

analysis_memo

BL05 data structure

summary of important measurements

Direct measurement

run #	SF
20210714193654	
20210717040703	OFF

Manual scans of the sample Fe 30 nm

run #	L_labview	I(A)	real I(A)	mag B (kitaguchi)	SF ON/OFF	Reflection beam x (mm)
20210715075452	0		-0.0041	-0.32198	off	47.2
20210715081447	0		-0.0041	-0.32198	off	47.09
20210715084835	0.15		0.129145	-0.90759	off	47.04
20210715085349	0.264		0.230411	-1.35266	off	47.2
20210715082606	0.378		0.331677	-1.79772	off	47.2
20210715083711	0.6		0.52888	-2.66443	off	47.2
20210715072653	1.97		1.745851	-8.01302	off	47.18
20210715080233	0		-0.0041	-0.32198	on	47.07
20210715082018	0		-0.0041	-0.32198	on	47.13
20210715085144	0.15		0.129145	-0.90759	on	47.1
20210715085714	0.264		0.230411	-1.35266	on	47.19
20210715083141	0.378		0.331677	-1.79772	on	47.24
20210715084052	0.6		0.52888	-2.66443	on	47.21
20210715073913	1.97		1.745851	-8.01302	on	47.11

Manual scans of the sample Fe 90 nm

run #	L_labview I(A)	real I(A)	H (mT)	SF ON/OFF	Reflection beam x (mm)
20210716230107	0	-0.0041	-0.32198	off	
20210716232122	2	1.7725	-8.13014	off	
20210716233530	2	1.7725	-8.13014	on	
20210717001854	0.37	0.324571	-1.76649	off?	
20210717004515	0	-0.0041	-0.32198	off?	
20210717005023	0	-0.0041	-0.32198	on	
20210717022140	0.265	0.2313	-1.35656	off	
20210717022920	0.265	0.2313	-1.35656	on	

Manual scans of the sample Fe 50 nm

run #	L_labview I(A)	real I(A)	H (mT)	SF ON/OFF	Reflection beam x (mm)
20210717051355	0	-0.0041	-0.32198	ON	
20210717052755	0	-0.0041	-0.32198	OFF	
20210717054725	2	1.7725	-8.13014	OFF	
20210717055945	2	1.7725	-8.13014	ON	

List of automatic scans

Scan name	run #	sample I_start t (LV, A)	I_end (LV, A)	dI (LV, A)	SF ON/OFF	Comments
	20210716193147	30 nm	0.15	0.26	0.01 OFF	Manually stopped due to beam trouble?
--	20210716201056	30 nm	0.15	0.26	0.01 OFF	Cannot identify the scan file, lost by overwriting?
scan20210713_flipper_agilent_scan_1	20210716210153	30 nm	0.2	0.22	0.005 ON/OFF	Observed the transition between 0.15 and 0.22A
scan20210713_flipper_agilent_scan_long_1	20210716220736	30 nm	0	2.0	2.0 ON/OFF	
scan20210713_flipper_agilent_scan_rough_1	20210716235619	90 nm	0.37	0.27	0.01 OFF	Wait: 80 s / kp 2000
scan20210713_flipper_agilent_scan_rough_2	20210717002421	90 nm	0.47	0.37	0.01 OFF?	Wait: 80 s / kp 2000
scan20210713_flipper_agilent_scan_rough_3	20210717011121	90 nm	0.35	0.10	0.05 OFF?	Wait: 40 s / kp 1000
scan20210713_flipper_agilent_scan_fine_1	20210717012326	90 nm	0.240	0.265	0.005 ON/OFF	The N was 13 (should be an even #), manually stopped?
scan20210713_flipper_agilent_scan_rough_4	20210717024407	90 nm	0.265	0.325	0.01 OFF?	
scan20210713_flipper_agilent_scan_fine_3	20210717030252	90 nm	0.295	0.325	0.005 ON/OFF	Wait: 240 s / kp 6000
scan20210713_flipper_agilent_scan_rough_5	20210717050342	50 nm	0.19	0.36	0.01 OFF	Wait: 20 s / kp 500
scan20210713_flipper_agilent_scan_rough_6	20210717054010	50 nm	0.23	0.262	0.002 OFF	Creation time of the scan file is 05:21. Due to the beam stop? Wait: 20 s/kp 500
scan20210713_flipper_agilent_scan_fine_5	20210717061701	50 nm	0.23	0.25	0.002 ON/OFF	Manually stopped at 07:25

