Experiments | VDG | TDT

Laboratory for Ion Beam Interactions Logbook v1.0

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Message ID: **113** Entry time: **5/6/2021 10:41:20 AM**

Experiment Date:	2020 05 14
Duration (Days):	2
User:	M. Barac, Z. Siketic
Accelerator:	Tandetron
Beam Line:	Old uProbe
Project:	RADIATE JRA (H2020 projekt)
Experiment Title:	LE MeV SIMS Ar sputter cleaning + yield meas. of various inorganic samples
Beam:	440 keV Cu2+
Method:	MeV SIMS

Days of measurements:14.-15.5. (440 keV Cu2+), 18.-19.5. (5 MeV Si4+)

SETUP:

Me = 44.3; Ox = 28.6

x = 1.7; y = 7

colim. slits: +20 rounds

V_chopper = +-500 V

chopper high = 100 us

chopper low = 100 us

1 channel = 3.33 ns

V_ext = +5 kV

V_det = -5 kV

file	sample	I_before / kHz	I_after / kHz	notes
2005060	TiO2	10.5	9.5	SS: 2x1
2005061	Ti bulk	9.5	10	
2005062	In bulk	10	9.65	
2005063	ITO	9.65	9.4	
Ar sputtering ITO, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005064	clean ITO	9.4	11	
Ar sputtering Ti bulk, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005065	clean Ti bulk	-	-	
Ar sputtering Ti bulk, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005066	cleaner Ti bulk	11	9	
Ar sputtering TiO2, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005067	clean TiO2	-	-	
Ar sputtering TiO2, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005068	cleaner TiO2	9	9.2	
Ar sputtering In bulk, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005069	clean In bulk	9.2	7.9	
2005070	Au	9.9	9.9	

Ar sputtering Au, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005071	clean Au	-	-	
2005072	ZrO2	-	-	
Ar sputtering ZrO2, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005073	clean ZrO2	9	-	
2005074	clean Au, negative mode	-	-	different position
2005075	Li	10.9	-	
Ar sputtering Li, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005076	clean Li	-	11.8	
2005077	CsI	-	-	small total yield
2005078	V	-	-	Li in spectrum after Li sputtering (also, t minus 3 mins)
Ar sputtering V, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005079	clean V			
Ar sputtering V, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005080	cleaner V	-	11.5	
2005081	Cr/CrO2	-	11.1	
2005082	Zr	-	-	
Ar sputtering Zr, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005083	clean Zr	-	9.5	
2005084	MgO	10.7	10.5	
2005085	HfO2	-	-	
Ar sputtering HfO2, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005086	clean HfO2			
Ar sputtering HfO2, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005087	cleaner HfO2	-	9	
2005088	CsI, positive mode	-	-	on aluminium
2005089	CsI, negative mode	-	7.8	on aluminium
2005090	Sn	14.3	-	
Ar sputtering CsI, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005091	clean Sn	-	14	
2005092	Co	14	-	
Ar sputtering Co, E= 3 keV, I_e = 10 mA, t = 15 min, dp = 6.3 x10-6 mbar				
2005093	clean Co	-	14.1	