LIDERAC – List of Equipment opened in Qualified Self-service Mode

code	Equipment Description	Area	contact	CMOS* Compatib
NL7	FIB Zeiss 1560 XB	Nanotecnologies	Xavier Borrisé	M
NL2	EBL Raith 150, EBL for 4"	Nanotecnologies	Xavier Borrisé	X
NL6	SEM Zeiss Leo 1530 w EBL	Nanotecnologies	Xavier Borrisé	X
NL8	AFM Veeco IV& Dim 3100	Nanotecnologies	Xavier Borrisé	X
NL1	NIL- Obducat 4" Thermal	Nanotecnologies	Xavier Borrisé	M
NL11	Optical Microscope Zeiss in nano area	Nanotecnologies	Xavier Borrisé	X
NL17	Wet station for spinning and developping resists for EBL and NIL	Nanotecnologies	Xavier Borrisé	X
NL12	SEM Zeiss Auriga 40 (fora SB)	Nanotecnologies	Xavier Borrisé	M
GH18	Tepla Gigabatch 360M O2 plasma asher	Wet Etching	Nuria Torres	M
GH9	Quimipol Inmersion chemical bench	Wet Etching	Nuria Torres	M
MS14	Confocal Microscope PLμ2300	Microsystems	Marta Duch	X
MS11	SB6 KarlSüss substrate bonder	Microsystems	Marta Duch	M
MS3	Critical Point Dryer Tousimis	Microsystems	Marta Duch	X
MS2	PLASMOS. Si-Glass wafer bonder	Microsystems	Marta Duch	M
MS10	3D Optical Profilometer - PLμ NEOX, Sensofar	Mycrosystems	Marta Duch	X
MS12 & MS13	Chemical wet bench: KOH, TMAH, Ni electroless, lift off	Microsystems	Marta Duch	X
MS15	Spinner Laurell WS-400A-6NPP/LITE	Microsystems	Marta Duch	X
FL7	Delta 80 Karl Suss spinner for SU-8	Photolithography	Javier Sánchez	X
FL10	Karl Suss MA/MB 6 2-sides aligner	Photolithography	Javier Sánchez	M
FL11	Hot Plates + fume hood	Photolithography	Javier Sánchez	X
FL18	Delta 20 - Spinner for PR and AZ	Photolithography	Javier Sánchez	X
FL36	Chemical Bench. Integrates PR developer Laurell WS-400A-6NPP	Photolithography	Javier Sánchez	M
FL28	PR Spinner Laurell WS-400A-6NPP/Lite	Photolithography	Javier Sánchez	X
FL21	Vacuum oven for MCM HMDS	Photolithography	Javier Sánchez	M
FL33	GBC 3500 Lamination Guide	Photolithography	Javier Sánchez	X
FL47	Kloe Dilase 650 Laser Writer	Photolithography	Javier Sánchez	X
FL45	Spinner Polymide Laurell WS-650MZ-23NPPB	Photolithography	Javier Sánchez	M
VM13	Nanospec 6100 UV/Visible interferometer	Inspection&Meas	Samuel Dacunha	X
VM1	Ellipsometer Rudolph AutoEL IV	Inspection&Meas	Samuel Dacunha	X

INFRAESTRUCTURA CIENTÍFICO TECNICA SINGULAR

LARGE-SCALE SCIENTIFIC AND TECHNICAL FACILITY

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VM11	Filmetrics F20. Optical interforemeter for thickness measurements	Inspection&Meas	Samuel Dacunha	X
VM18	Tencor P7 Stylus Profiler	Inspection&Meas	Samuel Dacunha	X
GS7	DRIE-ICP Alcatel AMS110-DE Dry etch for Si and dielectrics	Dry Etching	Roser Mas	M
PT10	Plasmalab PL800- PECVD deposition of SiO2, Si3N4 and a-Si	Thermal Processes	Sara Durán	M
MT11	Biorad E-5000 Au-Evaporator	Metal – Characterization	Jose Calvo	M
CE5	Keithley 4200-SCS Semiconductor Parameter Analyzer	Electr. Characterisation	Sergi Sánchez	X
CE17	Keysight E4990A Impedance analyser	Electr. Characterisation	Sergi Sánchez	X
CE20	Test Probeshield MPI TS-2000SE	Electr. Characterisation	Sergi Sánchez	X

(*) Note:

The Clean Room has a CMOS technology acting as a reference, so that appropriate cleaning and contamination-free conditions must be observed. The same applies to a set of other CMOS-compatible or CMOS-like existing technologies. Therefore potential risks of contamination of equipment, tools and environment must be avoided. Those risks are basically of two types: a) alkali metal ions (Na, K) and b) contaminant metals like some noble metals (Au, Pt, Pd, Ag) that are almost impossible to remove by conventional cleaning processes used in the Cleanroom. The most critical systems from this point of view are the oxidation-diffusion furnaces.

Related to contamination of the equipment 3 levels are identified:
a) clean systems (**C**): only CMOS-technology-compatible samples can be processed.
b) MNC Equipment (**M**): contaminated samples (for instance with noble metals contents) can be processed.
c) Mixed systems (**X**): systems that can be considered as clean or as MNC, depending on the appropriate use of some accessories.