

Measurement example of BL07U PES

- Fe_2O_3
 - [Fe L-edge and O K-edge \(XAS\)](#)
 - [Fe 2p, O 1s \(XPS\)](#)
 - [Valence band \(XPS\)](#)
 - [Valence band \(Resonant PES\)](#)
- Fe_3O_4
 - [Fe L-edge and O K-edge \(XAS\)](#)
 - [Fe 2p, O 1s \(XPS\)](#)
 - [Valence band \(XPS\)](#)
 - [Valence band \(Resonant PES\)](#)

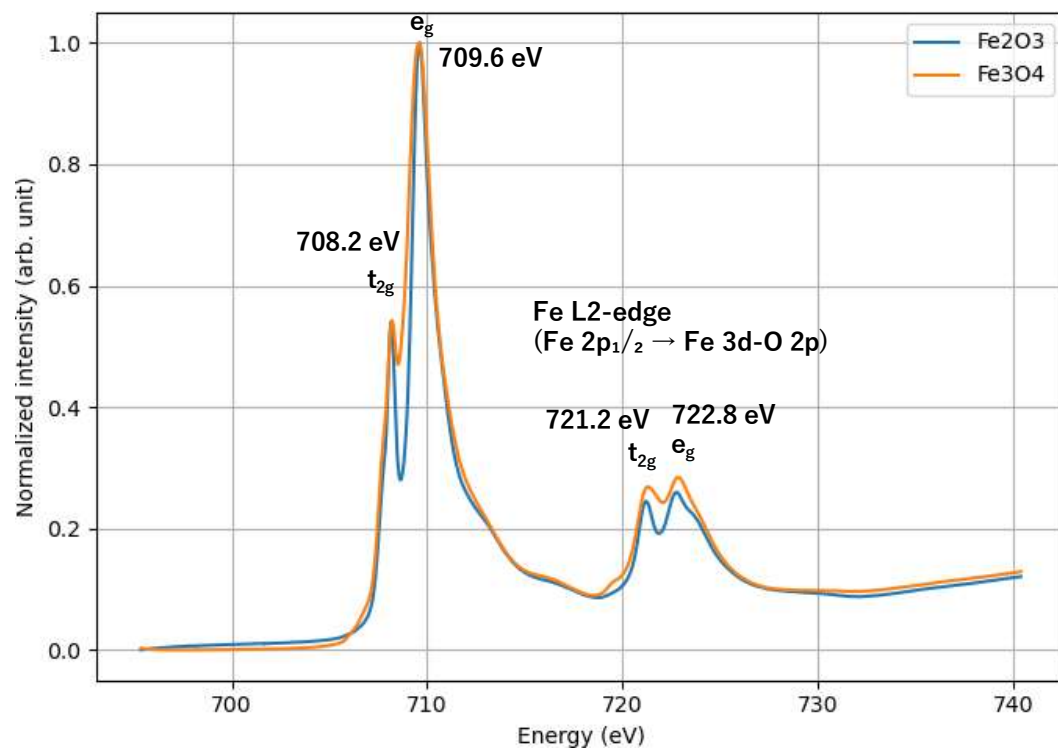
XAS(TEY)

Samples:

- Fe_2O_3 powder applied to carbon tape
- Fe_3O_4 powder applied to carbon tape

Fe L-edge

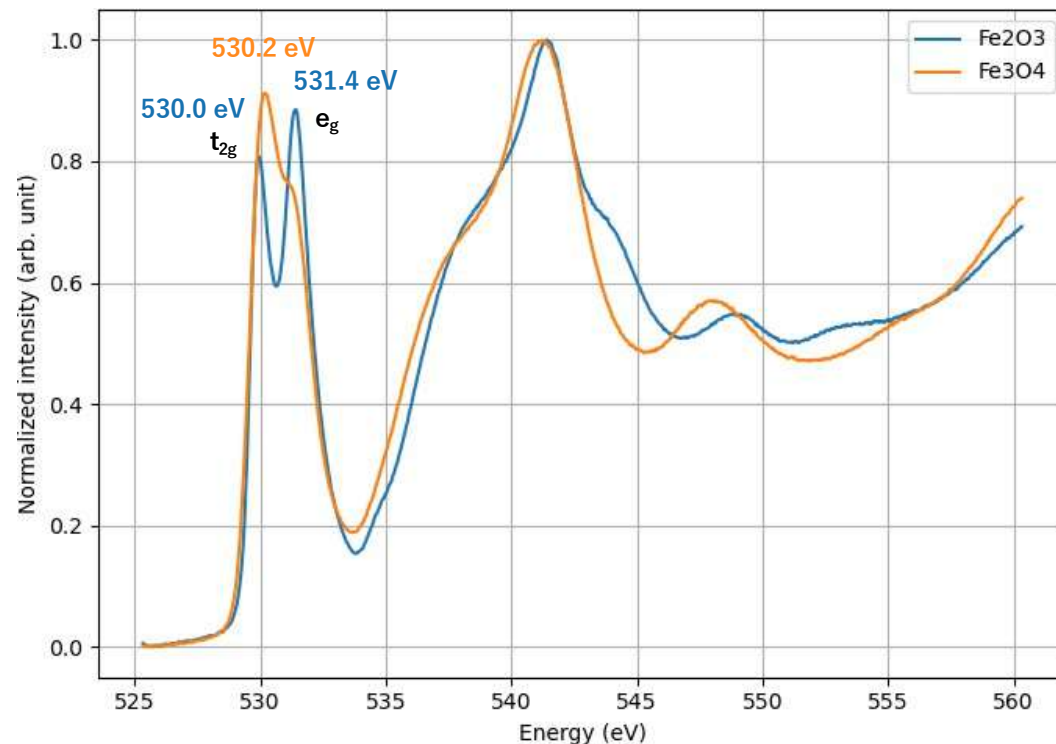
Fe L3-edge
($\text{Fe } 2p_{3/2} \rightarrow \text{Fe } 3d\text{-O } 2p$)



O K-edge

O pre-K-edge
($\text{O } 1s \rightarrow \text{O } 2p\text{-Fe } 3d$)

O K-edge
($\text{O } 1s \rightarrow \text{O } 2p\text{-Fe } 4s, 4p$)

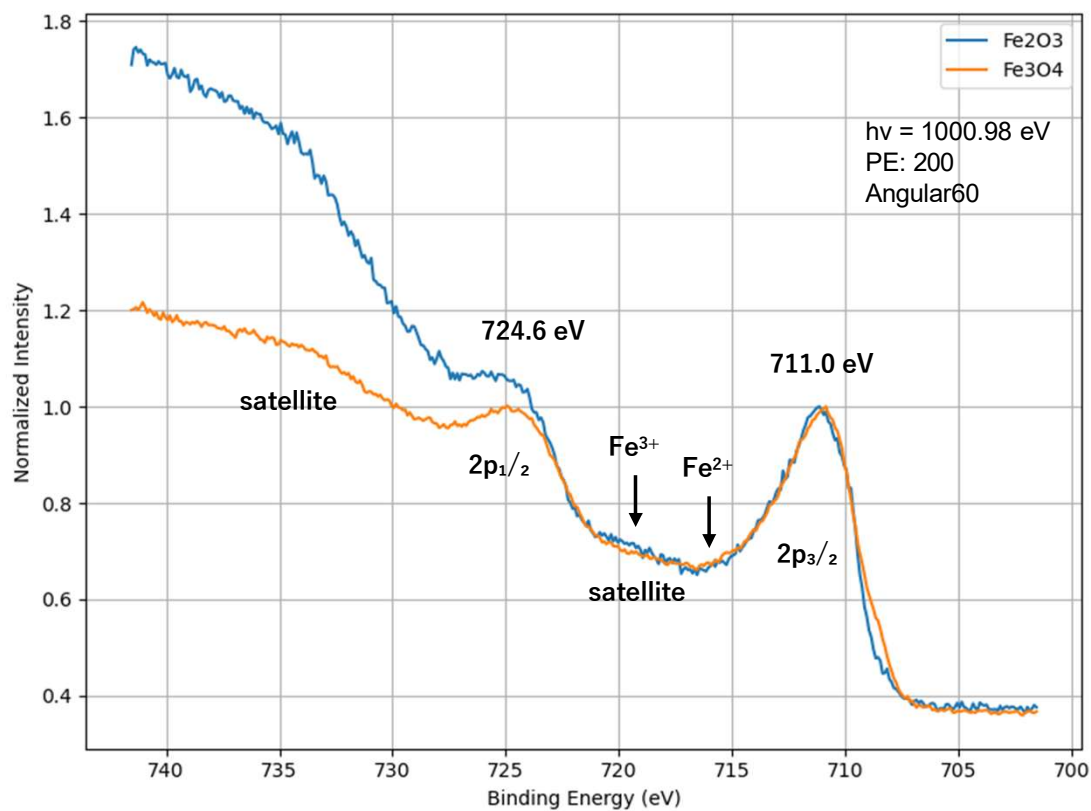


XPS

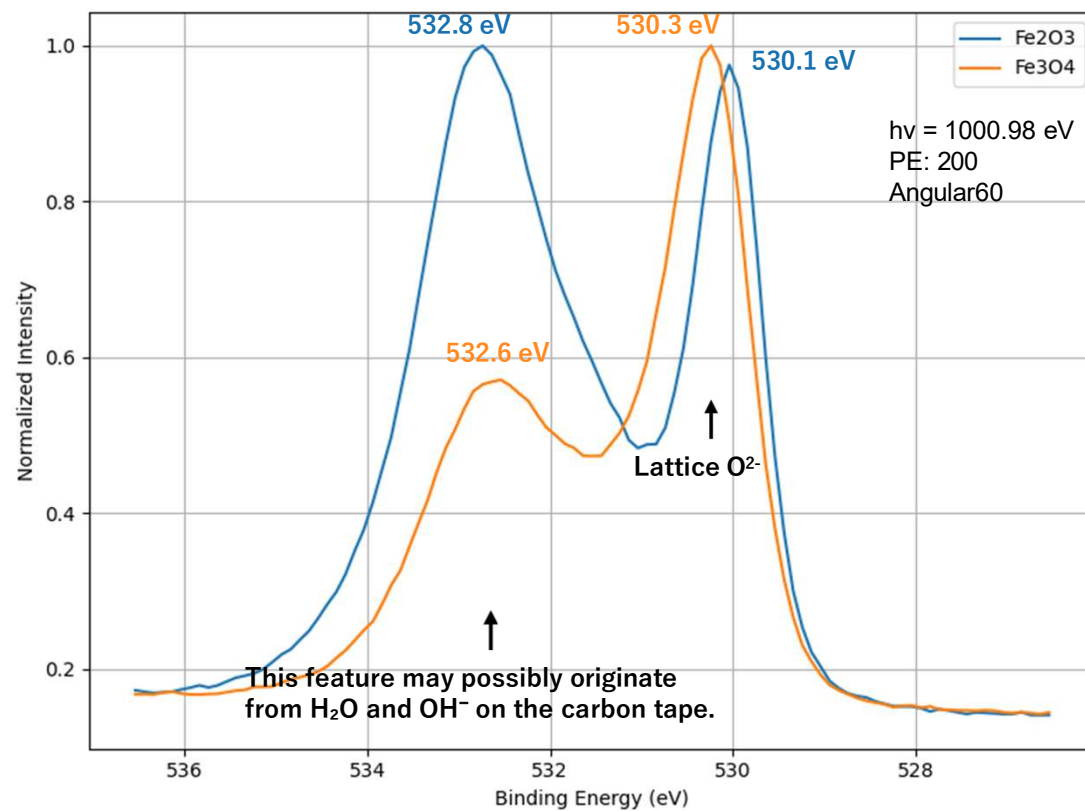
Samples:

- Fe_2O_3 powder applied to carbon tape
- Fe_3O_4 powder applied to carbon tape

Fe 2p



O 1s

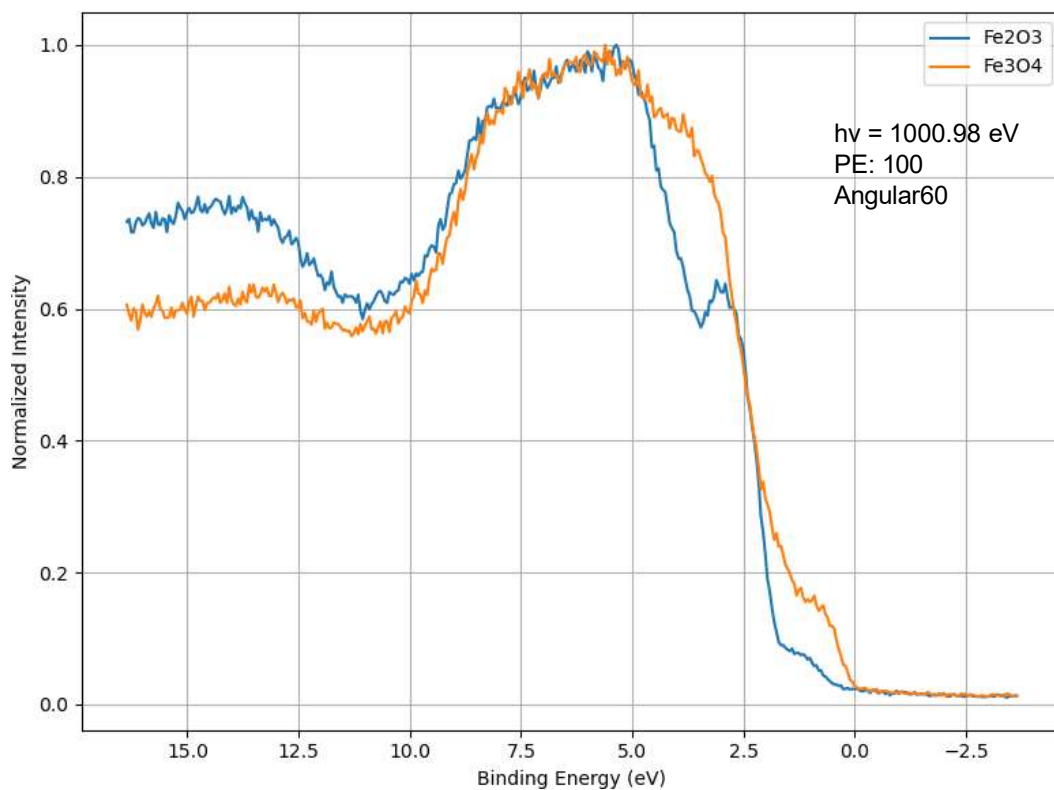


XPS

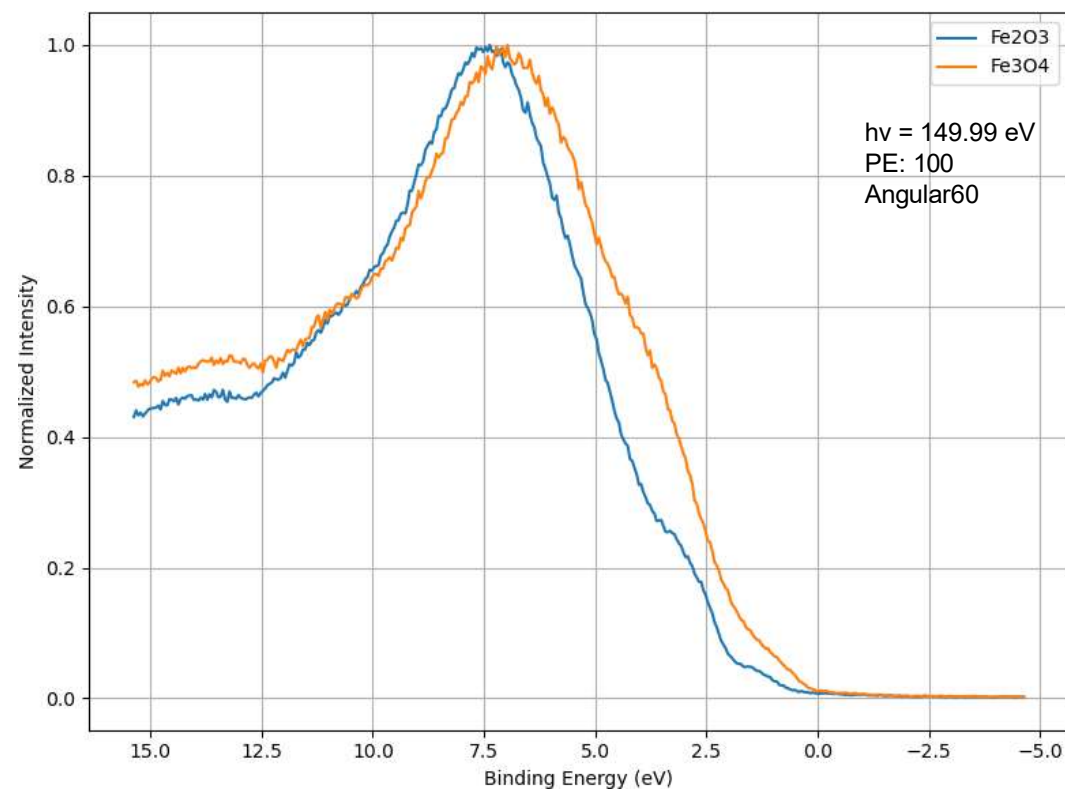
Samples:

- Fe_2O_3 powder applied to carbon tape
- Fe_3O_4 powder applied to carbon tape

VB ($h\nu \sim 1000$ eV, bulk-sensitive)



VB ($h\nu \sim 150$ eV, surface-sensitive)

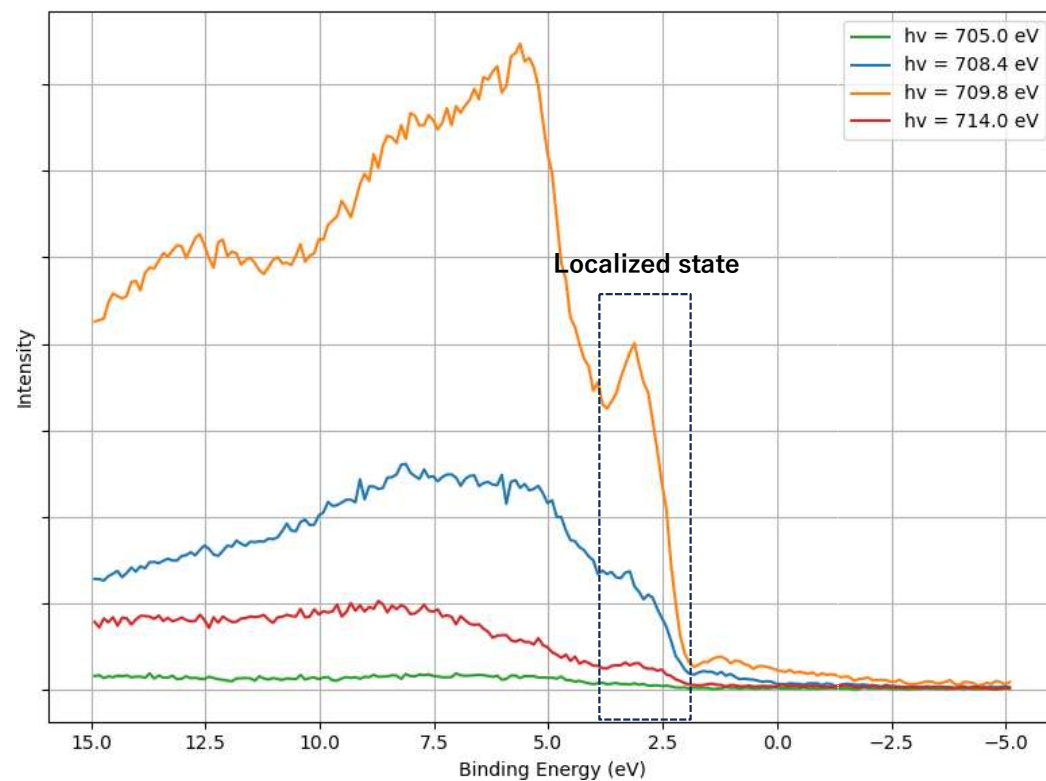
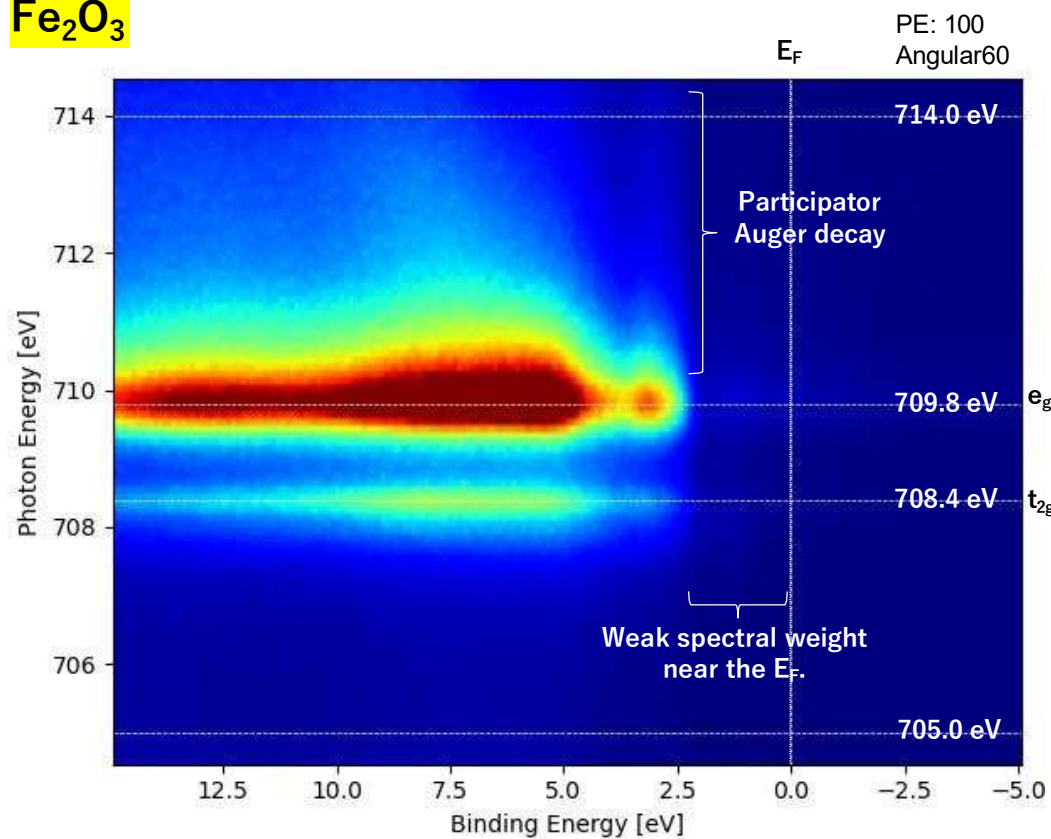


Resonant PES

Sample:

- Fe_2O_3 powder applied to carbon tape

Fe_2O_3



Resonant PES

Sample:

- Fe_3O_4 powder applied to carbon tape

Fe_3O_4

