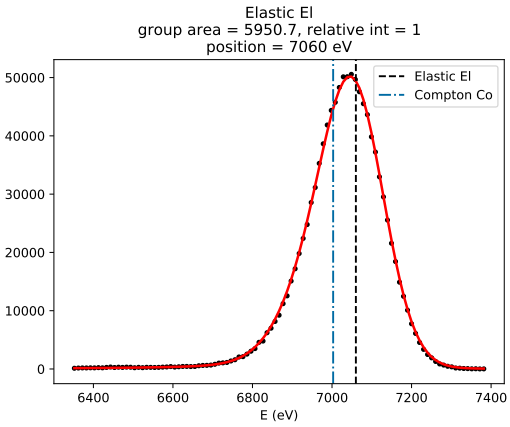
An example of an X-ray standing wave (XSW) experiment, fitted before subtraction with 64 peaks (8 atoms).
Here using a 4-elements detector.

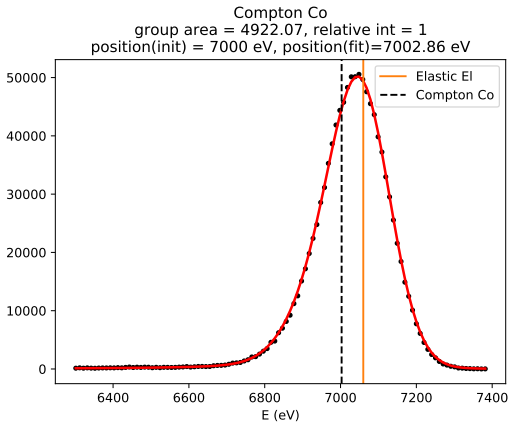
```
Fit results for SIRIUS_Fluo_2017_12_11_08042.nxs
Spectrum interval = [0,50]
Channel interval = [135,735]
List of chosen elements:  ['Element 0', 'Element 1', 'Element 2']

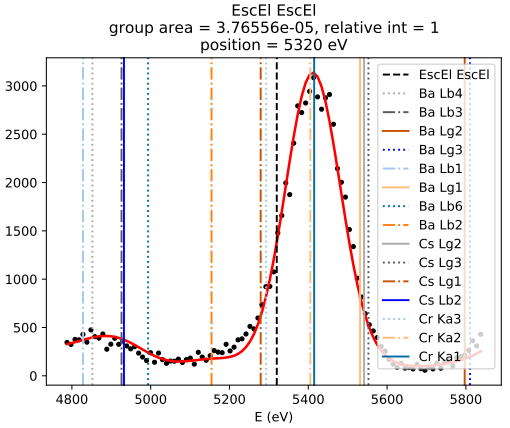
Parameters used:
gain = 10.0934; eV0 = -26.8675
List of fitted parameters: ['ct']

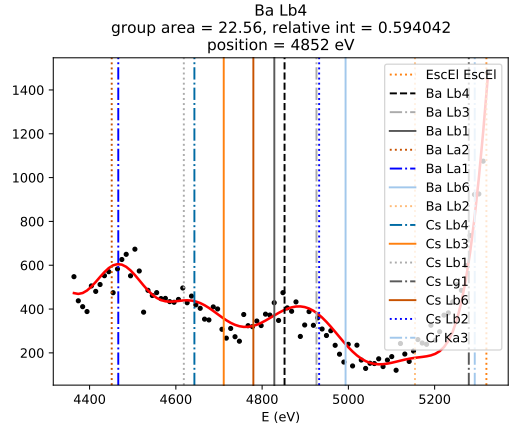
Initial fit parameters:
epsilon = 0.0036; fano = 0.115; noise = 0.118808
sl = 0; ct = 95.4974
sfa0 = 0.0002; sfa1 = 1e-05; tfb0 = 1e-05; tfb1 = 1e-05
twc0 = 1e-05; twc1 = 1e-05
fG = 1.33713
fA = 0.0870612; fB = 1e-10; gammaA = 2.43978; gammaB = 1e+10
```

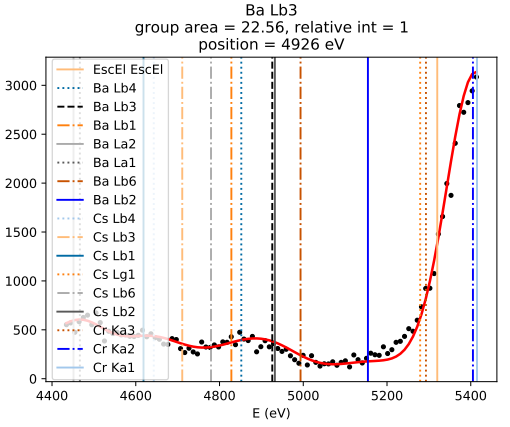


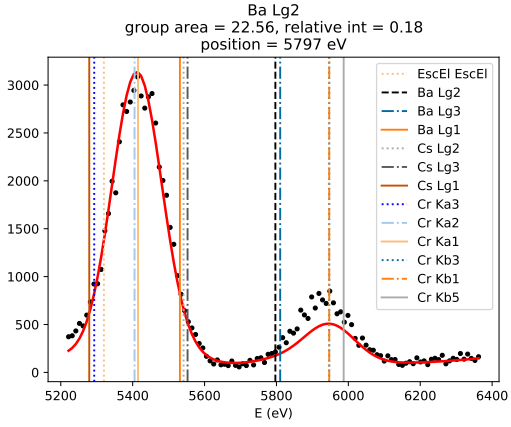

Elastic El
group area = 5950.7, relative int = 1
position = 7060 eV
Elastic El
Compton Co
E (eV)

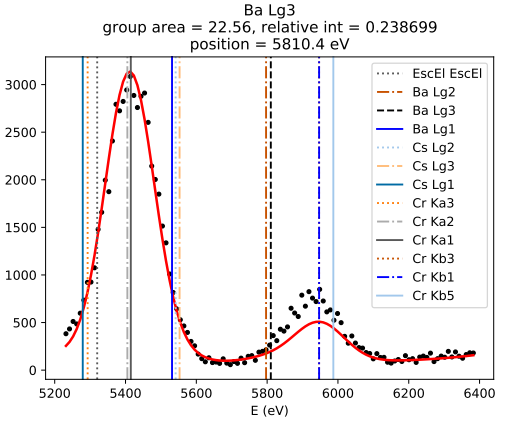

Compton Co
group area = 4922.07, relative int = 1
position(init) = 7000 eV, position(fit)=7002.86 eV
Elastic El
Compton Co
E (eV)

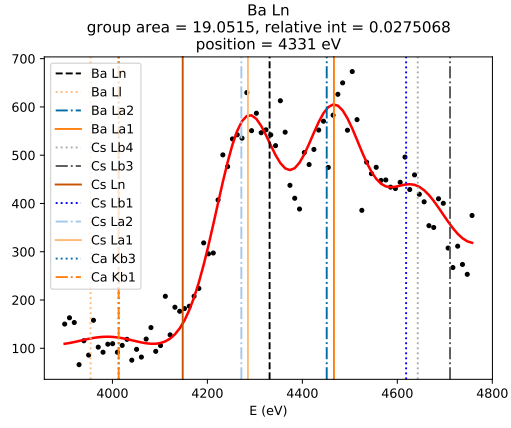

EscEl EscEl
group area = 3.76556e-05, relative int = 1
position = 5320 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lg2
Ba Lg3
Ba Lb1
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

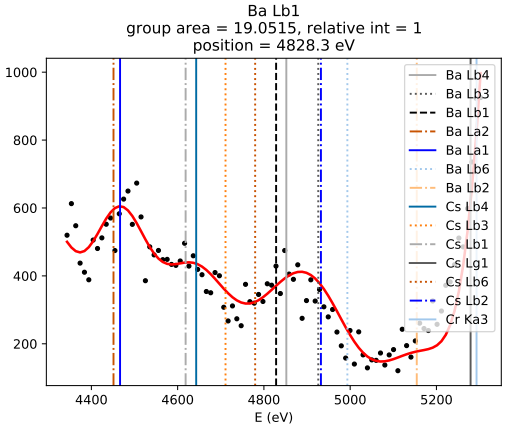

Ba Lb4
group area = 22.56, relative int = 0.594042
position = 4852 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
E (eV)

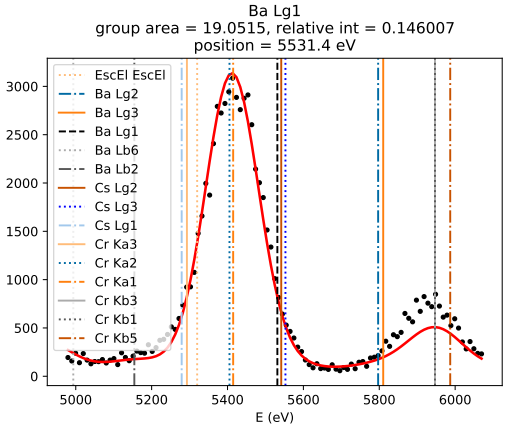

Ba Lb3
group area = 22.56, relative int = 1
position = 4926 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

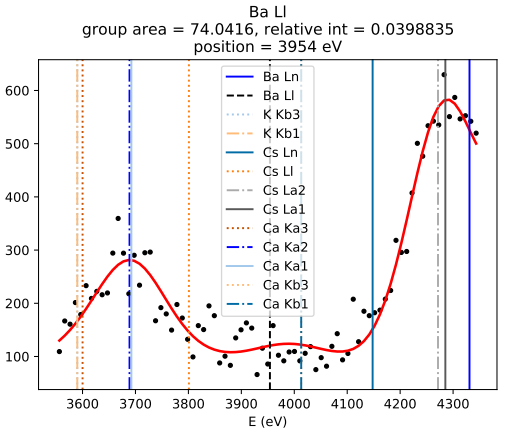

Ba Lg2
group area = 22.56, relative int = 0.18
position = 5797 eV
EscEl EscEl
Ba Lg2
Ba Lg3
Ba Lg1
Cs Lg2
Cs Lg3
Cs Lg1
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

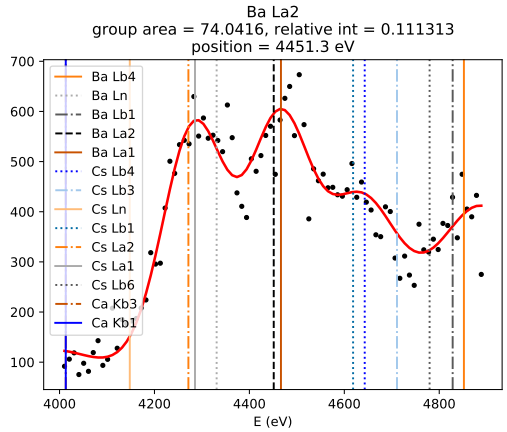

Ba Lg3
group area = 22.56, relative int = 0.238699
position = 5810.4 eV
EscEl EscEl
Ba Lg2
Ba Lg3
Ba Lg1
Cs Lg2
Cs Lg3
Cs Lg1
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

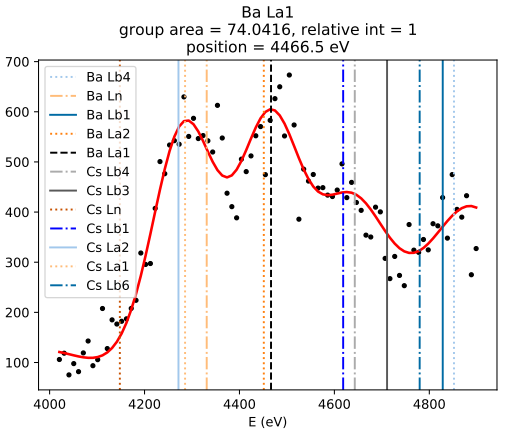

Ba Ln
group area = 19.0515, relative int = 0.0275068
position = 4331 eV
Ba Ln
Ba Ll
Ba La2
Ba La1
Cs Lb4
Cs Lb3
Cs Ln
Cs Lb1
Cs La2
Cs La1
Ca Kb3
Ca Kb1
E (eV)

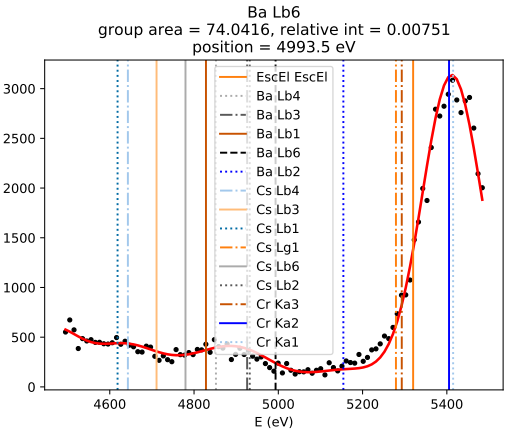

Ba Lb1
group area = 19.0515, relative int = 1
position = 4828.3 eV
Ba Lb4
Ba Lb3
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
E (eV)

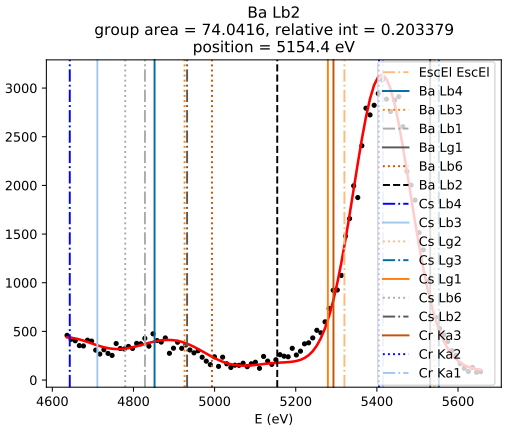

Ba Lg1
group area = 19.0515, relative int = 0.146007
position = 5531.4 eV
EscEl EscEl
Ba Lg2
Ba Lg3
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

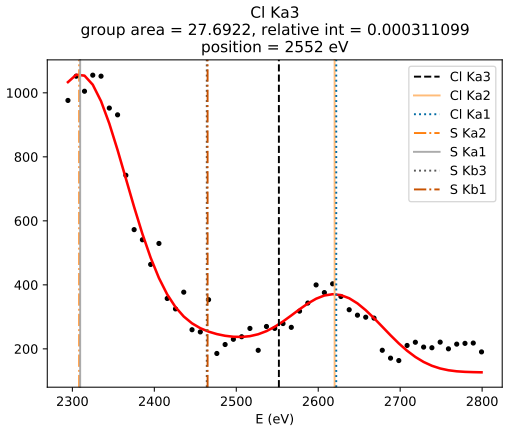

Ba Ll
group area = 74.0416, relative int = 0.0398835
position = 3954 eV
Ba Ln
Ba Ll
K Kb3
K Kb1
Cs Ln
Cs Ll
Cs La2
Cs La1
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

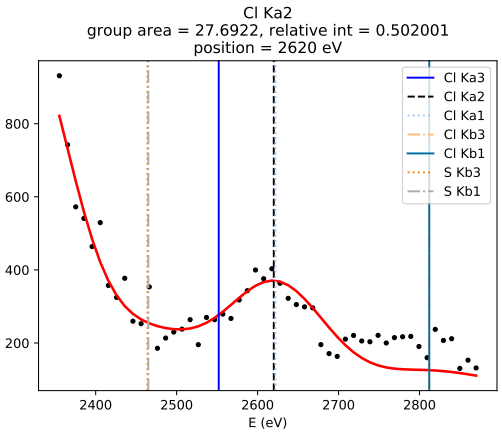

Ba La2
group area = 74.0416, relative int = 0.111313
position = 4451.3 eV
Ba Lb4
Ba Ln
Ba Lb1
Ba La2
Ba La1
Cs Lb4
Cs Lb3
Cs Ln
Cs Lb1
Cs La2
Cs La1
Cs Lb6
Ca Kb3
Ca Kb1
E (eV)

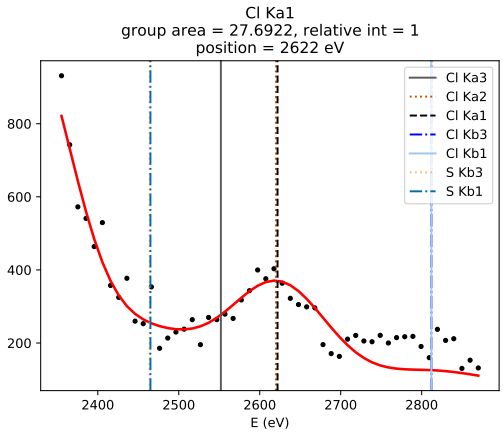

Ba La1
group area = 74.0416, relative int = 1
position = 4466.5 eV
Ba Lb4
Ba Ln
Ba Lb1
Ba La2
Ba La1
Cs Lb4
Cs Lb3
Cs Ln
Cs Lb1
Cs La2
Cs La1
Cs Lb6
E (eV)

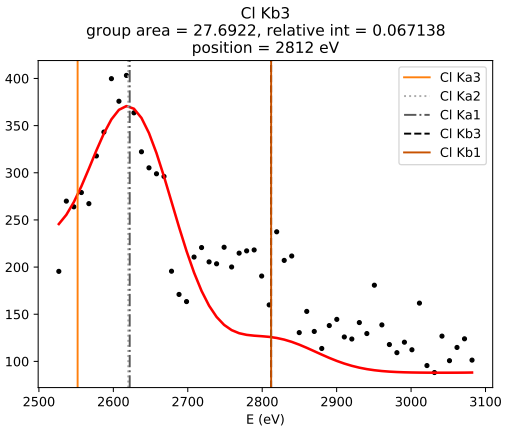

Ba Lb6
group area = 74.0416, relative int = 0.00751
position = 4993.5 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lb1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

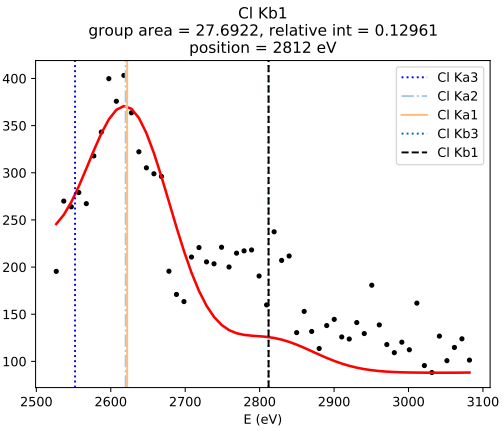

Ba Lb2
group area = 74.0416, relative int = 0.203379
position = 5154.4 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lb1
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

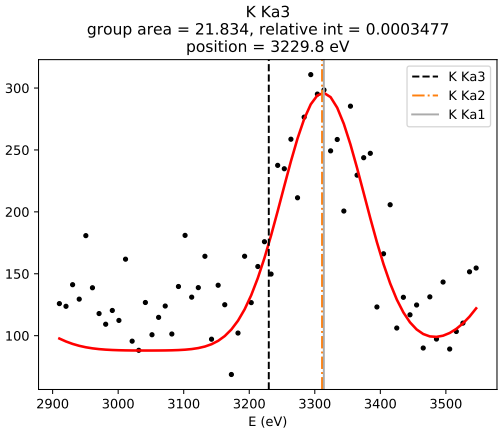

Cl Ka3
group area = 27.6922, relative int = 0.000311099
position = 2552 eV
Cl Ka3
Cl Ka2
Cl Ka1
S Ka2
S Ka1
S Kb3
S Kb1
E (eV)

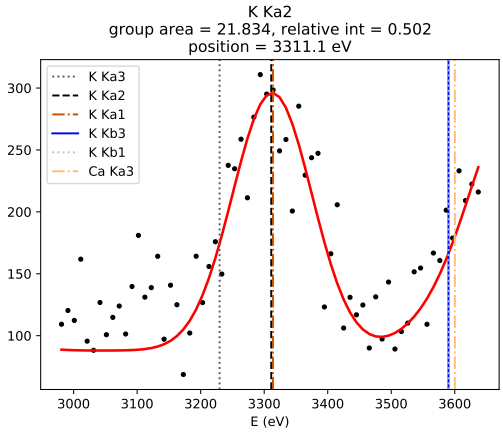

Cl Ka2
group area = 27.6922, relative int = 0.502001
position = 2620 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
S Kb3
S Kb1
E (eV)

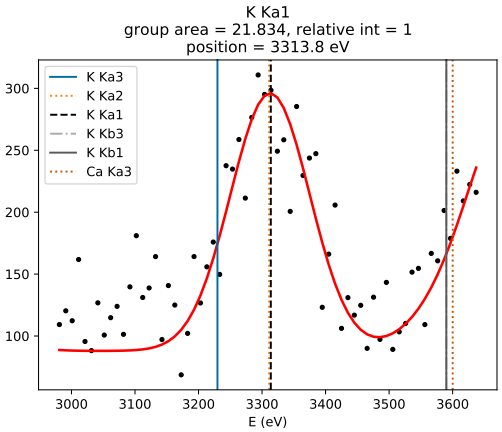

Cl Ka1
group area = 27.6922, relative int = 1
position = 2622 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
S Kb3
S Kb1
E (eV)

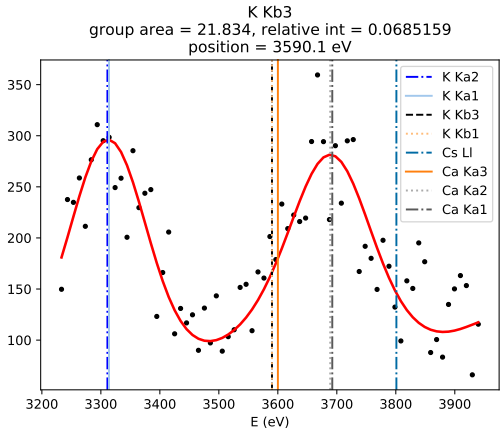

Cl Kb3
group area = 27.6922, relative int = 0.067138
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
E (eV)

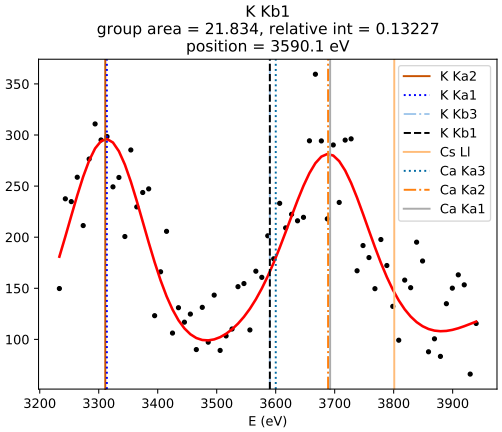

Cl Kb1
group area = 27.6922, relative int = 0.12961
position = 2812 eV
Cl Ka3
Cl Ka2
Cl Ka1
Cl Kb3
Cl Kb1
E (eV)

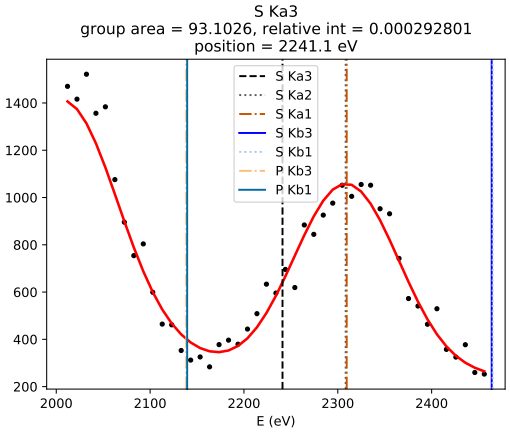

K Ka3
group area = 21.834, relative int = 0.0003477
position = 3229.8 eV
K Ka3
K Ka2
K Ka1
E (eV)

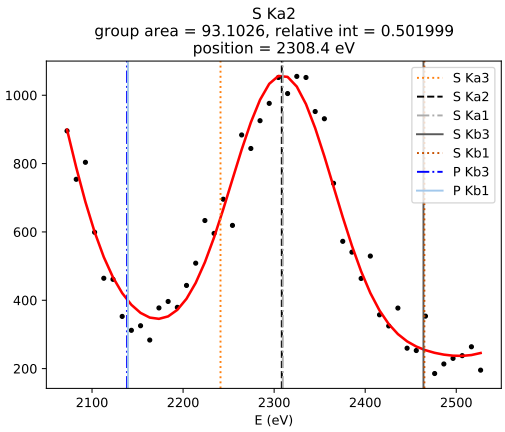

K Ka2
group area = 21.834, relative int = 0.502
position = 3311.1 eV
K Ka3
K Ka2
K Ka1
K Kb3
K Kb1
Ca Ka3
E (eV)

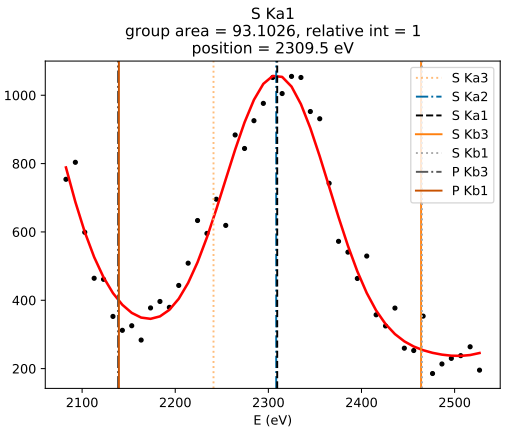

K Ka1
group area = 21.834, relative int = 1
position = 3313.8 eV
K Ka3
K Ka2
K Ka1
K Kb3
K Kb1
Ca Ka3
E (eV)

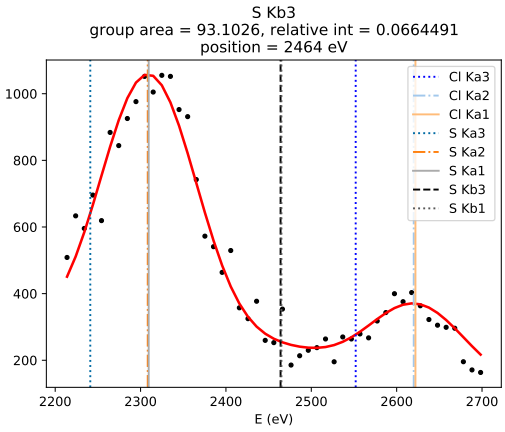

K Kb3
group area = 21.834, relative int = 0.0685159
position = 3590.1 eV
K Ka2
K Ka1
K Kb3
K Kb1
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

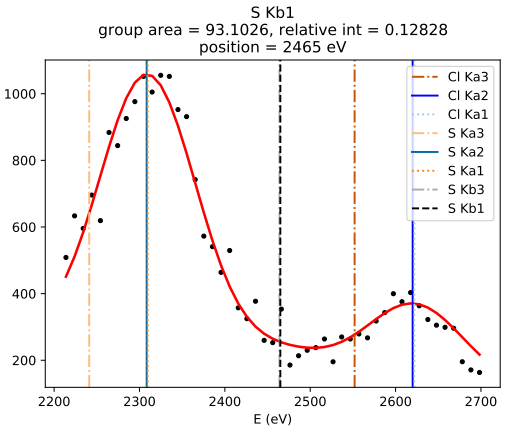

K Kb1
group area = 21.834, relative int = 0.13227
position = 3590.1 eV
K Ka2
K Ka1
K Kb3
K Kb1
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

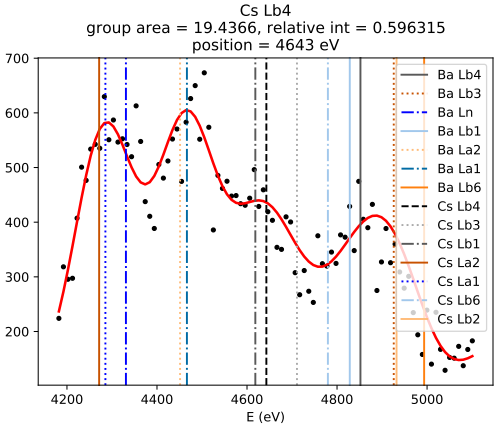

S Ka3
group area = 93.1026, relative int = 0.000292801
position = 2241.1 eV
S Ka3
S Ka2
S Ka1
S Kb3
S Kb1
P Kb3
P Kb1
E (eV)

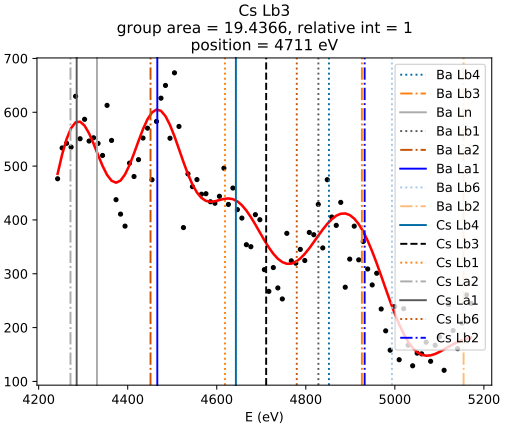

S Ka2
group area = 93.1026, relative int = 0.501999
position = 2308.4 eV
S Ka3
S Ka2
S Ka1
S Kb3
S Kb1
P Kb3
P Kb1
E (eV)

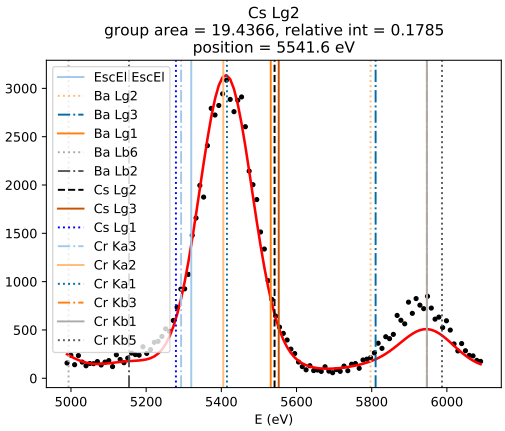

S Ka1
group area = 93.1026, relative int = 1
position = 2309.5 eV
S Ka3
S Ka2
S Ka1
S Kb3
S Kb1
P Kb3
P Kb1
E (eV)

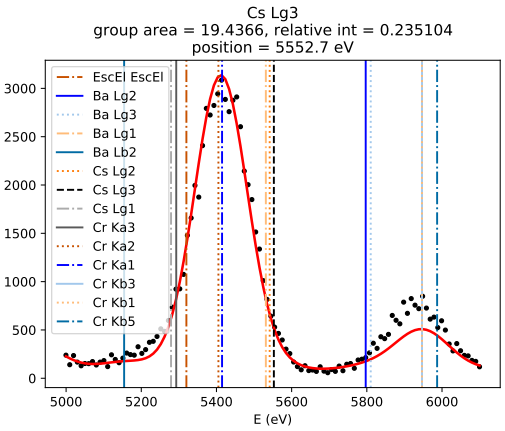

S Kb3
group area = 93.1026, relative int = 0.0664491
position = 2464 eV
Cl Ka3
Cl Ka2
Cl Ka1
S Ka3
S Ka2
S Ka1
S Kb3
S Kb1
E (eV)

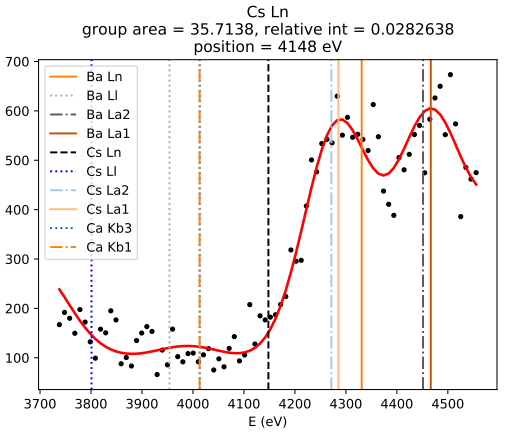

S Kb1
group area = 93.1026, relative int = 0.12828
position = 2465 eV
Cl Ka3
Cl Ka2
Cl Ka1
S Ka3
S Ka2
S Ka1
S Kb3
S Kb1
E (eV)

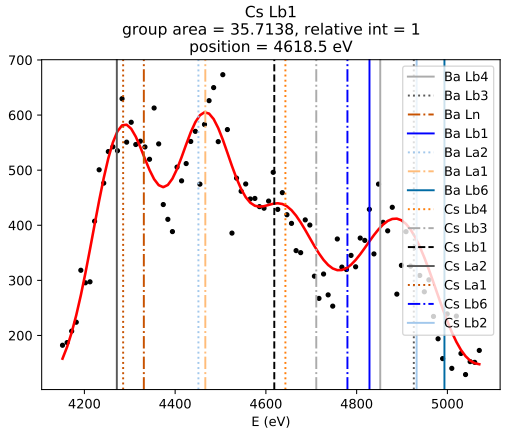

Cs Lb4
group area = 19.4366, relative int = 0.596315
position = 4643 eV
Ba Lb4
Ba Lb3
Ba Ln
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Cs Lb4
Cs Lb3
Cs Lb1
Cs La2
Cs La1
Cs Lb6
Cs Lb2
E (eV)

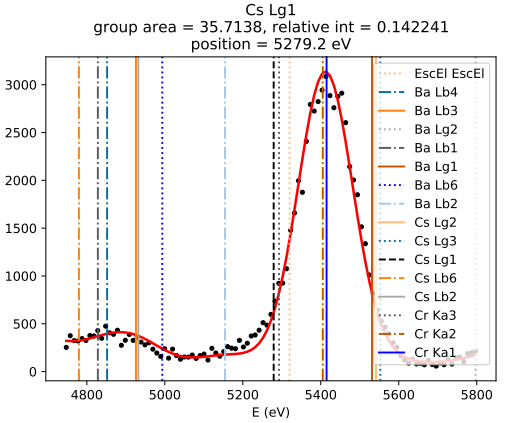

Cs Lb3
group area = 19.4366, relative int = 1
position = 4711 eV
Ba Lb4
Ba Lb3
Ba Ln
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs La2
Cs La1
Cs Lb6
Cs Lb2
E (eV)

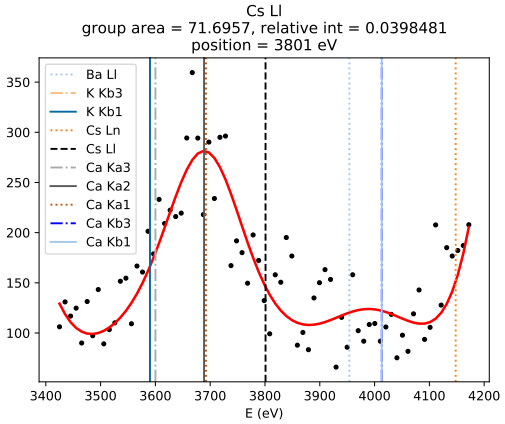

Cs Lg2
group area = 19.4366, relative int = 0.1785
position = 5541.6 eV
EscEl EscEl
Ba Lg2
Ba Lg3
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

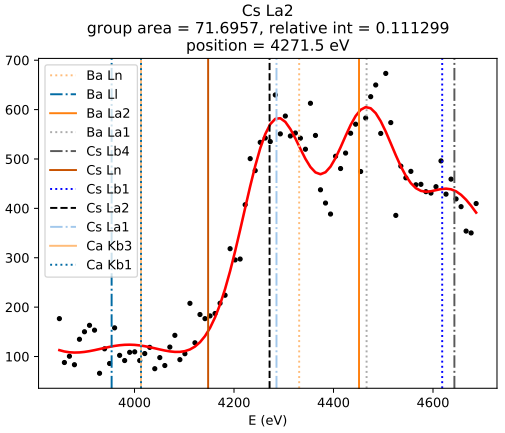

Cs Lg3
group area = 19.4366, relative int = 0.235104
position = 5552.7 eV
EscEl EscEl
Ba Lg2
Ba Lg3
Ba Lg1
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

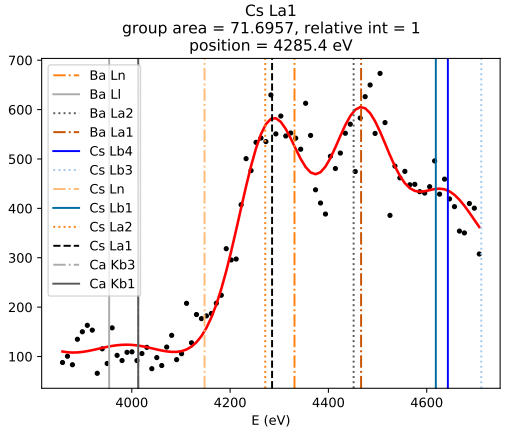

Cs Ln
group area = 35.7138, relative int = 0.0282638
position = 4148 eV
Ba Ln
Ba Ll
Ba La2
Ba La1
Cs Ln
Cs Ll
Cs La2
Cs La1
Ca Kb3
Ca Kb1
E (eV)

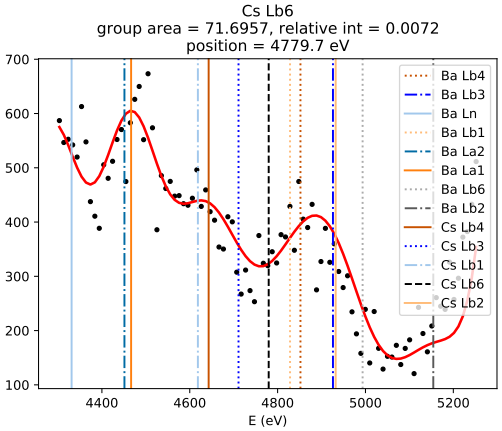

Cs Lb1
group area = 35.7138, relative int = 1
position = 4618.5 eV
Ba Lb4
Ba Lb3
Ba Ln
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Cs Lb4
Cs Lb3
Cs Lb1
Cs La2
Cs La1
Cs Lb6
Cs Lb2
E (eV)

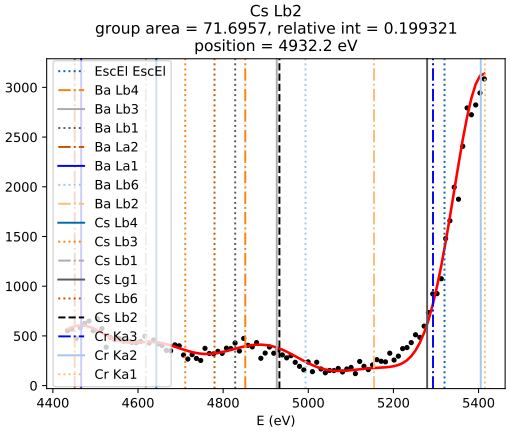

Cs Lg1
group area = 35.7138, relative int = 0.142241
position = 5279.2 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lg2
Ba Lb1
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

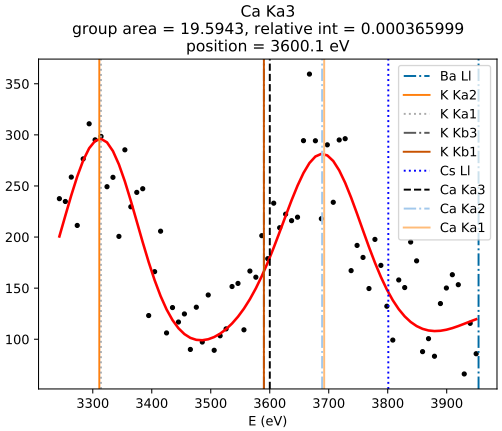

Cs Ll
group area = 71.6957, relative int = 0.0398481
position = 3801 eV
Ba Ll
K Kb3
K Kb1
Cs Ln
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

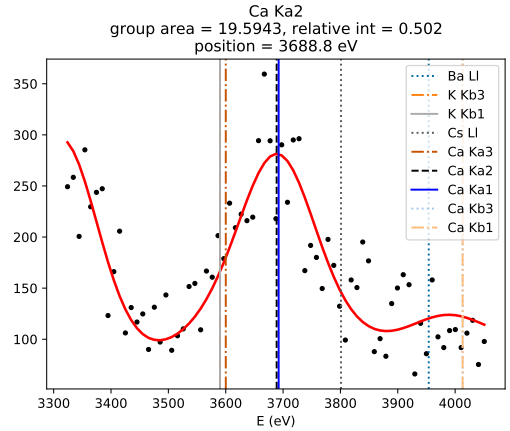

Cs La2
group area = 71.6957, relative int = 0.111299
position = 4271.5 eV
Ba Ln
Ba Ll
Ba La2
Ba La1
Cs Lb4
Cs Ln
Cs Lb1
Cs La2
Cs La1
Ca Kb3
Ca Kb1
E (eV)

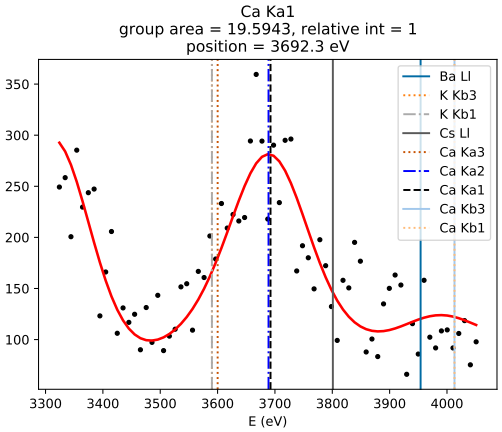

Cs La1
group area = 71.6957, relative int = 1
position = 4285.4 eV
Ba Ln
Ba Ll
Ba La2
Ba La1
Cs Lb4
Cs Lb3
Cs Ln
Cs Lb1
Cs La2
Cs La1
Ca Kb3
Ca Kb1
E (eV)

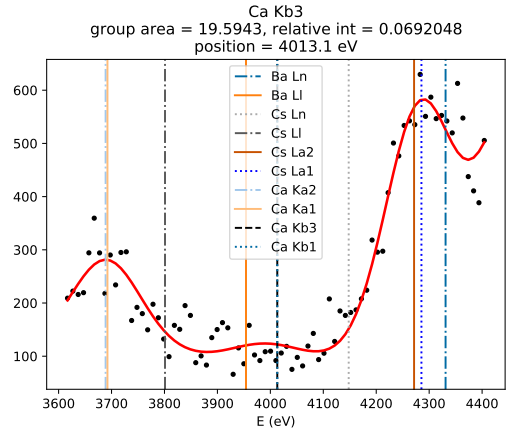

Cs Lb6
group area = 71.6957, relative int = 0.0072
position = 4779.7 eV
Ba Lb4
Ba Lb3
Ba Ln
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lb6
Cs Lb2
E (eV)

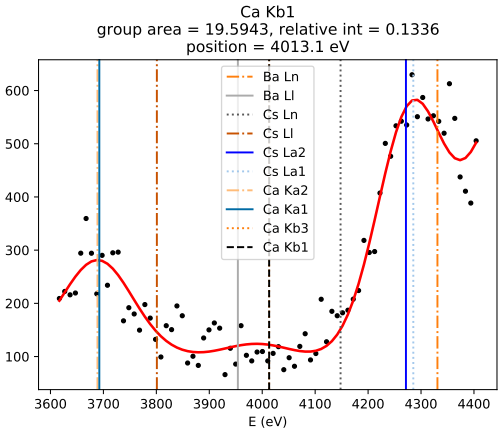

Cs Lb2
group area = 71.6957, relative int = 0.199321
position = 4932.2 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lb1
Ba La2
Ba La1
Ba Lb6
Ba Lb2
Cs Lb4
Cs Lb3
Cs Lb1
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)

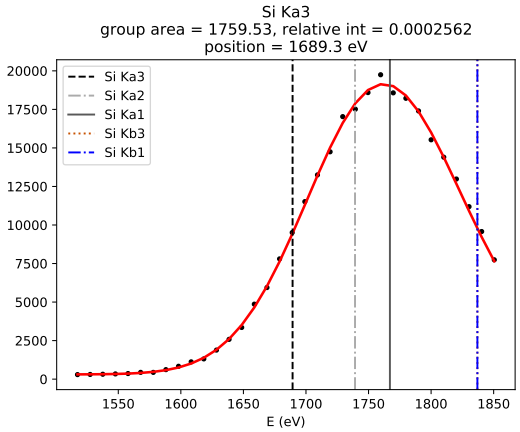

Ca Ka3
group area = 19.5943, relative int = 0.000365999
position = 3600.1 eV
Ba Ll
K Ka2
K Ka1
K Kb3
K Kb1
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
E (eV)

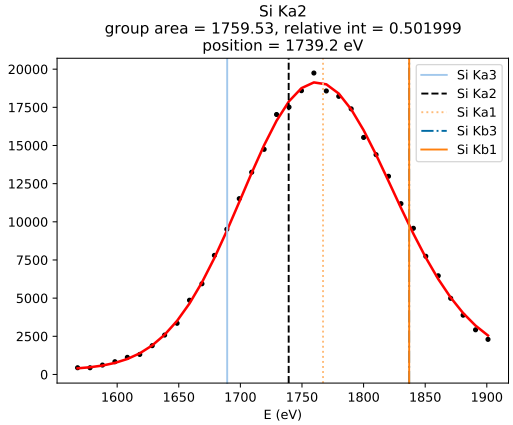

Ca Ka2
group area = 19.5943, relative int = 0.502
position = 3688.8 eV
Ba Ll
K Kb3
K Kb1
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

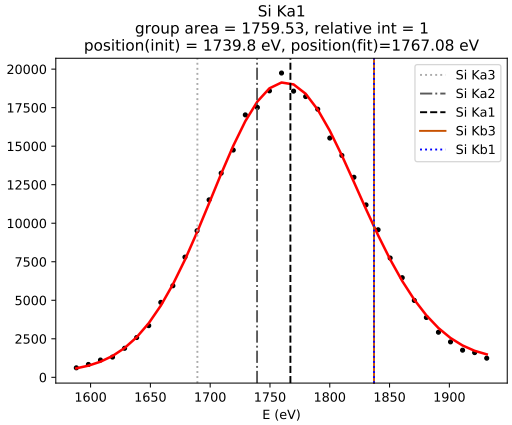

Ca Ka1
group area = 19.5943, relative int = 1
position = 3692.3 eV
Ba Ll
K Kb3
K Kb1
Cs Ll
Ca Ka3
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

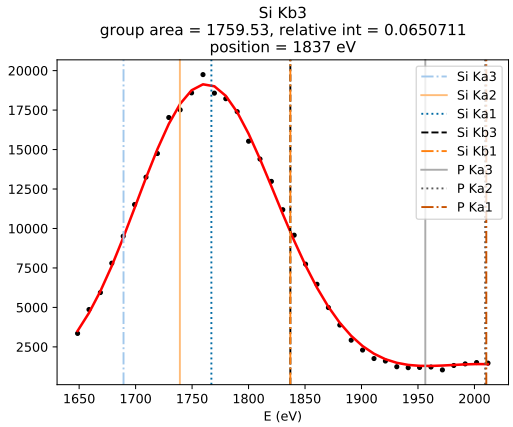

Ca Kb3
group area = 19.5943, relative int = 0.0692048
position = 4013.1 eV
Ba Ln
Ba Ll
Cs Ln
Cs Ll
Cs La2
Cs La1
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

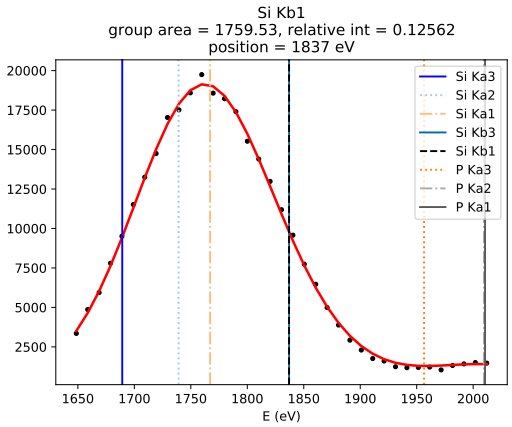

Ca Kb1
group area = 19.5943, relative int = 0.1336
position = 4013.1 eV
Ba Ln
Ba Ll
Cs Ln
Cs Ll
Cs La2
Cs La1
Ca Ka2
Ca Ka1
Ca Kb3
Ca Kb1
E (eV)

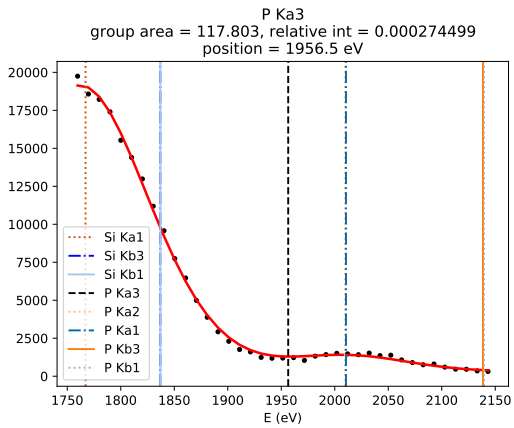

Si Ka3
group area = 1759.53, relative int = 0.0002562
position = 1689.3 eV
Si Ka3
Si Ka2
Si Ka1
Si Kb3
Si Kb1
E (eV)

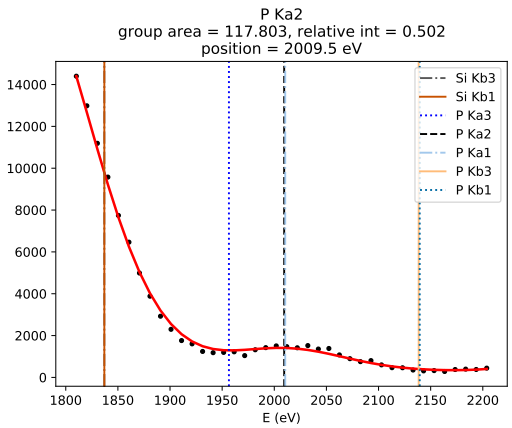

Si Ka2
group area = 1759.53, relative int = 0.501999
position = 1739.2 eV
Si Ka3
Si Ka2
Si Ka1
Si Kb3
Si Kb1
E (eV)

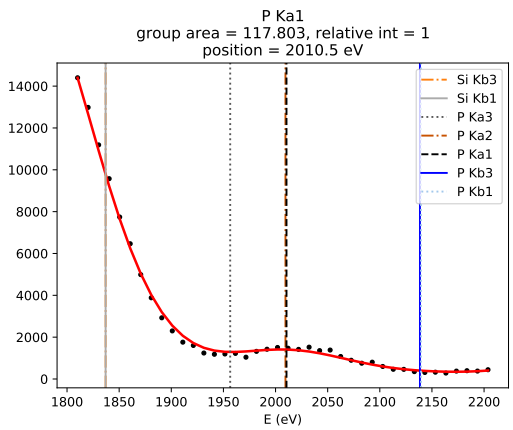

Si Ka1
group area = 1759.53, relative int = 1
position(init) = 1739.8 eV, position(fit)=1767.08 eV
Si Ka3
Si Ka2
Si Ka1
Si Kb3
Si Kb1
E (eV)

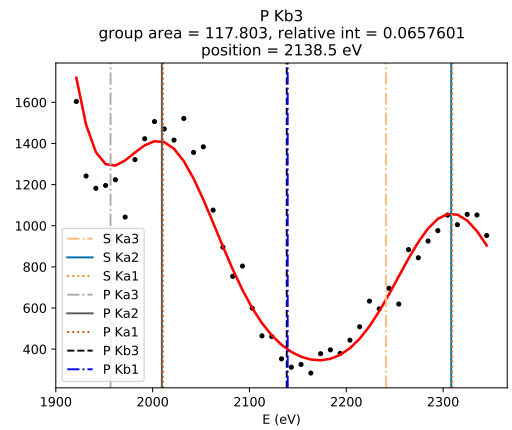

Si Kb3
group area = 1759.53, relative int = 0.0650711
position = 1837 eV
Si Ka3
Si Ka2
Si Ka1
Si Kb3
Si Kb1
P Ka3
P Ka2
P Ka1
E (eV)

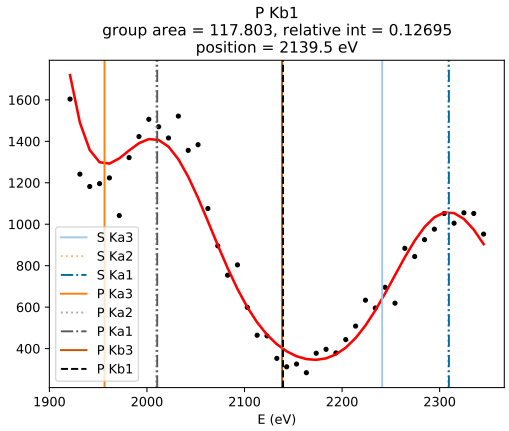

Si Kb1
group area = 1759.53, relative int = 0.12562
position = 1837 eV
Si Ka3
Si Ka2
Si Ka1
Si Kb3
Si Kb1
P Ka3
P Ka2
P Ka1
E (eV)

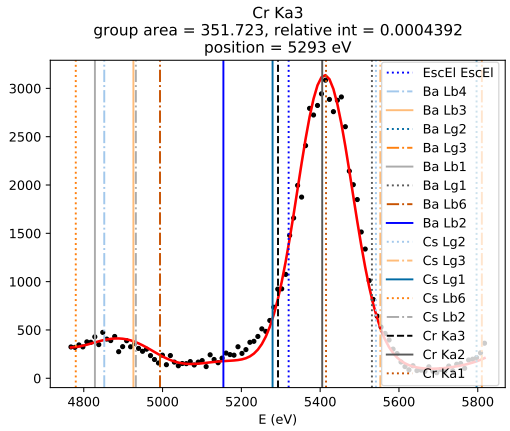

P Ka3
group area = 117.803, relative int = 0.000274499
position = 1956.5 eV
Si Ka1
Si Kb3
Si Kb1
P Ka3
P Ka2
P Ka1
P Kb3
P Kb1
E (eV)

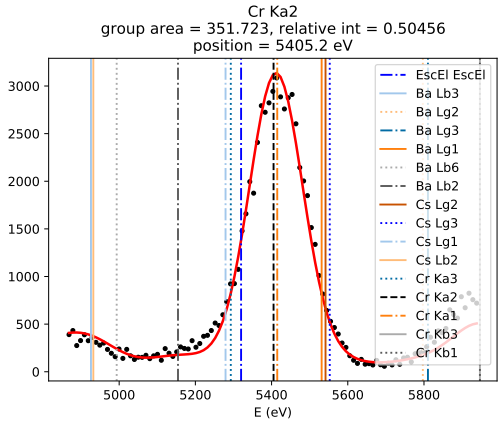

P Ka2
group area = 117.803, relative int = 0.502
position = 2009.5 eV
Si Kb3
Si Kb1
P Ka3
P Ka2
P Ka1
P Kb3
P Kb1
E (eV)

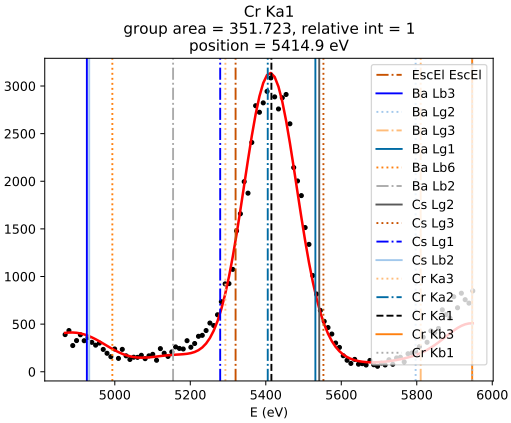

P Ka1
group area = 117.803, relative int = 1
position = 2010.5 eV
Si Kb3
Si Kb1
P Ka3
P Ka2
P Ka1
P Kb3
P Kb1
E (eV)

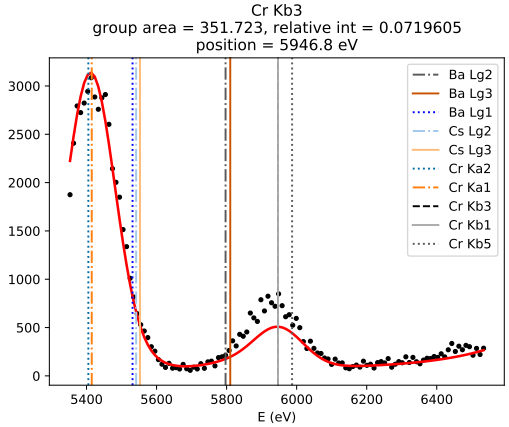

P Kb3
group area = 117.803, relative int = 0.0657601
position = 2138.5 eV
S Ka3
S Ka2
S Ka1
P Ka3
P Ka2
P Ka1
P Kb3
P Kb1
E (eV)

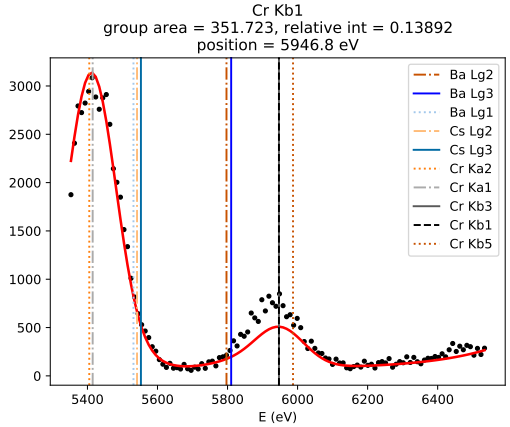

P Kb1
group area = 117.803, relative int = 0.12695
position = 2139.5 eV
S Ka3
S Ka2
S Ka1
P Ka3
P Ka2
P Ka1
P Kb3
P Kb1
E (eV)

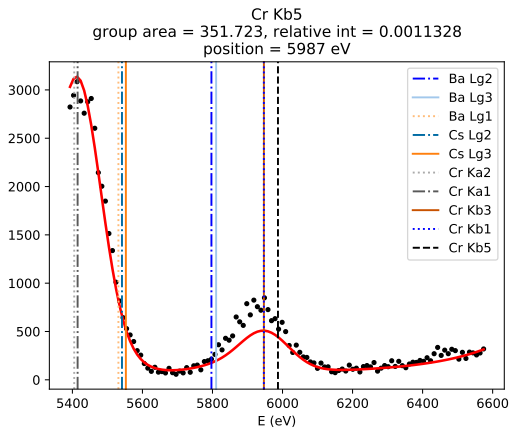

Cr Ka3
group area = 351.723, relative int = 0.0004392
position = 5293 eV
EscEl EscEl
Ba Lb4
Ba Lb3
Ba Lg2
Ba Lg3
Ba Lb1
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb6
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
E (eV)


Cr Ka2
group area = 351.723, relative int = 0.50456
position = 5405.2 eV
EscEl EscEl
Ba Lb3
Ba Lg2
Ba Lg3
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)


Cr Ka1
group area = 351.723, relative int = 1
position = 5414.9 eV
EscEl EscEl
Ba Lb3
Ba Lg2
Ba Lg3
Ba Lg1
Ba Lb6
Ba Lb2
Cs Lg2
Cs Lg3
Cs Lg1
Cs Lb2
Cr Ka3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
E (eV)

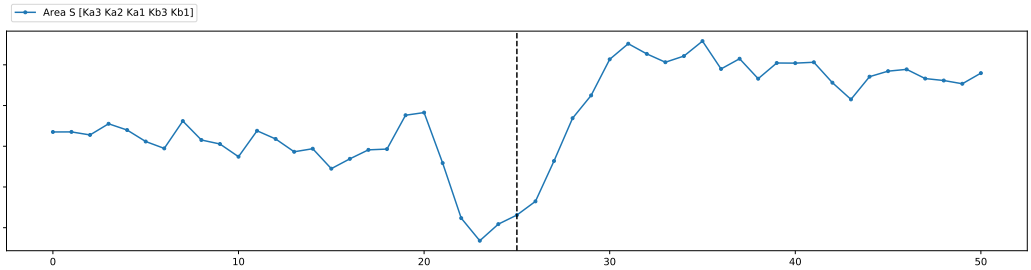

Cr Kb3
group area = 351.723, relative int = 0.0719605
position = 5946.8 eV
Ba Lg2
Ba Lg3
Ba Lg1
Cs Lg2
Cs Lg3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

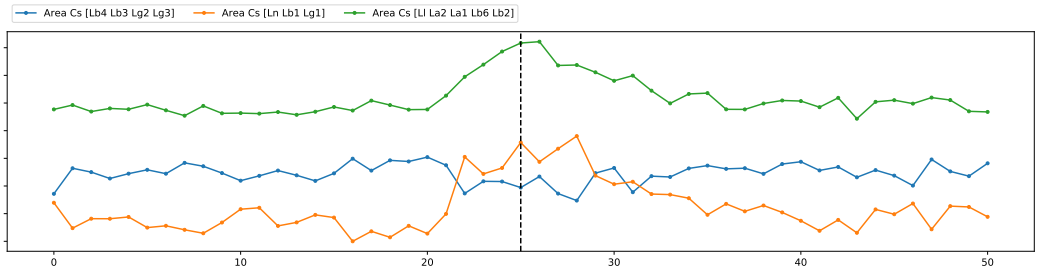

Cr Kb1
group area = 351.723, relative int = 0.13892
position = 5946.8 eV
Ba Lg2
Ba Lg3
Ba Lg1
Cs Lg2
Cs Lg3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

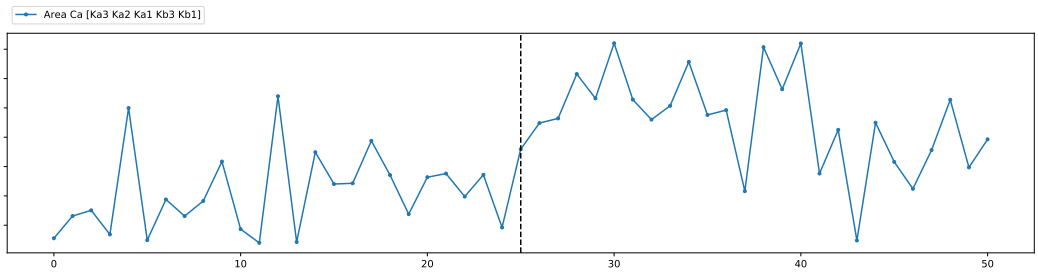

Cr Kb5
group area = 351.723, relative int = 0.0011328
position = 5987 eV
Ba Lg2
Ba Lg3
Ba Lg1
Cs Lg2
Cs Lg3
Cr Ka2
Cr Ka1
Cr Kb3
Cr Kb1
Cr Kb5
E (eV)

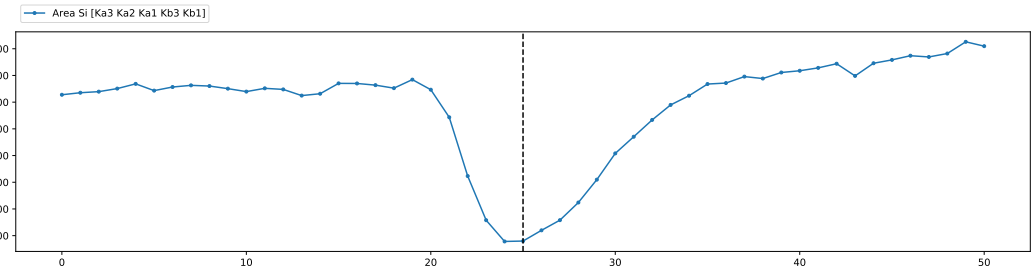
AREAS

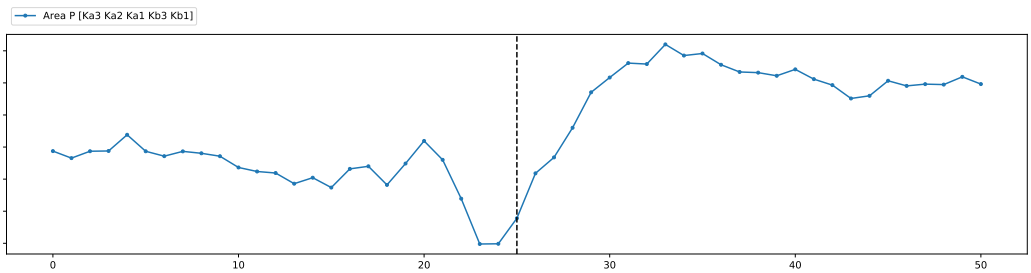

Area Elastic [El]
Area Compton [Co]
Area EscEl [EscEl]
Area Ba [Lb4 Lb3 Lg2 Lg3]
Area Ba [Ln Lb1 Lg1]
Area Ba [Ll La2 La1 Lb6 Lb2]
Area Cl [Ka3 Ka2 Ka1 Kb3 Kb1]
Area K [Ka3 Ka2 Ka1 Kb3 Kb1]

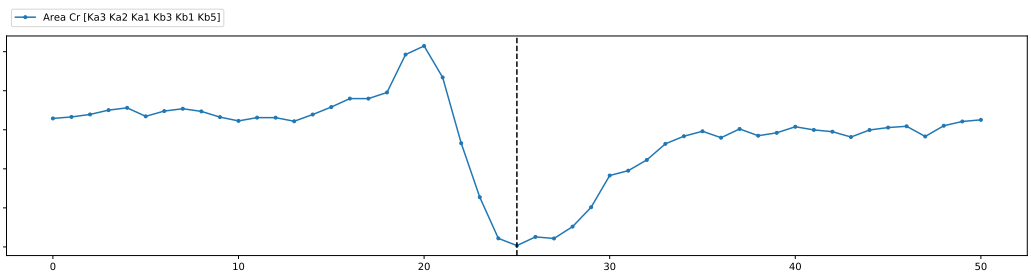

Area S [Ka3 Ka2 Ka1 Kb3 Kb1]

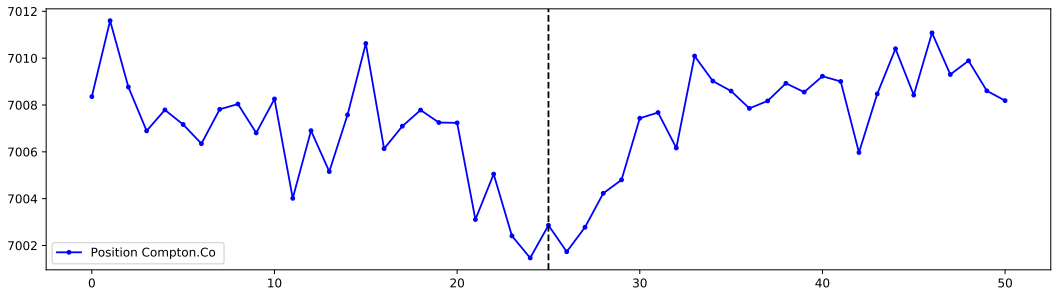

Area Cs [Lb4 Lb3 Lg2 Lg3]
Area Cs [Ln Lb1 Lg1]
Area Cs [Ll La2 La1 Lb6 Lb2]


Area Ca [Ka3 Ka2 Ka1 Kb3 Kb1]


Area Si [Ka3 Ka2 Ka1 Kb3 Kb1]


Area P [Ka3 Ka2 Ka1 Kb3 Kb1]


Area Cr [Ka3 Ka2 Ka1 Kb3 Kb1 Kb5]


POSITIONS
7012
7010
7008
7006
7004
7002
0
10
20
30
40
50
Position Compton.Co