Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

Sample ID: RA-QD02-0061

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 %	3.94	88.59	-	6.91	0.48	0.08	-	-	-

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-QD02-0061

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

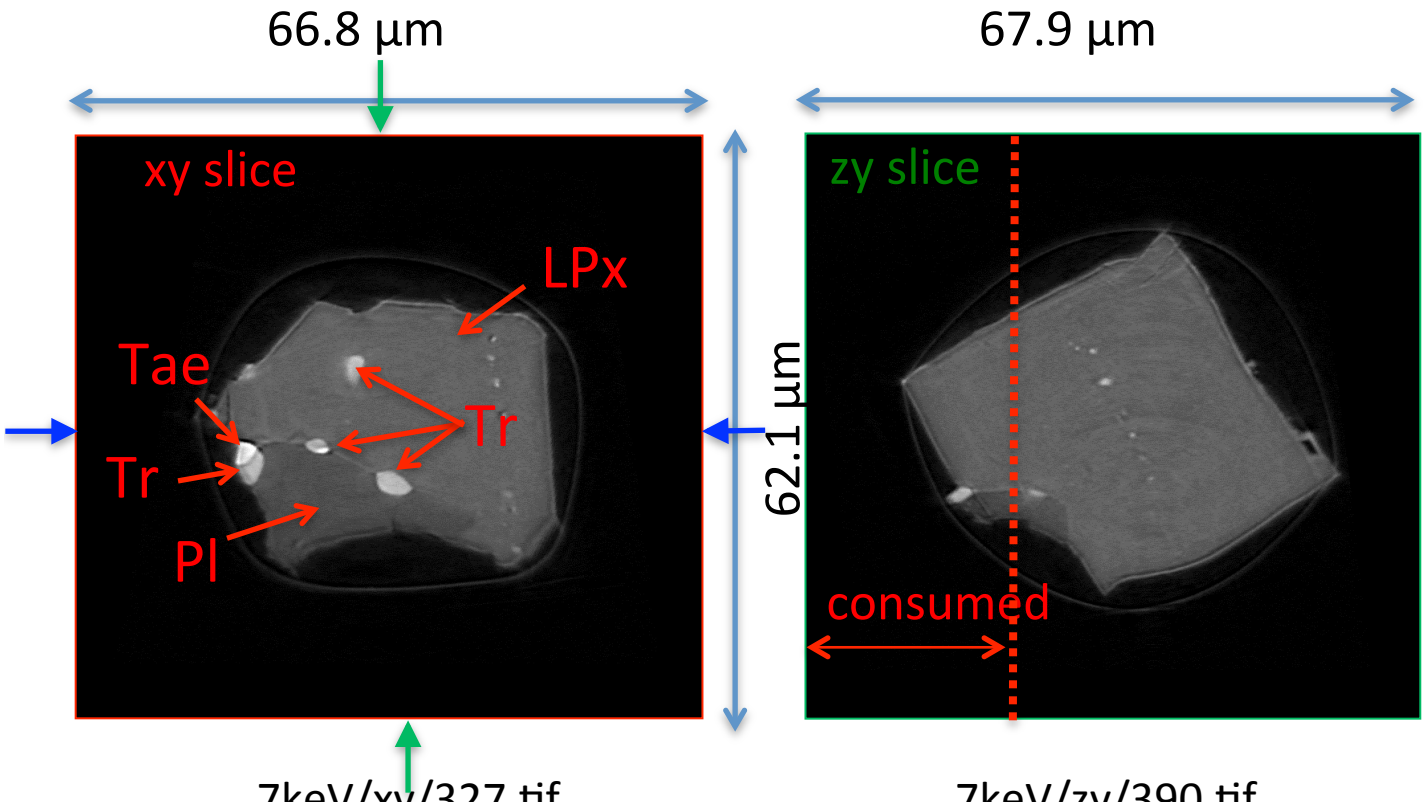
Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	3.94	88.59	-	6.91	0.48	0.08	-	-	-

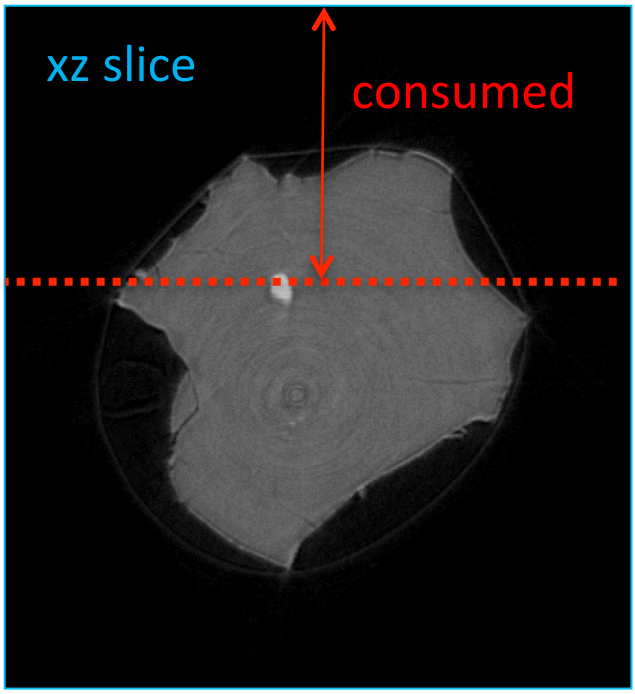
A (μm)	B (μm)	C (μm)	V (μm^3)	Porosity (%)
18.5	19.6	24.6	33097	1.55

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

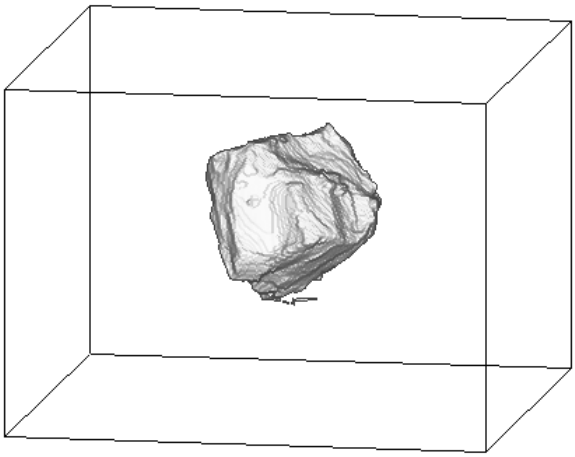
A, B, and C: shortest, middle, and longest axial radii, respectively, of a best-fit ellipsoid for the particle
V: particle volume without pore
dz: CT image interval
LAC: linear attenuation coefficient of X-ray

RA-QD02-0061 7 keV

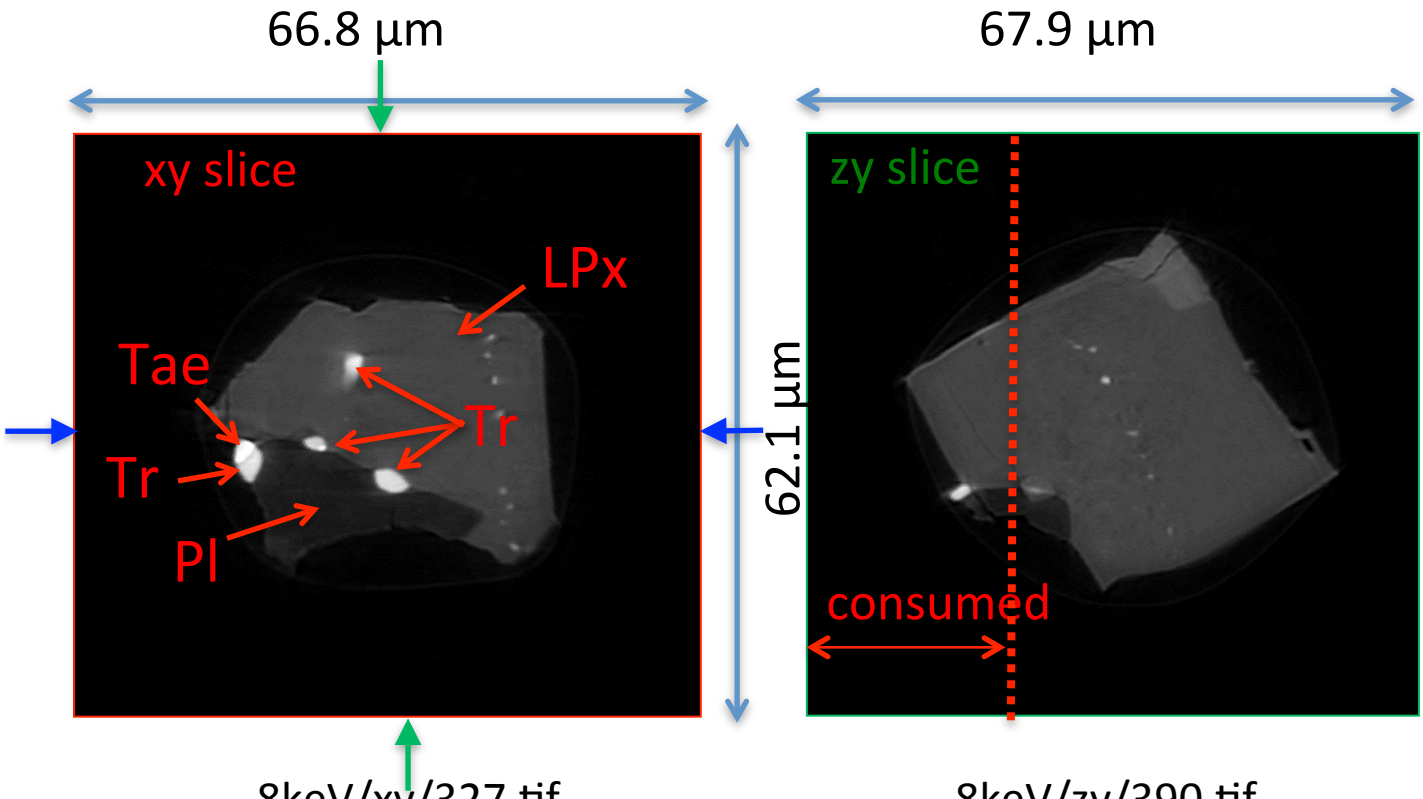




7keV/xz/401.tif

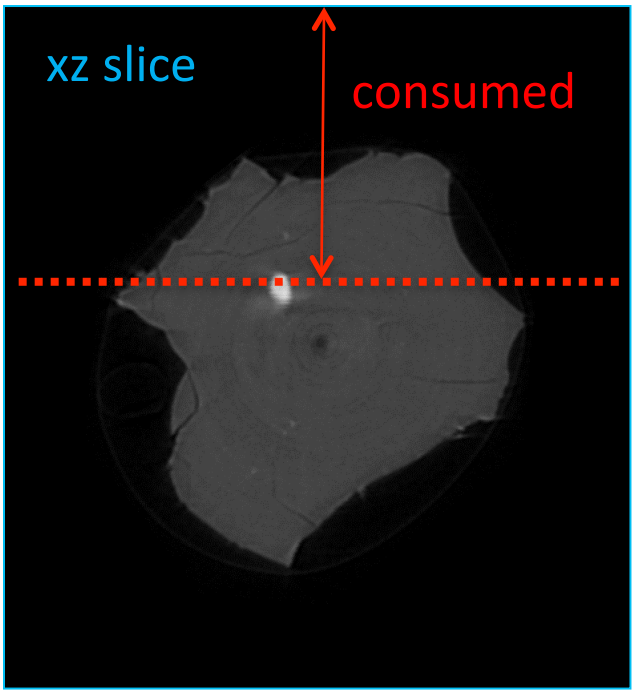


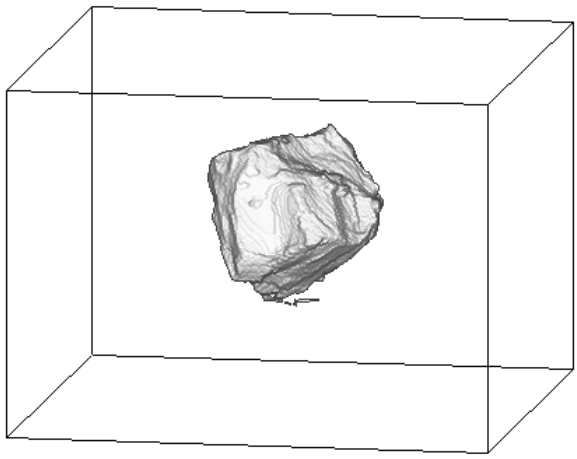
RA-QD02-0061 8 keV



8keV/xy/327.tif

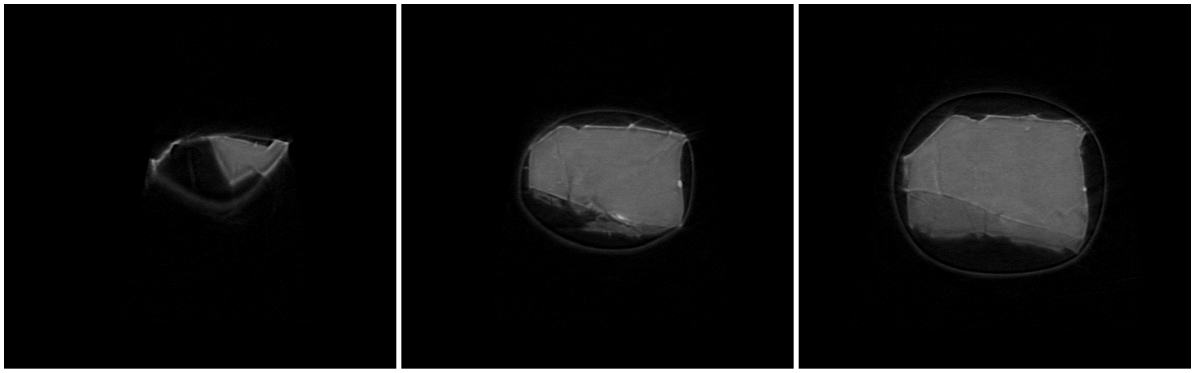
8keV/zy/390.tif



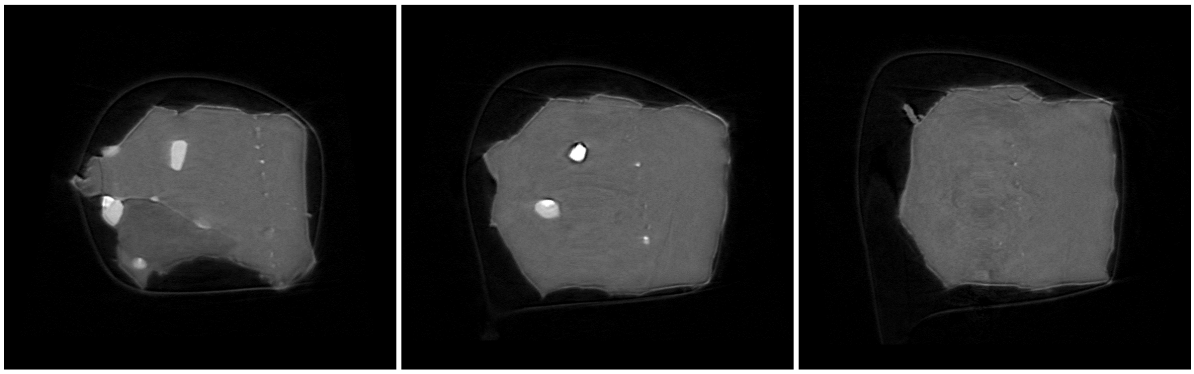


8keV/xz/401.tif

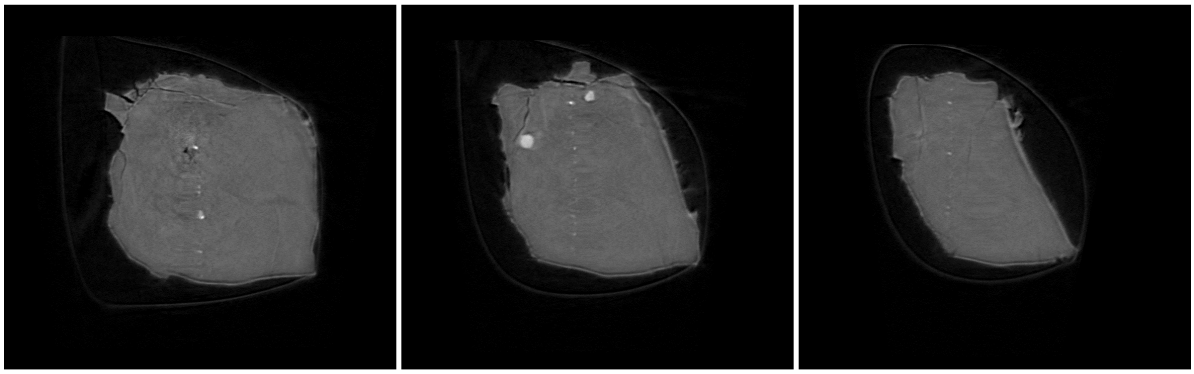
RA-QD02-0061 7 keV catalogue



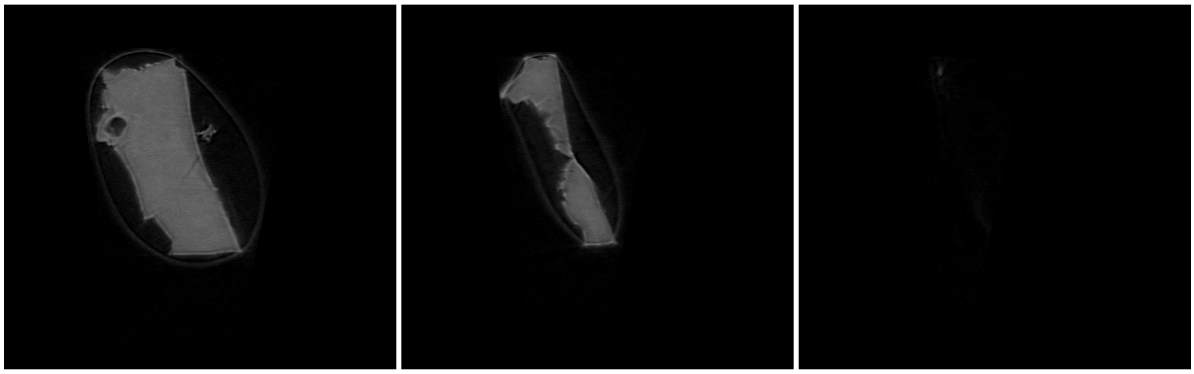
190.tif 240.tif 290.tif



340.tif 390.tif 440.tif



490.tif 540.tif 590.tif



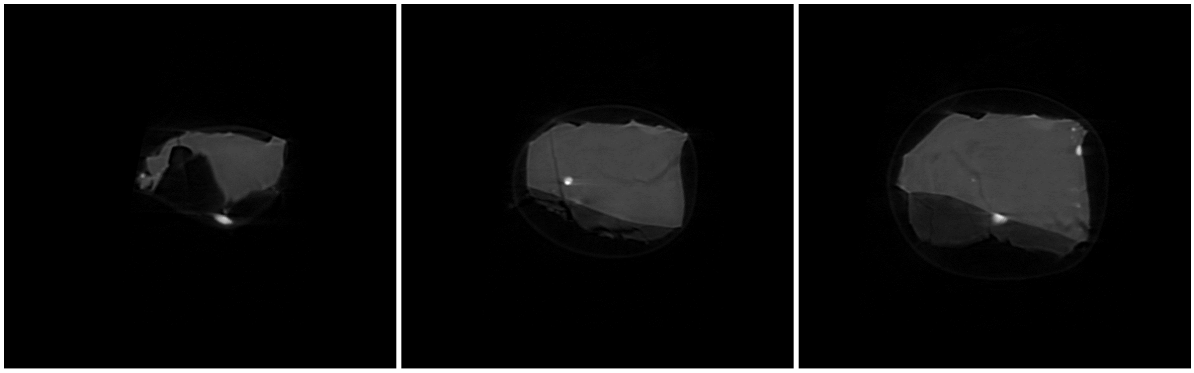
640.tif 690.tif 740.tif

dZ = 4.28350 um

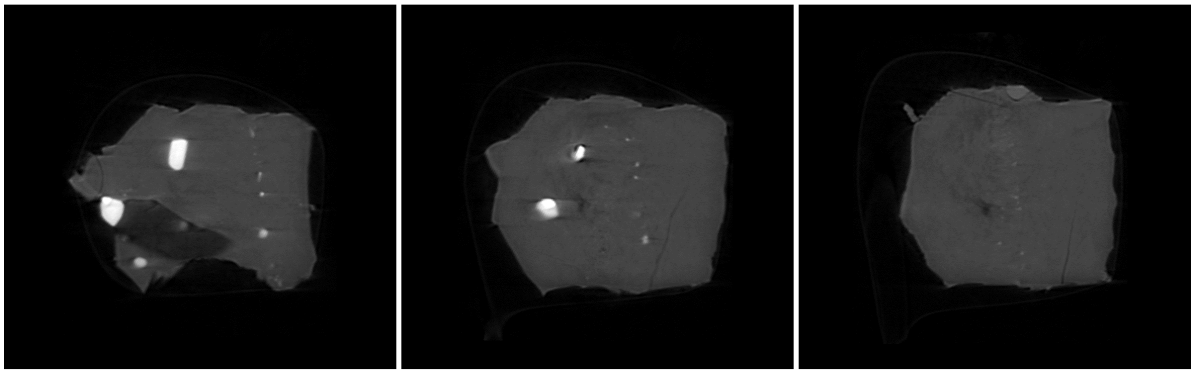
10 um

431 cm-1 (LAC)

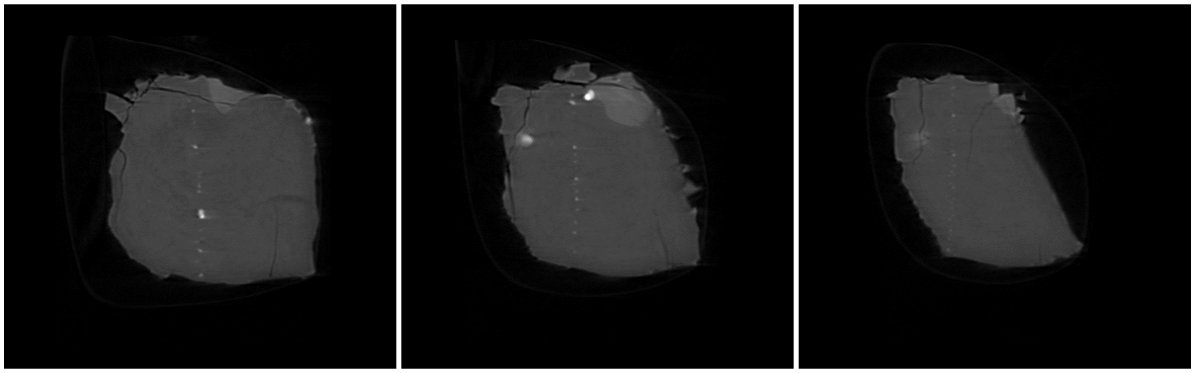
RA-QD02-0061 8 keV catalogue



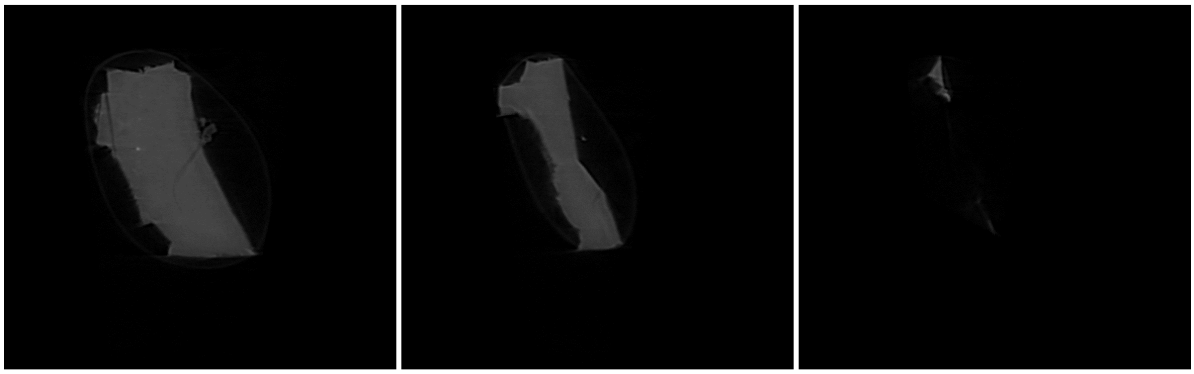
206.tif 253.tif 300.tif



347.tif 394.tif 441.tif



488.tif 535.tif 582.tif



629.tif 676.tif 723.tif

dZ = 4.02649 um

10 um

862 cm-1 (LAC)

RA-QD02-0061 Dual energy histogram