

EURAMET Project No 1239

Measurement of surface roughness by AFM

2nd circulation

Pilot:

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Surface Metrology / Roughness Measuring Methods

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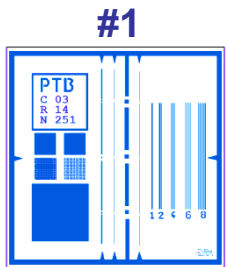
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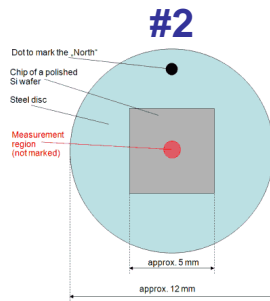
Instrument: Atomic force microscope (AFM)

Samples:

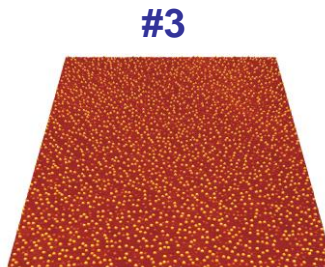


nom.1000 nm

step height standard

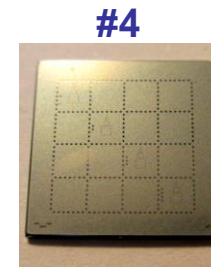


polished Si wafer



„smaller nanodots“

Ge-Si nanodot samples



Simetrics RnS
Lapped Si chip



Simetrics RS-N
resolution standard

NMIs willing to participate (2nd):

CEM, CMI, DFM, LNE, METAS, MIKES, NPL, PTB, SMD, RISE, VSL and NIST

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Time schedule @ 26.9.2018

Inst.-Nr.	Institute	Task	Month planned	received	send to next	comment
1	PTB	Measurements	2014		???	Measurement by SiS-Nanostation
10	CMI	Measurements	???	???	27.06.2018	Measurement by ...
	PTB	waiting for further activities				
1						
Inst.-Nr.	Institute	Task	Month planned	received	send to next	comment
1	PTB	Measurements	May 2018		27.06.2018	Measurement by Bruker Icon
2	LNE	Measurements	July 2018	02.07.2018	03.08.2018	Two Instruments used, no problems
	PTB	Summerbreak/ custom	Aug/Sep 2018	10.08.2018	13.09.2018	visual inspection
1a				?		
	METAS	Measurements	Oct. 2018	24.09.2018		Si wafer contaminated during transit
3						
1b	PTB	custom	Nov 18			
4	DFM	Measurements	Nov 18			
1c	PTB	vis. Insp.	Dec. 2018			
5	NPL	Measurements	Jan 19			
6	VTT-MIKES	Measurements	Feb 19			
7	SMD/FGOV	Measurements	Mar 2018			
8	VSL	Measurements	Apr 19			
9	CEM	Measurements	May 2018			
10	CMI	Measurements	Jun 19			
1d	PTB	vis. Insp., custom	Jul 19			
11	NIST	Measurements	Jul/Aug 2019			
1e	PTB	Final Insp./ Custom	Aug/Sep 2019			

2nd circulation of samples is on time