Sample Results Summary Sheet
Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0038

PI: Akira Tsuchiyama

Type and date of analysis performed:

Tomography   Jan/25/2011 (7 keV)

Jan/24/2011 (8 keV)

Elements or phases identified: (Mg, Si, olivine, pyroxene, aromatic carbon, etc.)

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	4.95	83.72		6.24	4.98		0.12		

Contaminant phases identified: (Al, SUS, carbon particles, etc.)

N/A

Sample handling:

Exposed in atmosphere.

State of sample pre-analysis:

Attached to carbon fiber with resin.

State of sample post-analysis:

N_2 hold in sample holder.

Analysis data Notes: (summary of the attached analysis data and/or images)

See attached sheets.

RA-QD02-0038

Operation Date   Jan/25/2011 (7keV)
                 Jan/24/2011 (8keV)
operated by   T. Ogami (7keV)
                 T. Matsumoto (8keV)
analyzed by   T. Nagano

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	4.95	83.72		6.24	4.98		0.12		

A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
9.5	21.4	27.3	19478	4.4

Ol: olivine
LPx: low calcium pyroxene
HPx: high calcium pyroxene
Pl: plagioclase
Tr: troilite
Tae: taenite
Chm: chromite
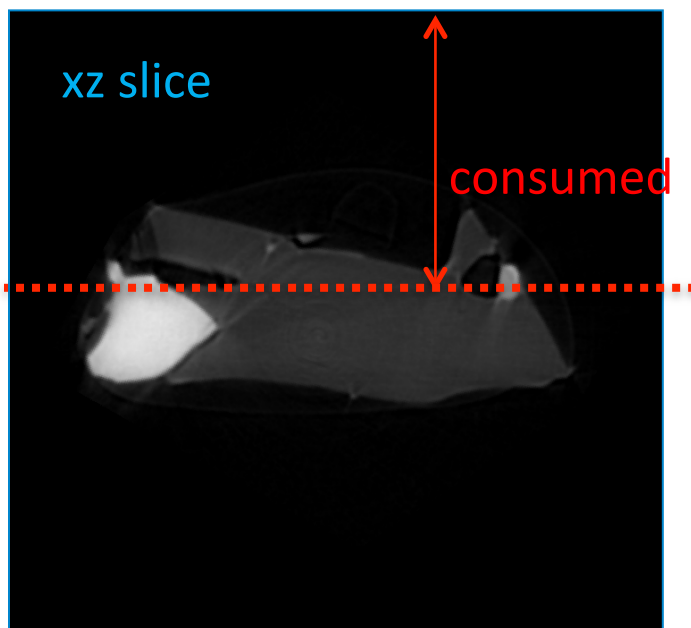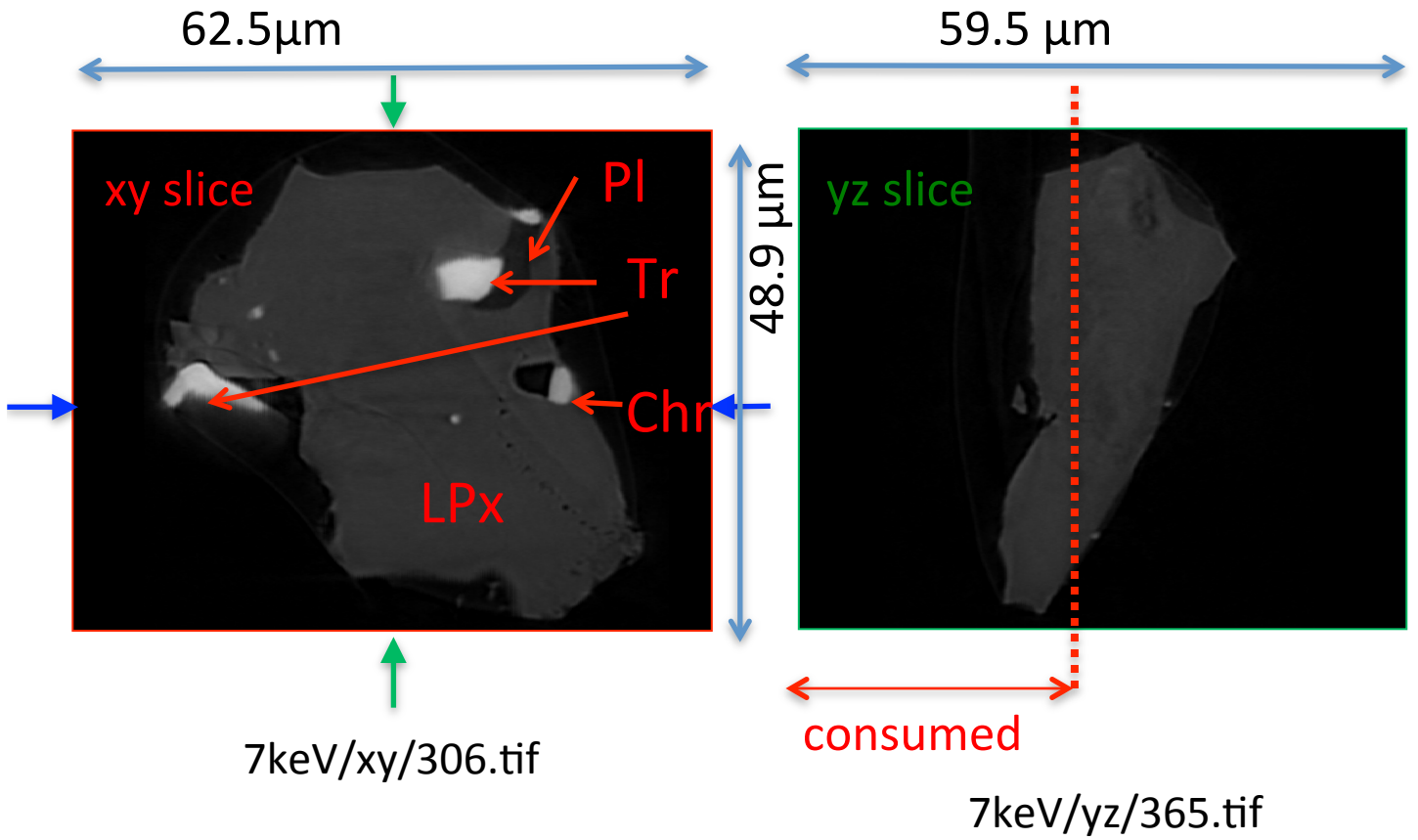CP: calcium phosphate
Kam: kamacite

A, B, and C: shortest, middle, and longest axial radii, respectively,
          of a best-fit ellipsoid for the particle
V: particle volume without pore
dz: CT image interval
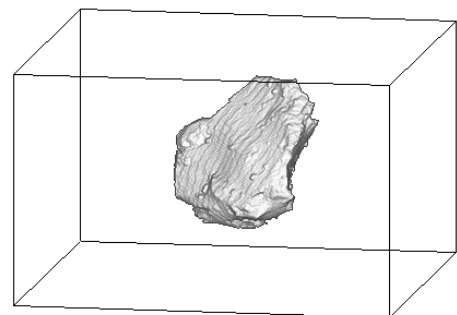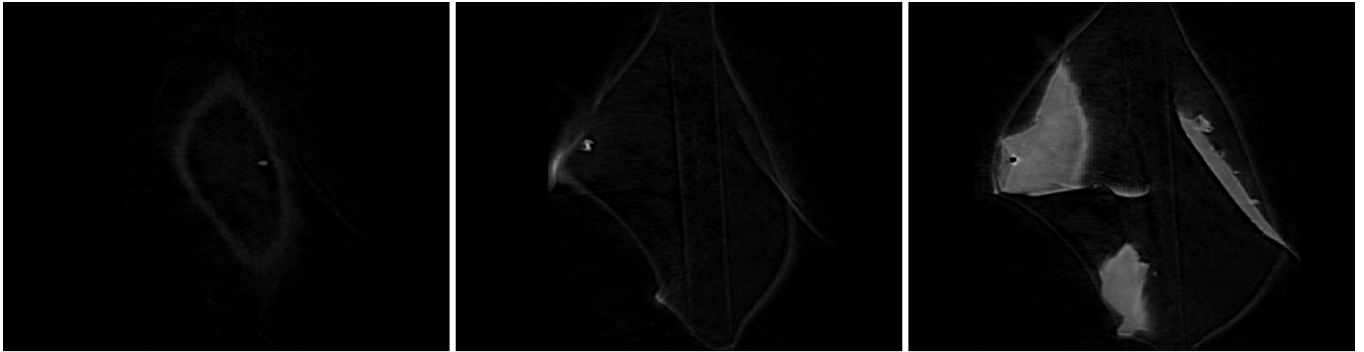LAC: linear attenuation coefficient of X-ray

RA-QD02-0038 7keV

62.5μm

59.5 μm

48.9 μm

xy slice

Pl

Tr

Chr

LPx

zy slice

consumed

7keV/xy/306.tif

7keV/zy/365.tif

xz slice

consumed

7keV/xz/286.tif

RA-QD02-0038 8keV

62.5μm

59.5 μm

xy slice

Pl

Tr

Chr

LPx

48.9 μm

yz slice

consumed

7keV/xy/306.tif

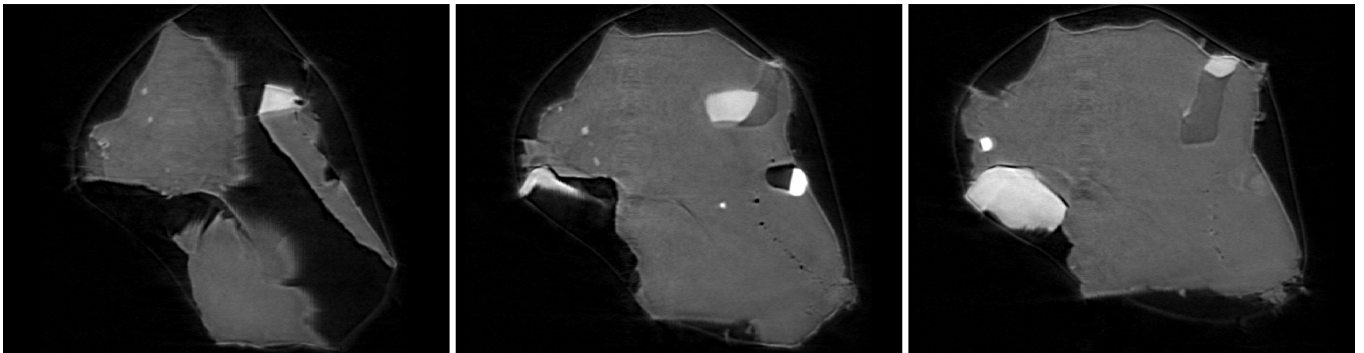7keV/yz/365.tif

xz slice

consumed
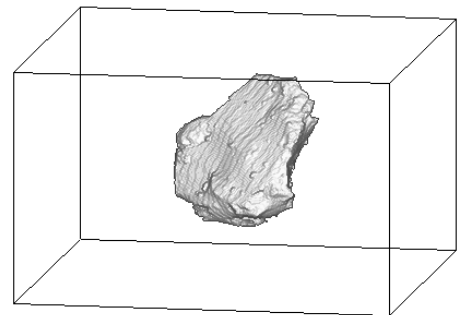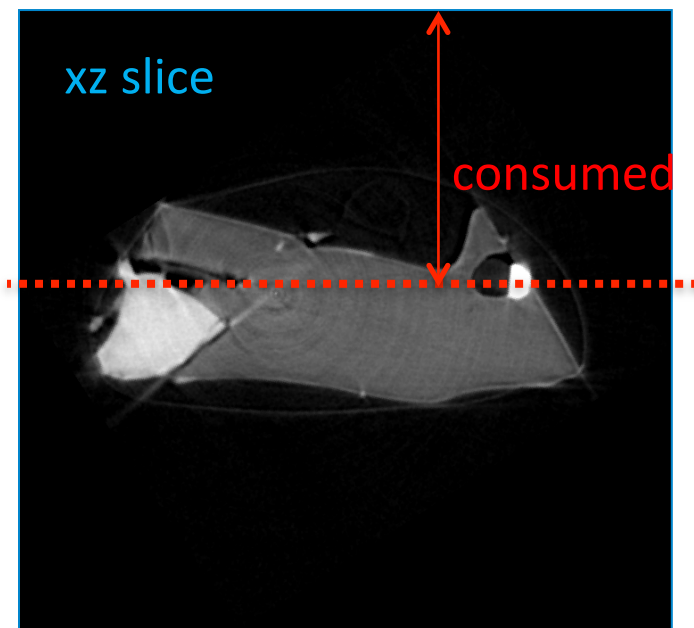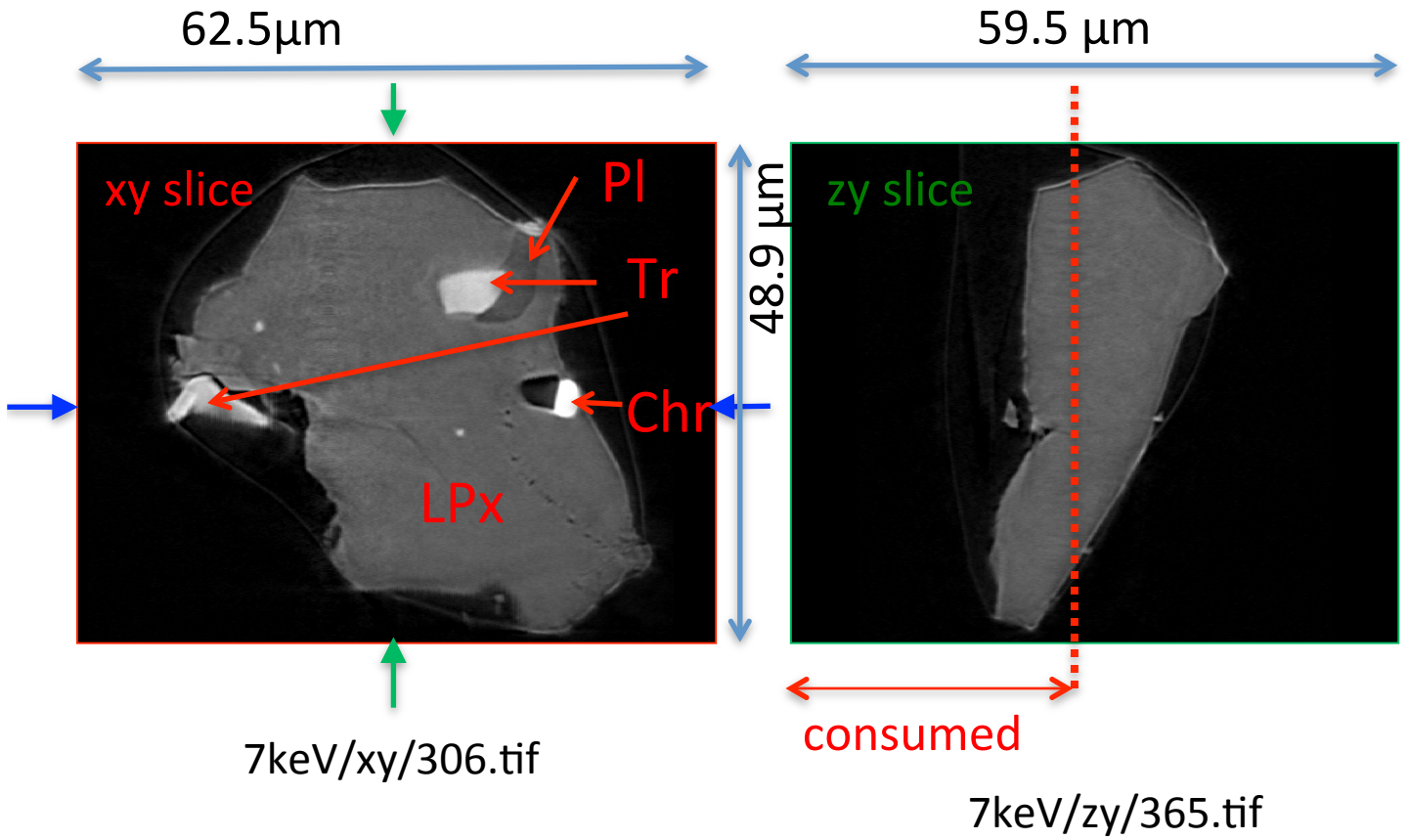
7keV/xz/286.tif

RA-QD02-0038 7keV catalogue

186.tif

215.tif

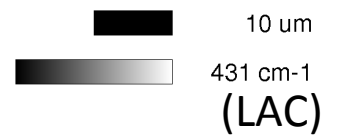244.tif

273.tif

302.tif

331.tif
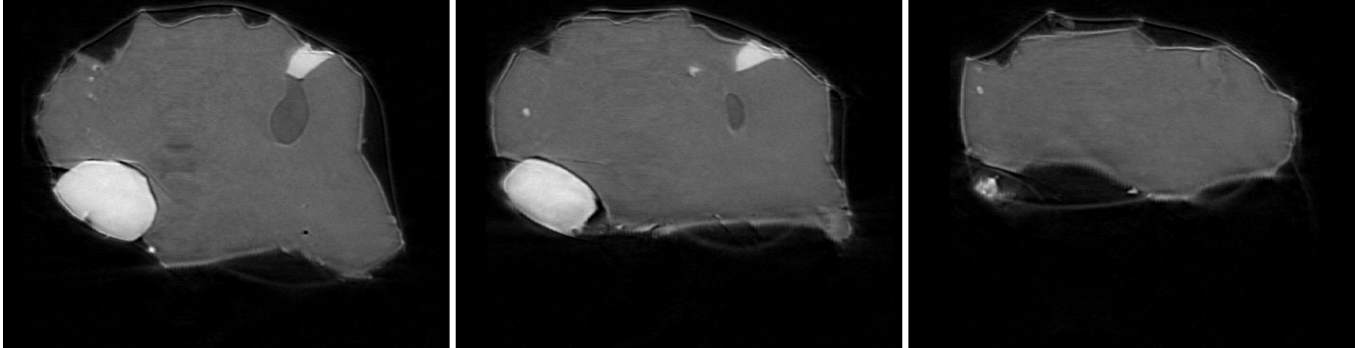
360.tif

389.tif

418.tif

447.tif

476.tif

505.tif

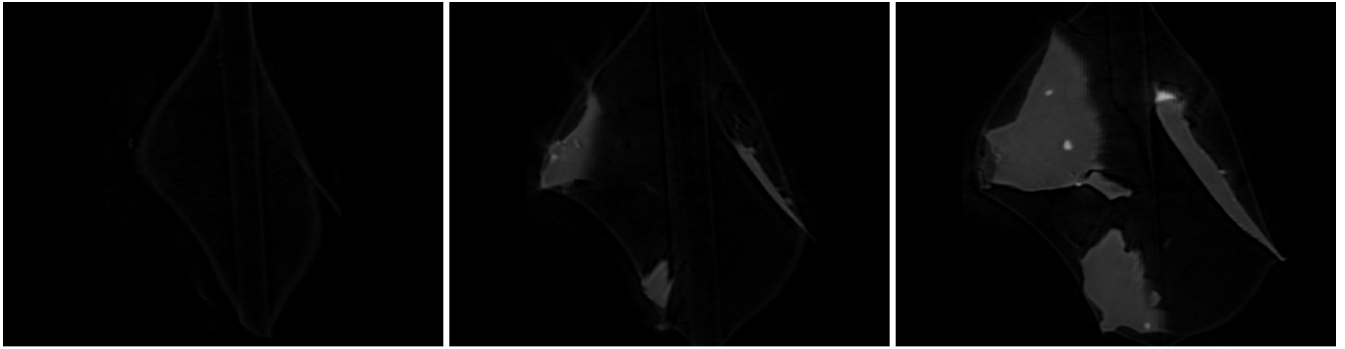dZ = 2.484 μm
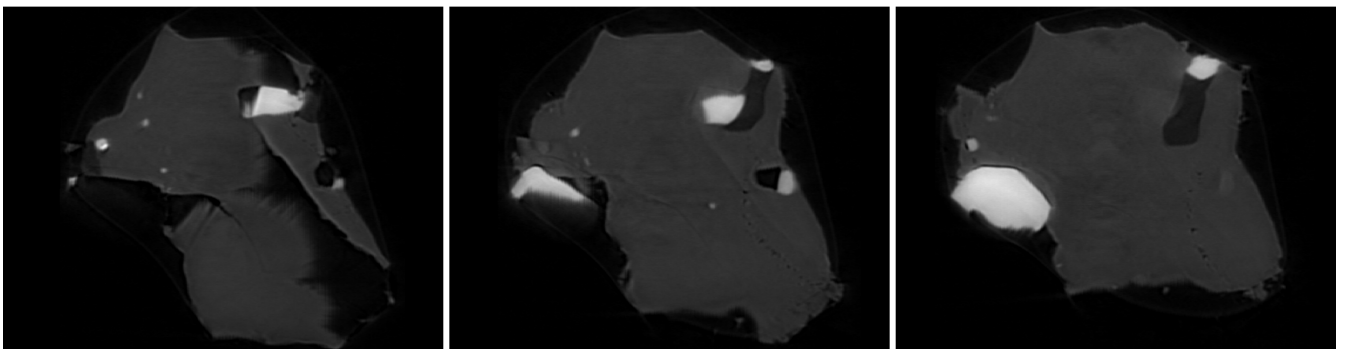
10 um

431 cm-1

(LAC)

RA-QD02-0038 8keV catalogue
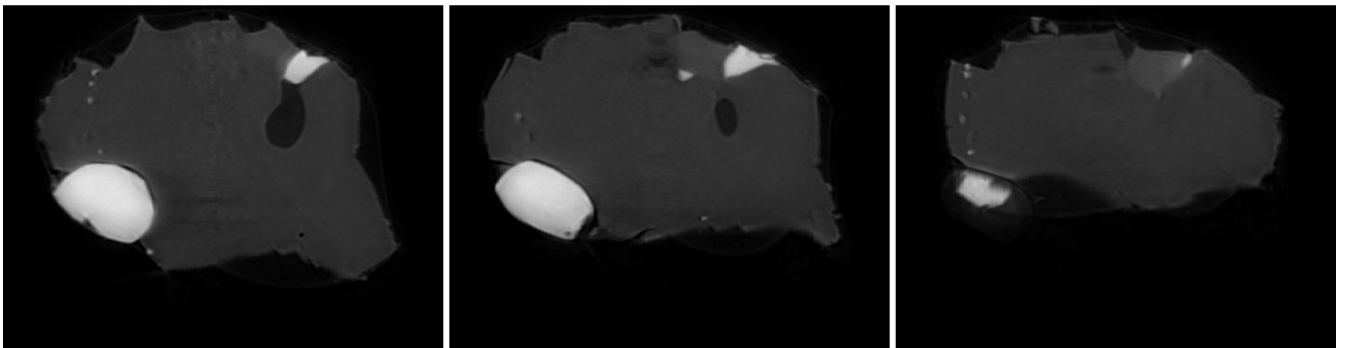

204.tif

230.tif

256.tif

282.tif

308.tif

334.tif

360.tif

386.tif

412.tif
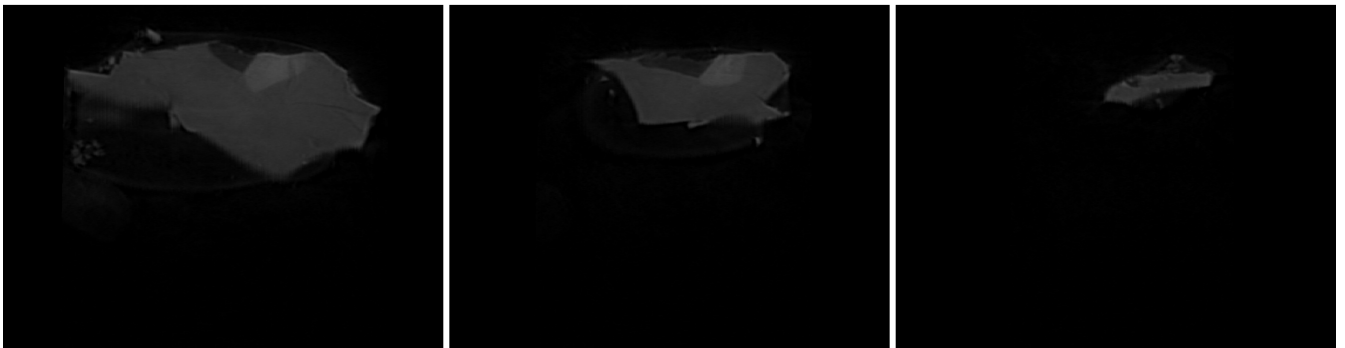
438.tif

464.tif

490.tif

dZ = 2.227 μm

10 um

719 cm-1

(LAC)
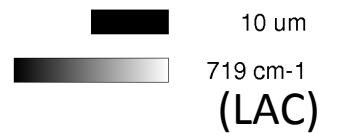
RA-QD02-0038 Dual energy histogram