ID 6113_2

29/02/2020.

3:15 B ห้องข้าง → Main.

3:20 Arc.!

3:25 HV = -20 kV P = 2.2×10^{-9}

4:21 ปิดชัตเตอร์ห้องไว้ 100.

29/02/2020

17:14 Img 400 1 hv 630 eV; ES 1

* x,y = -0.0020, -2.1260 *

Scan 630 eV

Survey hv 630eV 50-635 eV, 10eV stp, 4x4 bin DXPS 87
U_{60} 26.5mm mcp 1-335 kV, 1000ms x2
500/200 * move gold mesh up *

Survey hv 405eV 50-~~480~~ eV, 1.0 eV stp, 4x4 bin DXPS 88
U_{60} 26.5mm mcp 1.335 kV, 1000ms x2
500/200 *move gold mesh up*

Area_C hv 405 50-410 eV, 10 eV stp, 4x4 bin DXPS 89
U_{60} 26.5mm mcp 1.400 kV, 1000ms x 2, SA1
500/200 * move gold mesh up *

18.21 hv 630 50-635, 1.0 eV stp, 4x4 bin DXPS 90
U_{60} 26.5mm mcp 1.400 kV, 1000ms x 2, SA1
500/200 * move gold mesh up *

ID6113_2 29/2/2020

18:47 hν 630 eV 50-635 eV, 1.0 eV step, 4x4 bin DXPS91
U_{60} 26.5 mm mcp 1.400kV, 1000ms x 4, SAA1
500/200 * move gold mesh up*

Area_A

19.37 hν 630 eV 50-635 eV, 1.0 eV step, 4x4 bin DXPS92
U_{60} 26.5 mm mcp 1.400kV, 1000ms x 4, SAA1
500/200 " move gold mesh up*

20:25 hν 405 eV 50-410 eV, 1.0 eV step, 4x4 bin DXPS93
U_{60} 26.5 mm mcp 1.400kV, 1000ms x 2, SAA1
500/200 " move gold mesh up*

Area_B
20:40 hν 630 eV 50-635 eV, 1.0 eV, step, 4x4 bin DXPS94
U_{60} 26.5 mm mcp 1.400kV, 1000ms x 4, SAA1
500/200 * move gold mesh up*

21.27 hν 405 eV 50-410 eV, 1.0 eV step, 4x4 bin DXPS95
U_{60} 26.5 mm mcp 1.400kV, 1000 ms x 2, SAA1
500/200 * move gold mesh up*

Area_D

21.48 hν 630 eV 50-635eV, 10 eV step, 4x4 bin DXPS_96
U_{60} 26.5 mm mcp 1.400 kV, 1000ms x 4, SAA1
500/200 * move gold mesh up*

22.29 hν 405 eV 50-410 eV, 1.0 eV step, 4x4 bin DXPS_97
U_{60} 26.5 mm mcp 1.400 kV, 1000 ms x 2, SAA1
500/200 * move gold mesh up*

ID 6113_2 29/02/2020 1366

NEXAFS → เรียก Roi.ini ตาม date ใน 6113_2 ที่ save ไว้

23.00 N K-edge 390, 390, 420, 435 eV, 1, 0.2, 1 step, 4x4 bin — Cancel NEX_63 64
500/200 mcp 1.285 kV, 1000 ms, ES1, G#2, 3rd → โหลดจาก N.ini, 6113_2
I_0 = 1.819 nA put gold mesh

23.45 B-kedge 190-215 eV, 0.2 eV step, 4x4 bin — Cancel NEX 66 67
200/100 mcp 1.325 kV, 1000 ms, E1, G#1
I_0 = 0.222 nA put gold mesh

23:20 N-kedge 395-425 eV, 0.2 eV step, 4x4 bin; โหลดจาก N.ini, 6113_2 — NEX65
500/800 mcp 1.285 kV, 1000 ms, ES1, G#2, 3rd
I_0 = 1.78 nA put gold mesh
(HV ตัดตอนระหว่างเก็บ)

cancel 68 Cancel. NEX_69 70
00:29 N_kedge 395-430 eV, 0.2 eV step, 4x4 bin
500/200 mcp 1.285 kV, 1000 ms, ES1, G#2, 5th
I_0 = 2.285 nA put gold mesh

00:52 N_kedge 395-430 eV, 0.2 eV step, 4x4 bin — NEX_71
500/200 mcp 1.285 kV, 1000 ms, ES1, G#2, 3rd
I_0 = nA put gold mesh.

ขอ cancel 01:18 B_kedge 190-215 eV, 0.2 eV step, 4x4 bin — NEX_73
200/100 mcp 1.300 kV, 1000 ms, ES1, G#1, 3rd
I_0 = 0.224 nA put gold mesh

ID 6113_2 1/03/2020 1367

Area 2 x = -0.0130 ; y = -1.929

01:45 survey hv 630 eV 50-635 eV, 1.0 eV step, 4x4bin
V_{bo} = 26.5 mcp 1.335 kV, 1000 ms x2
500/200 move gold mesh up

DXPS_98

Survey hv 405 eV 50-410 eV, 1.0 eV step, 4x4bin
V_{bo} = 26.5 mcp 1.335 kV, 1000 ms x2
500/200 move gold mesh up

~~DXPS_99~~

หน้าแผ่น A 630
DXPS_900

หน้าแผ่น C 630
DXPS101

หน้าแผ่น B 630
DXPS102

หน้าแผ่น B 405
DXPS103

หน้าแผ่น C 405
DXPS104

หน้าแผ่น A 405
DXPS105

8:00 เก็บ Survey hv 405 eV ; ไม่ NEX

6/3/2020 1368

~~6/8/2020~~

ID 613_2

hv 405 eV 50 - 410 eV ; 1eV step, 4x4 bin

U_{66} = 26.5 mcp 1.300 kV ; 1000ms x 2 OXPS 106

Img 13699 hv 630 eV,

N_K edge 395 - 432 eV ; 0.2 eV step ; 4x4 bin

mcp 1.285 kV , 1000 ms ; ES 1 NEX 75

N_K edge 395 - 432 eV ; 0.2 eV step 4x4 bin

mcp 1.350 kV , 1000ms ; ES 1 NEX 76

↓

NEX 77

11:00 Beam dump.

13:11 N K edge 395 - 432 eV ; 0.2 eV step 4x4 bin NEX 78

mcp 1.300 kV , 1000ms ; ES 1

13.46 B - K edge 190, 192, 209, 215 4x4 bin

1 0.2 1 ev step

cancel

NEX 79

mcp 1.300 kV 1000ms ES 1 O#1 3rd

190 - 215 0.2 ev step → NEX 80

15.59 B- K edge 190 - 215 0.2 ev step 4x4 bin

mcp 1.350 1000ms ES 1 O#1 3rd

NEX 81

B1 เพื่อปรับตำแหน่ง → main

LEEM Img −13698

13699 x 0.054
y 0.033

17.16 hv 405 ev 50- 410 ev 1 ev step 4x4bin
U_{60}=26.5 Mcp. 1.330 1000MS x2

17.32 hv 630 ev 50 - 635 ev 1ev step 4x4bin
U_{60}=26.5 Mcp 1.400 1000MS x2

18.06 hv 405 ev 50-410 1 ev step 4x4bin
hv ~~635~~ 405 ev Mcp 1.450 1000MS x2 S600#1
U_{60}=26.5

18.24 hv 405 ev 50-410 1 ev step 4x4bin
U_{60}=26.5 Mcp1.450 1000MS x2 S600#1

18.50 N wedge 390 395 420 435
1.0 0.2 1.0 ev step
4x4 bin 1000ms Mcp1.300 ES 1

19.06 N wedge ——————

19.34 B wedge 190, 192, 209 215
1 0.2 1 ev step
4x4bin 1000ms Mcp1.350 ES1

DXPS107 Img 13715

DXPS108

DXPS109 cancel

DXPS110

DXPS111

NEX82

NEX83 cancel 85

NEX86

NEX87

ID 6113-2 9/03/2020

9:15 Img 14060

					Tcom	T pyro @ 228.1	P
9:15	2.20	0.3	001	5.29	358.1	451.1	1.4×10^{-9}
9:42	2.50	0.5	001	5.99	400	595.7	6.5×10^{-9}
9:57	2.50	11.1	100	6.65	432.7	565.4	1.8×10^{-8}
10:06	2.90	19.8	165	7.17	460.4	605.2	1.5×10^{-8}

now 605.2 10 min.

SU hv 405 eV. 50-410 eV ; 1.0 eV step ; 4×4 bin — DXPS112
U_{60} = 26.5 mcp 1.310 ; 500 ms×2 ; gold mesh √
500/200

Img 15192. → SAA1.

SU hv 405 eV 50-410 eV ; 1.0 eV step ; 4×4 bin — DXPS113
U_{60} = 26.5 mcp 1.440 ; 500 ms×2 ; SAA1.
500/200

Img 15554 → SAA1.

hv 405 eV 50-410 eV ; 1.0 eV step ; 4×4 bin — DXPS114
mcp 1.400 ; 500 ms×2 ; SAA1.* 8.2×10^{-9}

11.46	25	20.5	320	9.92	561.9	717.5

11.48 hv 405 eV 50-410 ; 1.0 eV step 4×4 bin — DXPS115
U_{60}=26.5 mcp 1.311 500×2

11. hv 405 eV 50-410 ; 1.0 eV step 4×4 bin — DXPS116
U_{60}=26.5 MCP 1.450 500ms×2 SAA1 *

12.12 hv 405 ev 50-410 1.0 ev step 4x4bin
U_{60}=26.5 mcp 1.450 500msx2 SAA1 ✗

DXPS 117

13.58 Arc

14.27 2.95 23.3 650 11.10 661.9 879.4 1.3×10^{-8}

15.42 1.49 0.2 1 7.47 475.4 423.2 4.3×10^{-9}

15.31 LEEMIV -1 to 10 0.2 4x4bin
100ms x 40 no ca✗1
mcp 1,300

LEEMIV 11

15.57 LEEMIV -1 to 10 0.1 ev step 4x4bin
100msx40 no ca✗1
mcp 1.300

LEEMIV 12

Img 17450 HV405 oldmesh29

16.09 Survey hv 405 ev 50-410 1.0 ev stp 4x4bin
U_{60}=26.5 mcp1.310 500msx2

DXPS 118

16.24 Survey hv 630 ev 50-635 1.0 ev step 4x4bin
U_{60}=26.5 mcp 1.400 500ms x 2

DXPS 119

Img 18400 ดี

16.38 Survey hv 630 ev 50-635 1.0 ev step 4x4bin
เลือกบริเวณ U_{60} 26.5 mcp 1.450 1000msx2 SAA✗1

DXPS 120

17.01 survey hv 405 ev 50-410 1.0 ev step 4x4bin
U_{60} 26.5 mcp 1.450 500x2 SAA✗1

DXPS 121

Img 19348 สวย

17.11 survey hv 405 50-410 1.0 ev step 4x4bin
U_{60}=26.5 mcp 1.450 500msx2 SAA ✗1

DXPS 122

17.20 Survey hv 630 50-635 1 ev step 4x4bin DXPS123
U_{60}=26.5 mcp 1.450 1000ms x2 SAA#1

Img 20247 im

17.44 Survey hv 630 50-635 1ev step 4x4bin DXPS124
U_{60}=26.5 mcp 1.450 1000ms x2 SAA#1

18.07 Survey hv 405 50-410 1 ev step 4x4bin DXPS125
U_{60}=26.5 mcp 1.460 ~~1000ms~~ 900 x2 SAA#1

18.26 N-K-edge 390 395 420 435 NEX88
500/200 GA#2 1 0.2 1 ev step
4x4bin 1000ms mcp 1.2400 ES#1

18.53 B K edge 190, 192, 209 215 NEX99 cancel
200/100 GA#1 1 0.2 1 ev step NEX90 AA mcp 1.430 cancel
4x4bin 1000ms mcp 1.450 ES #1 NEX91 AA mcp 1.360

5/03/2020

Ims 21249 hv 110 eV.

9:20 B K edge 190, 193, 197, 209, 215; 4x4bin NEx_93
1 0.05 0.2 1
mcp 1.380; 200/100; ES 1, 1000ms

9.35 B-K edge 190 193 197 209 215 4x4bin NEx_94
1 0.05 0.1 1 ev step
mcp 1.420
200/100 ES 1# 1000ms

Img 21205 LEEM ; CA 1

Img 21207 img EELS

10.11 Bias 1025 - 1067 0.1 ev step
STV 30 V 300x7 4x4 bin
Mcp 1.450 meh 320.0 COI* SAA*2

EELS 01

10.30 Bias 1025 -1067 0.1 ev step
STV 30V 300x7 4x4 bin
Mcp 1.490 meh 320 COI*1 SAA*2

EELS02

Img 22089

10.50 Bias 1025 - 1067 0.1 ev step
STV 30 V 300x7 4x4 bin
Mcp 1450 meh 320 COI*1 SAA*2

EELS03

11.11 -2 to 2 ev ; 0.02 ev step
100MS x20 bin 4x4 Mcp 1.270

LWF 01

11.32 hv110 -5.0 to 3 ev 0.05 ev step 100x30
U_{60}=26.5 Mcp 1.390 4x4 bin COI*1 ES*1

PWF 01

(A2) Img 22875 PEEM HV 630

12.08 Surv hv 630 50 - 635 1.0 ev step 4x4 bin
U_{60}=26.5 Mcp 1.350 500MS x2

DXPS126

13.28 Survey hv 405 50 - 410 1 ev step 4x4 bin
U_{60}=26.5 Mcp 1.331 500MS x2

DXPS127

Img 23823 คลาว

13.40 Surv hv 405 50 - 410 1 ev step 4x4 bin
U_{60}=26.5 Mcp 1.450 500MS x2 500*1

DXPS 128

13.48 Survey hv630 50-635 1ev step 4x4bin
U_{00}=26.9 Mcp 1:450 1000MSx2 SAA#1

DxPS129

Img 24771 6m

14.11 Survey hv630 50-635 1ev step 4x4bin
U_{60}=26.5 Mcp 1.450 1000MSx2 SAA#1

DXPS130

14.31 Survey hv405 50-410 1ev step 4x4bin
U_{60}=26.5 Mcp 1.450 500MSx2 SAA#1

DXPS131

14.42 Surv hv405 50-410 1evstep 4x4 bin
U_{60}=26.5 Mcp 1.331 500MSx2

DxPS132
SBO2W127

26081 6m

14.54 Survey hv405 50-410 1evstep 4x4bin
U_{00}=26.5 Mcp 1.450 500MSx2 SAA#1

DXPS133

15.01 Survey hv630 50-635 1 evstep 4x4 bin
U_{00}=26.5 Mcp 1.450 1000MSx2 SAA#1

DxPS134

15.32 N K-edge 390 395 420 435
900/200 O#2 1 0.2 1
4x4bin 1000ms Mcp 1.180

NEXCS

16.05 B K edge 190 193 197 209 215
200/100 O#1 1 0.05 0.1 1
Mcp1.380 1000ms 4x4bin

ES#1

NEX96 (cancel)
NEX97 Mcp 1.300

16.28 -5 to 3ev 0.05 evstep 100x30
hv110
U_{60}=26.5 Mcp 1.390 4x4bin CAA#1 ES#1

PWF02

16.41 a2to2 ev 0.02 evstep
100MSx20 bin 4x4 Mcp 1.270

LWF02

LEEM IV -1 to 10 ⊙ 1ev/step 4x4bin

16.50 100 μm x 40 no CA#1

Mcp 1.300

LEEM IV 13

Img 27501 สีม่วง

17.06 Bias 1025 - 1067 0.1 ev step

STV 20 V 300x7 4x4bin

Mcp 1.450 wd 3200 CA#1 SAA#2

EELS 04

17.25 Img 27923 1ม

EELS 05

Img 28345 6ก

17.42

EELS 06

Img 28767 LEED STV 30 eV 4ม

Mcp 1.450 28768 STV 40 eV

100x32 28769 STV 50 eV

4x4 bin 28770 STV 60 eV

Img 28771 LEED STV 30 eV 1ม7

Mcp 1.450 28772 STV 40 eV

100x32 28773 STV 50 eV

4x4 bin 28774 STV 60 eV

Img 28775 LEED STV 30 eV 6ก

Mcp 1.450 28776 STV 40 eV

28777 STV 50 eV

100x32 28778 STV 60 eV

4x4bin

390

Img 28779 PEEM 690 HV

N - K edge 390 395 420 435

1 0.2 1

50/200 0.2

4x4bin 1000ms Mcp 1.

NEXAFS

Area 1

Img 28780 1ม

Img 28781 LEED STV 30 eV

Mcp 1.450 28782 40

100x32 28783 50 6ก7

4x4bin 28784 60

Img 28785 ตัว

Img	28786	LEED	SiV 30 eV
			40
Mcp 1.450	28787		50
100×32	28788		
4×4bin	28789		60

Img 28790 ตัว

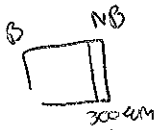
Img	28791	LEED	SiV 30 eV
			40
Mcp 1.450	28792		50
100×32	28793		
4×4bin	28794		60

Bo ส่งมาให้ → main

29293 ขอบวัสดุ −0.473 (B)
−0.965

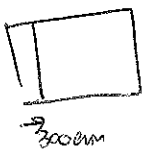
29294 ขอบรูเข็ม −0.473 (NB)
1.67

x −0.473 y = 1.37



14.23 hv 405 30-410 eV 10 eV step NO Gold mesh DXRS 135
U_{00} = 26.5 Mcp 1.330 500 ms x2 4×4bin
500/200 ตัว2

x −0.473 y = −0.665



DXRS 136

14.32 hv 405 30-410 eV 1eV step
U_{00} = 26.5 Mcp 1.330 500 ms x2 4×4bin
500/200 ตัว2

ค่าเฉลี่ย $\frac{1.67 - (-0.965)}{2} = x$

x − 0.965 = 0.3525 y = 0.3525 ค่าเฉลี่ย

x-0.478 y=-0.815

19.41 hv 405 50-410 1ev step
U_{60}=26.5 mcp 1.330 500ms×2 4×4bin
500/200 G#2

DxPS137

x-0.473 y=-0.840

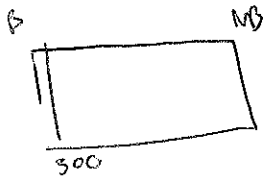
19.49 hv 405 50-410 1ev step
U_{60}=26.5 mcp 1.330 500ms×2 4×4bin
500/200 G#2

DxPS138

					T_c	T_{pyro}	p
9:06	2.10	0.3	001	5.12	349 C	434 C	1.1×10^{-9}

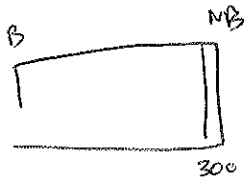
9/03/2020

9:06 hv 405 50-410 eV ; 1 eV step. DxPS139 มีการเปลี่ยนตำแหน่ง 13 ส.
mcp 1.340 500ms×2 ; 4×4 bin.



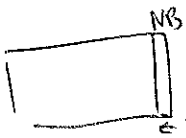
9.15 hv 405 50-410 ev 1evstep
U_{60}=26.5 mcp 1.370 500MSx2 4x4bin
500/200G#2

DxPS140



9.22 hv 405 50-410 ev 1ev step
U_{60}=26.5 mcp1.370 500ms x2 4x4bin
500/200G#2

DxPS141



x -0.472 y 1.52

9.32 hv 405
U_{60}=26.5 50-410 ev 1ev step
500/200G#2 mcp1.370 500MSx2 4x4bin

DxPS142

Img 32183

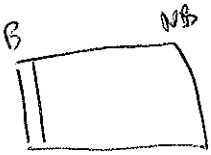
9.54 stv -2 to 2 0.02 ev step
100MS x20 bin 4x4 mcp 1.270

LWF 03

Img 32386

10.25 U_{60}=405 50-410 ev rev step
U_{60}=26.5 mcp1.370 500MSx2 4x4bin
500/200G#2

DxPS143

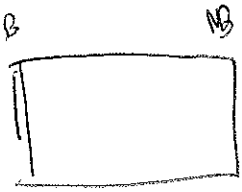


≈ 150 um

verified z=-1.067 ∴ ↗ 25.2+5 250 um NEW

	FC	EC	Bv	ST	Tc	Tp	P
10.47	2.55	0.705	51	6.81	440.4	589	8.4×10^{-9}
11.33	2.55	23.7	350	9.17	564.2	782	2.8×10^{-9}
13.06	2.55	26.4	400	9.89	600	825.3	8.6×10^{-9}

13.07 survey hv 405 V_{00}=26.5 500/200 G#2
30-410 ev 1 ev step
Mcp 1370 500ms×2 4×4bin
IDxBS144



× 0.07
2 - 0.92800

15.20 2.55 27.9 472 10.50 631.8 860.8 9.4×10^{-9}

T W ↓

					TC	Tpyro	P
13:38	2.55	23.4	300	9.82	597	742.5	3.2×10^{-9}

N k-edge 390, 395, 420, 435
1 0.2 1
INEX_100

สังเกตว่าที่นี่ขอ Austenite แต่ในแป้นว่าเป็น BN.
ลอง TW ดูเพื่อว่า NEX BS#1

14.02 B k-edge 200/100 G#1 Mcp 1.405
190 MB 197 209 215
1 0.05 0.2 1
1000ms 4×4 bin 3rd BS#1
cancel NEX 101 ↓ 102

15.26 B-k-edge 200/100 G#1 Mcp 1.35
190, 193 197 209 215
1 0.05 0.2 1
1000 ms 4×4 bin 3rd BS#1
NEX 103 cancel 104

19.56 N k-edge 200/100 G#1 Mcp 1.350
390, 395, 420, 435
1 0.2 1
1000ms 4×4 bin 3rd BS#1
Img 33347 (cm)
NEX 105

16.48 hv 405 500/200 V_{00}=26.5 G#2
30-410 ev 1ev step
Mcp 1.450 600ms×2 SDD#1
IDxDS145

16.57 hv 630 V_{00}=26.5 500/200 G#2
50-635 1 ev step
Mcp 1.450 1000ms×2 SDD#1
IDxDS146

34295 이후

17.20 hv 630 90-635 1eV step
900/200 mcp 1.450 1000MS*2 SAA*1
U_{60}=26.3 G*2

DXPS147

17.44 hv 405 90-410 1eV step
900/200 mcp 1.450 500MS*2 SAA*1
U_{60}=26.5 G*2

DXPS148

35244 이후

17.52 hv 405
900/20c
U_{60}=26.9 G*2

DXPS149

18.00 hv 630

DXPS150

18.22 hv 630
500MS*2 NO SAA*1
mcp 1.430

DXPS151

18.34 hv 405
mcp 1.350 NO SAA*1

DXPS152

18.43 Img 37135 LEEM
37136

10.03.2020

Img 37137 hv 405 ES#1 SIV5

37138 hv 405 ES#1 SIV0

9.93 N k-edge 390 395 420 435
300/200 0#2 1 0.2 1
Mcp 1.900 1000 ms 4×4bin 3rd ES#1

NEX106 Cancel
NEX 107 Mcp1.33 cancel
NEX 109 Mcp1.28

10.11 N K-edge
Mcp 1.28

NEX 109 Cancel
NEX110 Mcp1.250

10.34 N K-edge
Mcp1.250

NEX 111

10.50 N K-edge
Mcp 1.250

NEX112 Cancel
NEX113 Mcp 1.210

11.11 B K-edge 190 193 197 203 205
200/100 3#1 1 0.05 0.1 1
Mcp1.300 1000ms 4×4 bin 3rd ES#1

NEX114 ถ่ายต่อจาก NEX113

11.33 B K-edge
Mcp 1.350

NEX 115 NEX111

11.56 B K-edge
Mcp1.35

NEX 116 NEX 110

Break

13.04 B K-edge
Mcp1.35

NEX 117 cancel NEX 106
NEX118

14.00

om 37188

Img				
	37189	LEED	40	ev
	37190		50	
	37191		60	

Img 37192 LEEM om

37193	LEED	40	ev
37194		50	
37195		60	

Img 37196 LEEM and

37197	LEED	40	ev
37198		50	
37199		60	

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