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

CODE	Equipment Description	Area	contact	CMOS* Compatible
NL01	NIL- Obducat 4" Thermal	Nanotecnologies	Xavier Borrisé	No CMOS
NL02	EBL Raith 150, EBL for 4"	Nanotecnologies	Xavier Borrisé	Mixed
NL06 / NL20	SEM Zeiss Leo 1530 & Zeiss 1560 XB	Nanotecnologies	Xavier Borrisé	Mixed
NL11	Optical Microscope Zeiss in nano area	Nanotecnologies	Xavier Borrisé	Mixed
NL17	Wet station for EBL/NIL resists	Nanotecnologies	Xavier Borrisé	Mixed
NL12	SEM Zeiss Auriga 40 (outside the CR)	Nanotecnologies	Xavier Borrisé	No CMOS
NL19	FIB Zeiss 550L (outside the CR)	Nanotecnologies	Xavier Borrisé	Mixed
NL21	AFM Bruker ICON	Nanotecnologies	Xavier Borrisé	No CMOS
GH09	Quimipol Inmersion chemical bench	Wet Etching	Nuria Torres	No CMOS
GH18	Tepla Gigabatch 360M O2 plasma asher	Wet Etching	Nuria Torres	No CMOS
MS02	PLASMOS. Si-Glass wafer bonder	Microsystems	Marta Duch	No CMOS
MS03	Critical Point Dryer Tousimis	Microsystems	Marta Duch	Mixed
MS10	3D Optical Profilometer PLμ NEOX	Microsystems	Marta Duch	Mixed
MS11	SB6 KarlSüss substrate bonder	Microsystems	Marta Duch	No CMOS
MS12/MS13	Chemical wet benches: KOH, lift-off…	Microsystems	Marta Duch	Mixed
MS14	Confocal Microscope PLμ2300	Microsystems	Marta Duch	Mixed
MS15	Spinner Laurell WS-400A-6NPP/LITE	Microsystems	Marta Duch	Mixed
FL07	Delta 80 Karl Suss spinner for SU-8	Photolithography	Javier Sánchez	Mixed
FL10	Karl Suss MA/MB 6 2-sides aligner	Photolithography	Javier Sánchez	No CMOS
FL11	Hot Plates + fume hood	Photolithography	Javier Sánchez	Mixed
FL18	Delta 20 - Spinner for PR and AZ	Photolithography	Javier Sánchez	Mixed
FL26	UV insolator SPECTRO	Photolithography	Javier Sánchez	No CMOS
FL28	SiC PR Spinner Laurell 6NPP/Lite	Photolithography	Javier Sánchez	Mixed
FL33	GBC 3500 Lamination Guide	Photolithography	Javier Sánchez	Mixed
FL36	Fume hood with developer Laurell	Photolithography	Javier Sánchez	No CMOS
FL45	Spinner Polymide Laurell 23NPPB	Photolithography	Javier Sánchez	No CMOS
FL47	Kloe Dilase 650 Laser Writer	Photolithography	Javier Sánchez	Mixed
FL52	Polyimide OvenVan N67	Photolithography	Javier Sánchez	No CMOS

ICTS- Integrated micro-nanofabrication CLEANROOM

CODE	Equipment Description	Area	contact	CMOS* Compatib
VM13	Nanospec 6100 UV/Vis Reflectometer	Inspection&Meas	Samuel Dacunha	Mixed
VM18	Tencor P7 Stylus Profiler	Inspection&Meas	Samuel Dacunha	Mixed
VM19	Horiba Jobin Ivon/AutoSE Ellipsometer	Inspection&Meas	Samuel Dacunha	Mixed
VM22	Raman spectrometer Horiba XploRa	Inspection&Meas	Gemma Rius Samuel Dacunha	Mixed
GS07	RIE-ICP Alcatel AMS110	Dry Etching	Roser Mas	No CMOS
GS11	RIE Sentech Si MNC	Dry Etching	Roser Mas	No CMOS
PT10	PECVD Plasmalab PL800 SiO SiN a-Si	Thermal Processes	Sara Durán	No CMOS
MT11	Biorad E-5000 Au-Evaporator	Metal – Characterization	Leyre / Xevi	No CMOS
CE05+CE15	Keithley 4200-SCS Semiconductor Parameter Analyzer + Wafer Prober	Electrical Characterisation	Sergi Sánchez	CMOS
CE17	Keysight E4990A Impedance analyser	Electrical Characterisation	Sergi Sánchez	Mixed
CE20	Test Probeshield MPI TS-2000SE	Electrical. Characterisation	Sergi Sánchez	Mixed

(*) Note:

The Clean Room (CR) 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, Cu, 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, three levels are identified:

a) **CMOS** line tools/systems: only CMOS-technology-compatible samples can be processed.
b) **No CMOS** (or MNC) tools/systems: metal contaminated samples (noble metals & alkalines) can be processed.
c) **Mixed** tools/systems: systems that can be considered as CMOS or No CMOS, depending on the appropriate use of some accessories.