

DENTON E-GUN LOG SHEET-Please fill out as completely as possible for characterization and maintenance purposes

Name/Phone #	Date	Log In/ Log Out Times	Evaporated Material(s)	Substrate (Torr)	Base Pressure (Torr)	Pump Down Time (hours)	Maximum Deposition Rate (Å/Sec)	Max Beam Current (mA)	Beam Voltage (KV)	Substrate Temp (C)	Crystal Film Thickness (um)	Dektak Film Thickness (um)	4-point Sheet Resistance (ohm/sq)	Stress/Results/Problems/Maintenance/Etc
Rostislar	09-25	10-35	AMN	Si	1.1E-6	0.5h	0.6-1.0	37	6.5		202			up to 4 A/S 34-32 6.5 The meter deposited many but the evap. be poor good. Deposition rate is well to fast (25W/A sputter C/M/S) <u>100</u> We vacuum in Chem 2 (Vac list on gauge when next) 23 min to pump down slowly 30 min when 5 Torr pump down <u>100</u> 10 min gauge is checked <u>100</u> at 3 min
Rostislar	09-25	10-35	AMN	Si	1.1E-6	0.5h	0.6-1.0	37	6.5		202			up to 4 A/S 34-32 6.5 The meter deposited many but the evap. be poor good. Deposition rate is well to fast (25W/A sputter C/M/S) <u>100</u> We vacuum in Chem 2 (Vac list on gauge when next) 23 min to pump down slowly 30 min when 5 Torr pump down <u>100</u> 10 min gauge is checked <u>100</u> at 3 min
EPANBAR	1697AM	1600h T	Si		1.8E-6	0.7h	0.5A	50	6.5		78um			
DUFEL	1609	1730h Tu	Glass		1.5E-6	30 min	5A	96	6.5		0.3um			
Althman	2603/09	60800	Al	Glass	1.5E-6	30 min	5A	96	6.5		0.3um			
Nelson	2:05	0800	Al	Glass	1.5E-6	30 min	5A	96	6.5		0.9um			
5221	2/19/01	1-4 pm	Al	S	1.2E-6	15 min	8.7	100	6.5		300 nm			
5221	2/23/09	4:30	Al	Si		20 min	6.0	170	6.5		300 nm			
Darkman	3/04/09	9:50	Al	Glass	1.5E-6	42 min	2.8	100	6.5		500 um			
Nelson	3/04/09	9:50	Al	Glass	1.5E-6	42 min	2.8	100	6.5		500 um			
Stevan	3/04	9:50	Al	Glass	1.5E-6	42 min	2.8	100	6.5		500 um			
Krafft	1/09		Al	Glass	1.5E-6	42 min	2.8	100	6.5		500 um			
Jeff	3/5/	330	3m	glass	1.5E-6	40 min	2.8	100	6.5		400			

3/5/09

330 3m glass 1.5E-6 40 100 6.5 400

400

up to 4 A/S
34-32 6.5
The meter deposited many but the evap. be ~~poor~~ good. Deposition rate is well to fast (25W/A sputter C/M/S) 100
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Ronit
Mixed Cu 03/06

Cooper Kauer 03/31 12:30-7:00 Ti Si 1x10⁻⁶ 45 1.9 91 6.5 60
 mA

Cooper Kauer 03/31 12:30-7:00 Ni Si 1x10⁻⁶ 45 1.9 83 7.5 6.5
 mA

ARRON 05/04 3:20-08:00 glass 1x10⁻⁶ 1 60
 mA

ARRON 05/04 4:15-08:00 copper glass 4.5 70

ARRON 05/04 4:18-08:00 Cu glass 4 65

Cooper 01/23 2:00-7:00 Al₂O₃ Si 1x10⁻⁶ 45 0.6 51 6.5 20 mm
 min 0.6 45 150 mm

ARRON 06/30 7:30 AM-8:30 AM Ti Si 1x10⁻⁷ 1h 1.6 90 6.5 7 mm

ARRON 07/17/09 9:30 PM-11:00 PM Ti Si 8.7 2 1h 2.0 6.5 80 mm

ARRON 07/17/06 4:00-6:00 PM Ni Fe 6.5 2 4h 2.0 6.5 80 mm

ARRON 09/17/06 10:12:00-11:00:00 PM Fe 3h 4 6.5 2 40 85
 300 200 50 10 mm

JEFF 3/31 1:00-2:00 PM Ni glass 1h 30 4 100 6.5 30
 John

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Ronzi Micaco	03/21	9:00	AL	Sil	1.1x10 ⁻⁶	20 min	20 Å/sec	20 mA	6.5	311	300 nm			
Kortt McKeens	03/24	3:00	AL	Sil	1.1x10 ⁻⁶	20 min	7 Å/sec	100 mA	6.5		300 nm			
Hyungin	03/10	10:30	Si	glass	1.1x10 ⁻⁶	20 min	6 Å/sec	40 mA	6.5		400 nm			
Hyungin	03/10	8:40	Si	glass	1.1x10 ⁻⁶	20 min	2 Å/sec	100 mA	6.5		200 nm			
Hyungin	03/11	3:30	Cr	glass	1.5x10 ⁻⁶	20 min	2.5 Å/sec	110 mA	6.5		700 nm			
Nelson	3/10/09	11:00	Al	glass	1.8x10 ⁻⁶	30 min	34 Å/sec	0.99 mA	6.5		500 nm			
Steven Brett	3/12/09	11:00	Al	glass	1.1x10 ⁻⁶	30 min	34 Å/sec	0.99 mA	6.5		500 nm			
Gagan Kumar	3/23/09	11:00	Al	Si	1.1x10 ⁻⁶	15 min	1.0 Å/sec	90 mA	6.5		400 nm			
Gagan Kumar	3/26/09	11:00	Al	Si	1.5x10 ⁻⁶	15 min	1.0 Å/sec	100 mA	6.5		600 nm			
Mike Johnson	3/27	10:10	AL	glass	1.2x10 ⁻⁶	45 min	3 Å/sec	0.99 mA	6.5		500 nm			
Paul Phillips	4/2/09	12:00	Al	Si	1.7x10 ⁻⁶	1 hour								

Paul p.p.h@eng.uitah.edu

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Steve Smith	4/19	12:43	A1	Glass	1.4 x 10 ⁻⁶	30 min		208	6.5					Machine didn't deposit, no show anywhere
N-Hun Nelson	4/19	12:43	A1	Glass	1.4 x 10 ⁻⁶	4		208	6.5					No deposition occurred, no further analysis.
Nelson	4/16	12:53	A1	Glass	1.4 x 10 ⁻⁶	45 min		42	6.5					Success
Steve Smith	4/16	12:53	A1	Glass	1.4 x 10 ⁻⁶	45 min		42	6.5					None
RAJESH S	4/24	11:00	A1	Si PDMS and epoxy	8.0 x 10 ⁻⁷	40 min	15.4	0.075	6.5					Successful deposition
Rajesh S	5/5	9:06	Au	Parylene	5.5 x 10 ⁻⁷	45 min	1.14	6.5						Successful deposition
AJESH S	5/12	4:45 PM	Au	Parylene	4.5 x 10 ⁻⁷	45 min	2.4	0.05	6.5					99
AJESH S	5/18	5:45 PM	Au	Parylene										Need crystal change SEM is shown
RAJESH S	5/19	10:30 AM	Au	PDMS	1.5 e-6	1:25 hrs	1.5	0.045	6.5					Successfully deposited.
RAJESH S	5/27	1:30 PM	Au	SiO ₂	8.9 e-7	1:00 hrs	1.5	0.045	6.5					Successful deposition.

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Handwritten Name 8-22-01	8-22-01	11:47	Chromium	glass	1.2-10 ⁻⁶	1hr 24	1.5 Å/s	0.041	6.5	RT	150nm			
Handwritten Name 8/22/01	8/22/01	3:00pm - 4:40pm	Au	glass	1.0-10 ⁻⁶	40min	2.4 Å/s	0.041	6.5	RT	45.3nm			
Handwritten Name 8/23/01	8/23/01	2-5	Al	Glass DEKTA	1.2x10 ⁻⁶	1hr 8 1/2	0.80 Å/s	6.5	RT	150nm				
Handwritten Name 8/14/01	8/14/01	9:30am - 11:00am	Au	glass	1.0-10 ⁻⁶	40min	2.4 Å/s	0.041	6.5	RT	45.3nm			
Handwritten Name 8/14/01	8/14/01	9:50am - 10:45am	Al	glass	1.0-10 ⁻⁶	38min	3.8 Å/s	0.041	6.5	RT	45.2nm			After deposition when turning down current the e-beam moved forward & was sparking against front of heater. it was right on Al during deposition.
Handwritten Name 8/19/01	8/19/01	11:20am - 12:15pm	Au	glass	1.0-10 ⁻⁶	35min	0.7 Å/s	0.041	6.5	RT	45.8nm			Voltage is constant & varying.
Handwritten Name 8/14/01	8/14/01	11pm - 1am	Si	Si	8x10 ⁻⁷	1hr	0.6 Å/s	6.5	RT	104nm				
Handwritten Name 8/14/01	8/14/01	12pm - 1pm	Si	Si	2x10 ⁻⁷	1hr 15hr	1 Å/s	6.5	RT	106nm				
Handwritten Name 8/15/01	8/15/01	2:00pm - 3:00pm	Si	Si	5x10 ⁻⁷	30min	1 Å/s	0.30	6.5	RT	50nm			
Handwritten Name 8/27	8/27													Replace with pump
Handwritten Name 10/27/01	10/27/01	12:00pm - 1:30pm	Al ₂ O ₃	Al ₂ O ₃	2.5x10 ⁻⁷	1hr	6.5	6.5	RT	20nm				

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Jorgin	11/11	2:30	Ti	glass	10^{-7}	0.5/0.5	10	91	6.5	25	30	200	500	
Jeff Johnson	11/11	3:30	Al	Si	1.3×10^{-4}	5hr	10	91	6.5	25	30			
Chingjin	01/15/10	2:00	Ti Al	glass	10^{-7}	50m	10.5	140	6.5			5um 35um		The top-view window is blocked.
Chingjin	01/27/10	2:00pm	Ti Al	glass	10^{-7}	4um	20.8	150	6.5			1um 35um		

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ASHLEY 05/28 A.15 cr/Au PDMSe-7 **9.4** 1:15 1:0 0:50 6:5 min

MCHIT 10:50 12:00 Cr/Au Si 3.7 45 0.5 Å/s 15 40 6.5 - 4mm
 MENEN 12:00 12:00 X10 F min

1/14 10:30 11:30 SiO₂ 3.0 Å/s 45 50 6.5 - down

Solar 11/05 11:30 Ar Si 2.2 Å/s 1hr 15 Å/s 80 6500 - 0.5

11/18 11:30 12:00 Si 4.0 Å/s 45 50 6.5 - 0.5

11/22 10:30 11:30 Si 3.7 Å/s 45 50 6.5 - 0.35

Richard Merrill 12/10 3:16 4:54 Al Si 9.2 Å/s 1hr 17 Å/s 100 6.5 - 0.350

Richard Merrill 12/21 12:00 1:00 Cr Si 7.0 Å/s 1hr 5 Å/s 60 6.5 - 0.5
 12:00 1:00 SiO₂ 5 Å/s 6500 0.35

Brian Wall 1/20 3:20 Au SiO₂ 7e-7 45 min 1.1 51 mA 6.5 - 50um

1/20 1/20

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JEFF JOHNSON	02/03/10		Al	glass / CETs	1x 10 ⁻⁶	30 mins	10 Å/Sec	0.1A	6.5	25	370 nm	504 nm		
JEFF JOHNSON	3/4/10		Al	glass / CETs	3.5 x 10 ⁻⁷	30 mins	15 Å/Sec	0.1A	6.5	25	370 nm	film thickness 502 nm		
IVE	8/9/10		Am	graphite	3.5 x 10 ⁻⁷	30 mins	1.5 Å/Sec	0.07	0.5	25		400 nm		
Faisal	2/12/10		Ti	S	2.5 x 10 ⁻⁷	45 min	1.5 Å/Sec	0.02	6.5	24	20 nm			
The Nguyen	3/22/10		Am	graphite	3.5 x 10 ⁻⁷	30 mins	1.5 Å/Sec	0.04	6.5	25		200 nm		
Faisal	6/12/10		Ti	S	2.5 x 10 ⁻⁷	1 hr	1.0 Å/Sec	0.03	6.5	25	100 nm			
BRANKA	4/23/10		Cr	S	1x 10 ⁻⁶	1 hr	1.8 Å/Sec	50 mA	6.5	RT	700 nm			
CANPUD IE	4/10		Cr	Si	1x 10 ⁻⁶	40 mins	5 Å/Sec	107	6.5		357 nm			
Kamran	05/21		Cr	Si	1x 10 ⁻⁶		9.6 Å/Sec	60	6.5	RT	0.3			
Kamran	05/22		Cr	Si	1x 10 ⁻⁶		9.6 Å/Sec	60	6.5	RT	0.3			
RAJESH	06/09		Cr	Si	1x 10 ⁻⁶		5.4 Å/Sec	0.35	6.5	RT	250 nm			

RAJESH 06/23 Cr Au Kapton 1.2e-6 Torr 5.7 0.35 6.5 RT 250 nm
 JENNIFER 07/02 Cr Au Kapton 1.2e-6 Torr 1.6 0.42 6.5 RT 250 nm
 SIN 74x10⁴ 45 min 14042A 6.5 200 nm.

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Moojin	2/17/2010	2 Pm	TE Au	glass	9x10 ⁻⁷	40m	0.8	100	152	6.5		5µm 135µm		
Moojin	2/23	5:44pm 6:30pm	TE Au	glass	9x10 ⁻⁷	15m	0.9	155	142	6.5		5µm 135µm		The light of gun water is off again.
Hannul	3/02/2010	12:50 1:50pm	Ti	Si	9.15 ^h	30 min	1	46	65			3µm		
Moojin	3/02/2010	3:30pm 4:50pm	TE Au	glass	3x10 ⁻⁷	40m	0.9	158	140	6.5		5µm 135µm		gun wiper?
Hannul	3/04/2010	10:20Am	Ti	SiO ₂	2.5x10 ⁻⁷	35 min	1	46	65			9µm		
Jett Jahnke	3/4	9:30	Ni	cerms	6x10 ⁻⁷	30	70 Å/min	95	6500			35µm		
"	3/8	1:00	Ni	cerms	5x10 ⁻⁷	30	3 Å/s	.1A	6500			35µm		
"	3/1	2:30			5x10 ⁻⁷	40 min	1 Å/s	0.1A	6500			47µm		
Moojin	3/9	5:20pm	TE Au	glass										System cannot be pumped down!
Brimhall	3/10	4:15	Au	ITO	1e-6	1hr	0.5 Å/s	0.07 A	6500			25µm		
Moojin	3/10	5:30pm 6:30	TE Au	glass										System cannot be pumped down!

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Jeff J Hawthorn N	3/15/10	2:50 pm	Ni	CET3 / Au	2.3 x 10 ⁻⁷	0.5 hrs	1.5 Å/s	0.195	6.5	25		film thickness 420nm		
Brimhall	3/17/10	4:00pm	Cr/Au	ITO	3.0-7	40min	0.7 Å/s	0.06	6.5			16.6nm Cr 15nm Au		
Essal	3/18/2010	10am	Ti	Si	1.4e-7	1hr	1.0 Å/s	0.28	6.5	25	20nm			
Hammada	3/23/10	9:40am	Pol	SiO2	2.1e-7	45 min	1.4 Å/s	0.06	6.5	RT	3nm			
Nathan Cary	4/1	9:45 am	Ni, Fe, Si	Si	6.0e-7	45	0.3	0.55	6.5		20nm			
Xiaojin Jiao	4/6	3pm	Ti	glass	9.4e-7	50	1.5 Å/s	0.13	6.5		5nm			
Niki Brimhall	4/8	1:30	Cr, Au	ITO	1e-6	50	1.0	0.04	6.5		5nm 25.1nm			Changed the Al foil during the window tape
Jeff J	4/8	1:30	Cr, Au	ITO	1e-6	50	1.0	0.04	6.5					Jeff J Ni @ H3

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Cirravu Taylor 4/13/10 1:50pm - 3pm Au glass 1.0 x 10⁻⁶ 45min 2.1 0.0186.5 RT 0025 µm

UT Lund 4/14/10 2:15 AL ITO 2.10⁻⁶ 40 min 22 80 6.5 RT 335 Å

Xiangjin Jiao 4/20/10 4:30pm - 5:35pm Au glass 1.0 x 10⁻⁶ 50min 1.5 1.5 6.5 135nm

Xiangjin Jiao 4/21/10 1:00pm - 2:30pm Ti glass 1.0 x 10⁻⁶ 60min 1.5 1.5 6.5 135nm

SANDSD LET 4/22 10:45 AM Ti GE 1.0 x 10⁻⁶ 90min 1.2 1.2 6.5 1.0µm

Fossil 4/22 2pm Ti 1015 Å

Hannuoda 4/23 12PM Pd SiO₂ 1.0 x 10⁻⁶ 45 min 1 0.06 5.5 RT 5 nm

Brimhall 5/5 1:50 Cr/Au SiO₂ 1e-6 45min 1.5 0.05 6.5 15.3nm Cr 3e-2nm Au

Brimhall 5/7 10:45 Ti/Au SiO₂ 1e-6 45min 1.8/5 0.06 6.5 16 nm Ti 20 nm

11 5/13 11:45 Au Si 1e-6 45min 1.8/5 0.06 6.5 36.2 nm

" 5/14 11:30 Ti Au 0.5 Å/s 0.06 1.3 Å/s 0.04 6.5 20.8nm Ti 200nm Au

Contamination visible in Crucible from previous cycle. Sparked/cleaned crucible. All light + gun water is on. Top viewer is blocked.

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Winn	07/02/10		Cr	SIN	7x10 ⁻⁷	45 min	0.2	92	6.5		200nm			
Forsythe	07/06/10		Ti Fe	SIN	1hr	3.3	65	6.5			5nm 100nm			
Carra	07/07/10	10:40 am	Ti	glass	1x10 ⁻⁶	45 min	0.5	59	6.5		2 nm			
Burns	07/07/10		Hf	glass	1x10 ⁻⁶	45 min	7.3	51	6.5		50 nm			
Carra	7/7/10	2:25 pm	Au	glass	1x10 ⁻⁶	45 min	5.5	52	6.5		50 nm			
Hardman	7/7/10	3:30 pm	Ti	Si	1x10 ⁻⁶	45 min	0.5	47	6.5		100nm			
Winn	7/7/10	5:00 pm	Ti	Si	1x10 ⁻⁶	45 min	0.5	47	6.5		100nm			
Jeff	7/6/10	3:30 pm	Ni	glass	1x10 ⁻⁶	45 min	1.8	90	6.5		25			
Johnson	7/6/10		Ti	Si	1x10 ⁻⁶	45 min	0.2	47	6.5		50 nm			
Hardman	7/13/10	11:40 am	Ni	Si	7x10 ⁻⁷	45 min	1.4	70	6.5		40nm			
Cinray Taylor	7/14/10	10:20 - 10:50	Ag	glass	1-10 ⁻⁶	40 min	2.8	45	6.5		50nm			
Chen	7/15/10	11:00 am	Fe	Si	7x10 ⁻⁷	30 min	0.1	65	6.5		50nm			
Winn	7/15/10		Fe	Si	7x10 ⁻⁷	30 min	0.1	65	6.5		50nm			

DENTON E-GUN LOG SHEET-Please fill out as completely as possible for characterization and maintenance purposes

Name/Phone #	Date	Log In/ Log Out Times	Evaporated Material(s)	Substrate (Type)	Base Pressure (Torr)	Pump Down Time (hours)	Maximum Deposition Rate (Å/Sec)	Max Beam Current (mA)	Beam Voltage (kV)	Substrate Temp (C)	Crystal Film Thickness (µm)	Measured Film Thickness (µm)	4-point Sheet Resistance (ohm/sq)	Stress/Results/Problems/Maintenance/Etc
Yan	7/23/2010	3:00 4:30	AP	Si3N4	10 ⁻⁷	1	2.3	57	6.5		0.38			
Yan	7/24/2010	3:00 4:30	AK	SiN	10 ⁻⁷	1	11.7	56	6.5		1.15			
Greg	7/24/2010	9:50	CR	Glass / Z3 Pwnt	10 ⁻⁶				6.5					gun water misting had to give up, however is working on it
David	7/29/2010	11:00	A1	Glass	10 ⁻⁶	30.5	91	6.5			1.04			... A terrible defect at the bonds of the gun water sensor.
David	7/29/2010	3:20	A1	Glass	10 ⁻⁶	7	89	6.5			?			Crystal thickness meter Not functioning
Jason Kleinbaum	30 Jul 2010	10:10	TM	Si Si/Si	12x10 ⁻⁶	45	2.0	55	6.5		0.06			
Jason Kleinbaum	30 Jul 2010	11:30	TM	Si	1.2x10 ⁻⁶	"	1.2	75	6.5		0.20			
Nathan Greig	30 Jul 2010	2:30	NI	Fe Al ₂ O ₃ ZnO	1x10 ⁻⁶	45	0.8	90	6.5		0.14			
Greg	02 Aug 2010	10:15 11:45	CR	Si	1x10 ⁻⁶	1hr	8.3	72	6.5					
Trevor	30 Jul 2010	1:00	SI			2300 hr	6	76	6.5		0.1µm			

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Name/Phone # _____ Date _____ Log In/ Log Out Times _____ Evaporated Material(s) _____ Substrate _____ Base Pressure (Torr) _____ Pump Down Time (hours) _____ Maximum Deposition Rate (Å/Sec) _____ Max Beam Current (mA) _____ Beam Voltage (kV) _____ Substrate Temp (C) _____ Crystal Film Thickness (µm) _____ Measured 4-point Film Thickness (µm) _____ Sheet Resistance (ohm/sq) _____ Stress/Results/Problems/Maintenance/Etc _____

Jason Kienstwaldt 2A 8/10 2:45 T₁ Si 1.2x10⁴ 1hr 10 71 6.5 0.072 µm

Jason Kienstwaldt 2A 8/10 2:45 Au Si 1.2x10⁴ 1hr 2.0 96 6.5 0.48 µm
8017265060

C Taylor 8/8/10 10:30 Ag glass 1.10⁻⁴ 45 min 20 75 6.5 50.2 nm

David W 8/3/10 3:00 Al glass 1x10⁶ 1.5hrs 35.8 90 6.5 100 nm

Greg 8/4/10 9:15 Cu 1.7x10⁴ 45 min 5.2 90 6.5 0.150 µm

Trevor K 8/5/10 9:45 Cr Si 1x10⁶ 45 min 12.5 80 6.5 300 nm

Trevor K 8/5/10 12:00 Al Si 1x10⁶ 1hr 6.5 6.5 300 nm

Gara Barnes 8/5/10 3:25 Au glass 1x10⁴ 1hr 2.9 55 6.5 50.3 nm

Robert Sam 8/6/10 2:45 Cr Si 1x10⁴ 45 min 7.5 45 6.5 100 nm

C Taylor 8/11/10 10:20 Ag glass 1.10⁻⁴ 40 min 3.2 37 6.5 50.2 nm

C Taylor 8/11/10 11:30 Ag glass 1.10⁻⁴ 45 min 3.2 31 6.5 50.2 nm

DENTON E-GUN LOG SHEET- Please fill out as completely as possible for characterization and maintenance purposes

Name/Phone #	Date	Log In/ Log Out Times	Evaporated Material(s)	Substrate	Base Pressure (Torr)	Pump Down Time (hours)	Maximum Deposition Rate (Å/Sec)	Max Beam Current (mA)	Beam Voltage (kV)	Substrate Temp (C)	Crystal Film Thickness (µm)	Measured Film Thickness (µm)	Sheet Resistance (ohm/sq)	Stress/Results/Problems/Maintenance/Etc.
Heider	8/19	11:30	Ca Si	1x10 ⁶	1	2.3	73	65	50µm					
Alu	1/20													
Corey	20 Aug 2010	8:50 - 10:45	Cr	FRMS	1x10 ⁶	45 min	4.3	78	6.5		100µm	200µm		
Heider	8/20	2:30	Ca	Si	1x10 ⁶	45 min	4.2	55	6.5					
Alu	1/20													
David Waters	8/20/10	3:00	Al	gls	1x10 ⁶	55 min	7.1	132	6.5					
RASHISH	8/30	5:00	Cr	kapton	1x10 ⁶	2hrs	1.2	42	6.5		25µm	200µm		
Alu							1.9	19	42					
ROHIT	8/31	1:00	Cr	Si	1x10 ⁶	2hrs	1.8	80	6.5					
SHARADA	8/31	3:00												
LAWE														
Carly	9/2/10	9:00 AM	Ca	Si	1x10 ⁶	75 min	7.8	80	6.5		200µm			
Heider														
Greg	9/2/10	10:30 - 11:30	Cr	Pass	1x10 ⁶	45 min	5.9	80	6.5		150µm			
RASHISH	9/2	2:30	Cr	kapton	1.5e6	1hr	11.2	42	6.5		25µm			
Alu				PDMS			1.3	42	6.5		200µm			
Karun	9/2	12:05	Ni	Si	1e6	1hr	0	120	6.5					
2:00														

7/200µm ~~200µm~~ had for a crack

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Name/Phone #	Date	Log In/ Out Times	Evaporated Material(s)	Substrate	Base Pressure (Torr)	Pump Down Time (hours)	Maximum Deposition Rate (Å/Sec)	Max Beam Current (mA)	Beam Voltage (KV)	Substrate Temp (C)	Crystal Film Thickness (µm)	Measured Film Thickness (µm)	4-point Sheet Resistance (ohm/sq)	Stress/Results/Problems/Maintenance/Etc
Quadrup 5-74134	9/18	9:30 AM / 11 AM	Cr	Si	1x10 ⁻⁶ Torr	45 min	28	71	6.5	-	200 nm	200 nm		
Korun 906320 8864	9/18	12:15 / 2:35	Cr	Cr	1x10 ⁻⁶ Torr	40 min	28	51	6.5	-	80 nm	80 nm		
VASESH S	9/10	12:45	Au	PMMA	2x10 ⁻⁶ Torr	50 min	20	40	6.5	-	500 nm	500 nm		
Korun	9/10	9:00	Fe	Si ₃ N ₄	1x10 ⁻⁶ Torr	45 min	3	60	6.5	-	60 nm	60 nm		
Korun	9/11	7:00	Fe	Si ₃ N ₄	1x10 ⁻⁶ Torr	45 min	3	60	6.5	-	20 nm	20 nm		
Korun	9/12	5:00	Fe	Si ₃ N ₄	1x10 ⁻⁶ Torr	45 min	3	60	6.5	-	20 nm	20 nm		
Korun	9/14	10:00	Fe	Si ₃ N ₄	1x10 ⁻⁶ Torr	45 min	3	60	6.5	-	20 nm	20 nm		
Daniel	9/14	3:30	Al	PMMA	1x10 ⁻⁶ Torr	30 min	27	95	6.5	-	10 nm	10 nm		
Ronnie S/N	9/22	2:00 / 4:00	Al	glass	1x10 ⁻⁶ Torr	10 min	70	65	6.5	-	10 nm	10 nm		
Korun	9/24	8:00 / 5:30	Fe	Si ₃ N ₄	1x10 ⁻⁶ Torr	45 min	50	65	6.5	-	20 nm	20 nm		

No reading on film thickness meters

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DENTON E-GUN LOG SHEET-Please fill out as completely as possible for characterization and maintenance purposes

Name/Phone #	Date	Log In/Out Times	Evaporated Material(s)	Substrate	Base Pressure (Torr)	Pump Down Time (hours)	Maximum Deposition Rate (Å/Sec)	Max Beam Current (mA)	Beam Voltage (kV)	Substrate Temp (C)	Crystal Film Thickness (nm)	Dektak Film Thickness (nm)	4-point Sheet Resistance (ohm/sq)	Stress/Results/Problems/Maintenance/Etc.
Ukrumelwit	6/18	1:30	Ti/Al	Si	1.0x10 ⁻⁶	1hr	1.0 Å/s	56 mA	6.5		20nm			
Shawler	6/22	1:30	Ag	Cu	1x10 ⁻⁶	30min	3.4 Å/s	103A	6.2kV					
Carra Barnes	6/23	2:00	Ti/Al	glass										cryo pump issues
Carra Barnes	6/24	2:20	Ag	glass	1x10 ⁻⁶	1.5 hr	1.5 Å/s	58 mA	6.5		23 nm			
Carra Barnes	6/24	4:00	Im	S ₃ N ₄	2x10 ⁻⁶	1hr	4 Å/s	68 mA	6.5		23 nm			
Carra Barnes	6/24	8:00	Fe	S ₃ N ₄	8x10 ⁻⁶	1.15 hr	2.5 Å/s	31 mA	6.5		90 nm			
CASESH	6/28	3:25 PM	Cu	PdMS	1e-6 Torr	1 hr								
Carra Barnes	6/28	11:00 PM	Ti	Si	9e-7 Torr	50 min	1.6 Å/s	90 mA	6.5		50 nm			
Greg Lillard	29 Jun 2010	10:15	Cu	glass										cleaned glass chamber/rack instead of using it
Carra Barnes	6/30/10	3:20 PM	Ti	glass	1x10 ⁻⁶	45 min	0.2 Å/s	57 mA	6.5					

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DENTON SPUTTERING LOG SHEET - Please fill out as completely as possible for characterization and maintenance purposes

Name/Phone #	Date and Log In/ Out Times	Sputter Material	Substrate (Tor)	Base Pressure Time (hours)	Pump Down Time (min)	Pre-Sputter Time (min)	Sputter Time (min)	Sputter Power (W)	Argon Pressure (mT)	Argon Cap. Man. Flow (%)	Film Stress (Mpa)	Film Thickness (um)	4-point Sheet Resistance Rate (ohm/sq)	Sputter Rate (um/min)	Changed Targets?	Results/Problems/Maintenance/Etc.
Kevin	1/3/00	200	Si	1x10 ⁻⁶	2 hrs	1	1	150	1	1	1	4.0 um				
Ernie	9-30	Cr	glass	15x10 ⁻⁶	45min	1	2	300W	1	2	1	2.60	125			
Jeff Johnson	5/5/02	Si	glass	2x10 ⁻⁶	5 hrs	1	2	100W	1	2	1	2.5	130			
Jeff Johnson	5/6/09	Si	quartz	1.8x10 ⁻⁶	1 hr	1	2	300W	1	2	1	2.5	18%			
MAHT	5/14/02	Al	glass	1x10 ⁻⁶	30min	1	2	200W	1	2	1	30				
Raharaj	05/17	Ni	Si	1x10 ⁻⁶	1.5 hrs	1	2	300W	1	2	1	30				
AARON	05/08	ITO	glass	1x10 ⁻⁶	3 hrs	1	2	200W	1	2	1	230				
Ernie	5/11	Al	glass	1x10 ⁻⁶	2 hrs	1	2	150W	1	2	1	30				Planning for Cr IVD in Aug 2011
Raharaj	05/11	Ni	Si	1x10 ⁻⁶	1.5 hrs	1	2	300W	1	2	1	30				