

Experiment Proposal

Experiment number GP2022014

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Co-investigator
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Experiment title

NIMSF Non Invasive Morphological Surface Analysis

SRF Instrument
Atomic Force Microscopes
Days requested: 5
Access Route

Rapid Access

Previous GP Number: -
Science Areas

Materials

DOI: -
Sponsored Grant

None

Sponsor: -
Grant Title

-

Grant Number: -
Start Date

-

Finish Date: -
Similar Submission?

-

Industrial Links

-

Non-Technical Abstract

The NIMSF project is related to the industrial/scientific collaboration between the University of Milano-Bicocca and the company Industria Elettronica Varese. Object of the collaboration is the non invasive morphological surface characterization of quartz sample with nanometric resolution. The produced quartz samples need to be characterized in order to the final production of sensor of movement and it is important to have a preliminary verification of the characteristic of the surface morphology with particular interest to the following parameters. Ra (Roughness average), Rq (Root mean square roughness), Rt (Maximum height of the profile), Rv (Maximum profile valley depth), Rp (Maximum profile peak height), Rpm (Average maximum profile peak height), Rmax (Maximum roughness depth). The sample are analyzed by Atomic Force Microscopy in the imaging mode over about one hundred of different points of the surface. The number of requested samples analysis are of the order of several tenth every couple of months.

Publications

-

Instruments
Access Route
Science Areas
Sponsored Grant
Grant Title
Start Date
Similar Submission?
Industrial Links
Days Requested:
Previous RB Number:
DOI:
Sponsor:
Grant Number:
Finish Date:


Sample record sheet

Principal contact Professor Francesco Mantegazza, Università Milano-Bicocca, ITALY
SRF Instrument **Atomic Force Microscopes** **Days Requested: 5**
Special requirements:

SAMPLE

Material	quartz plates	-	-
Formula	SiO ₂	-	-
Forms	Solid		
Volume	5 cc		
Weight	1000 mg		
Container or substrate	-	-	-
Storage Requirements	-	-	-

SAMPLE ENVIROMENT

Temperature Range	- K	-	-
Pressure Range	- mbar	-	-
Magnetic field range	- T	-	-
Standard equipment	-	-	-
Special equipment	-	-	-

SAFETY

Prep lab needed	Yes	-	-
Sample Prep Hazards	-	-	-
Special equip. reqs	-	-	-
Sensitivity to air	No	-	-
Sensitivity to vapour	No	-	-
Experiment Hazards	-	-	-
Equipment Hazards	-	-	-
Biological hazards	-	-	-
Radioactive Hazards	-	-	-
Additional Hazards	-	-	-
Additional Details	-	-	-
Sample will be	Returned to user by instrument - scientist (when inactive)	-	-

