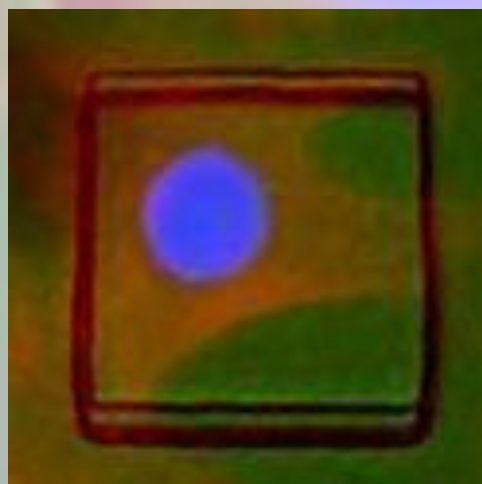




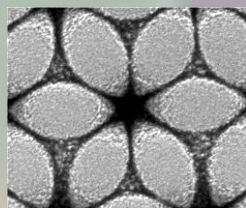
New Nanolithographed Transparent Substrates for Biotechnology and Material Sciences

Because Position matters!

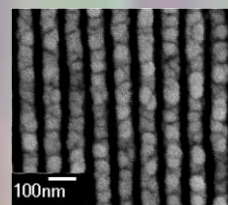
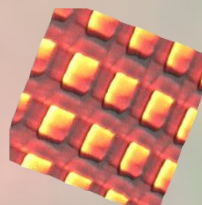
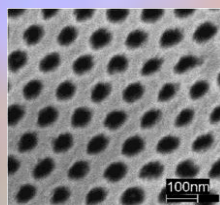
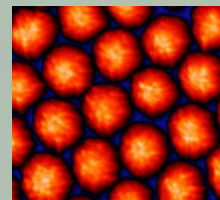


ΔRGOS

Transparent and reutilizable substrates for molecular biology and cell individualization



Advanced Substrates for microscopy

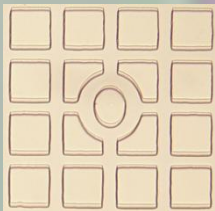
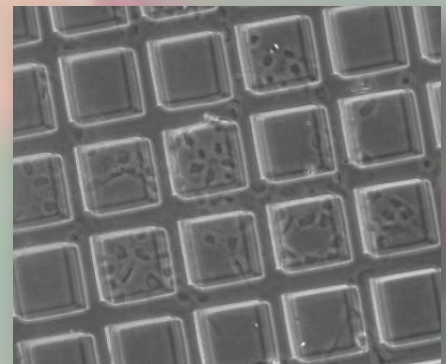
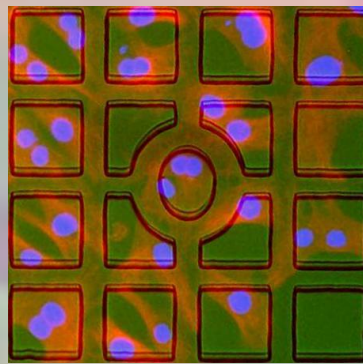
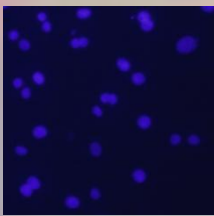
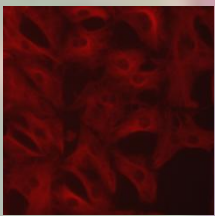


As you well know, your samples are scarce and expensive and they must be characterized by several techniques. Location of a specific region of interest is often difficult and demands an inadmissible cost of time.

ARGOS is the advanced solution to combine in a **reusable** sample holder the capacity of examination under SEM, AFM and optical microscopy techniques including confocal and fluorescence, always keeping the exact location of your samples.

ARGOS is a **transparent and reusable** substrate formed by array-ordered wells. ARGOS offer standard solutions and custom demands, where depth and width of wells are adjusted at micrometer range.

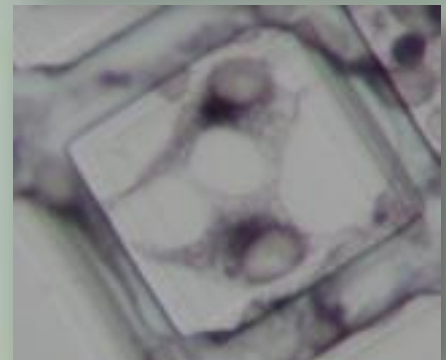
ARGOS is compatible both with standard and most advanced lab equipment. Direct manual sample deposition or a combination with a commercial spotter with **ARGOS** allows time and biological samples savings, and focus the analysis at the very specific target of the assay.



Courtesy of A. Chocarro-Calvo, J. M. García-Martínez, D. Horrillo, R. Palacios. (Universidad Rey Juan Carlos) and L. Sánchez-Ruiloba (Inst. Investigaciones Biomedicas "Alberto Sols" CSIC-UAM).

The lithographed wells allow the fixation of biological material from DNA oligonucleotides* to eukaryotic cells, over specific areas of the substrate.

Patterns may cover up to 1 cm² of surface area and there is a list of available shapes and depth of the wells.



The patented disruptive technology employed in the fabrication of **ARGOS** allows the adaptation to your specific needs, and significantly reduces the cost per assay.

*Nanoate has developed an specific hibridation protocol for microarray techniques.

ARGOS is made of modified TiO_2 . Modified TiO_2 gives physical and chemical endurance to the sample holder.



ARGOS is autoclavable and UV compatible and can be submerged directly into usual cleaning liquids, organic solvents and most acid or oxidative solutions.



ARGOS is stable up to 450 °C. These characteristics qualifies **ARGOS** to fast and easy cleaning methods ensuring optimal cleaning and sterilization after each use*. The surface of **ARGOS** can be easily modified from hydrophobic to hydrophilic.

Patterned surface is 3mm diameter. Standard wells may range from few nm to 5 μm in depth. If patterned area should be increased, depth may reach several more μm upon customer's request. A wide variety of micropatterns are available as for example squares, hexagons and lines.

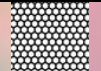
Availed patterns (over 3 mm diameter spot):

Squares

Pitch(μm)	500	340	250	165	125	125	125	83	83	
Size(μm)	420	285	205	125	90	113	113	58	73	

Pitch(μm)	62	62	57	62	37	42	25	16.5	12.5	
Size(μm)	37	54	49	40	29	37	19	11.5	7.5	

Hexagonal


Pitch(μm)	333	250	250	165	125	125	83	83	63	62	
Size(μm)	283	220	200	130	105	85	58	45	30	37	

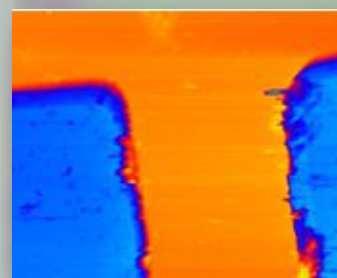
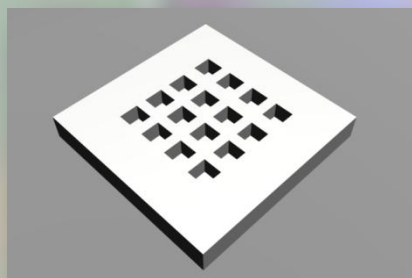
Lines

Pitch(μm)	500/33	333/83	250/63	
Size(μm)	450/283	283/43	212/25	

ID pattern

Squares identified with letters. There are wells of fixed size inside. This feature simplifies the identifications of different zones

#Squares	6	21	37	
Size(μm)	40	60	100	



ARGOS should be delivered with complete optical, SEM and AFM characterization upon customer request (final price may be increased)

*NANOATE recommends a maximum of 50 cleaning processes

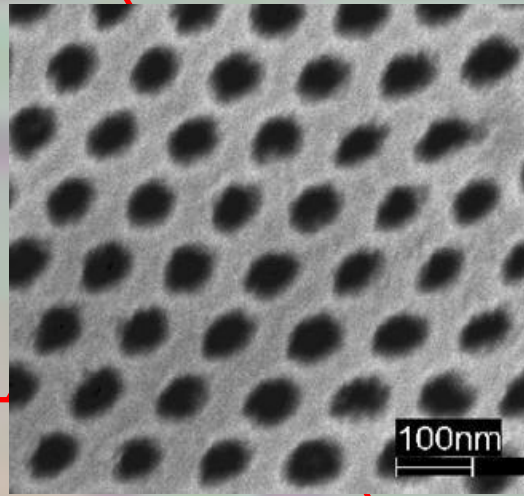
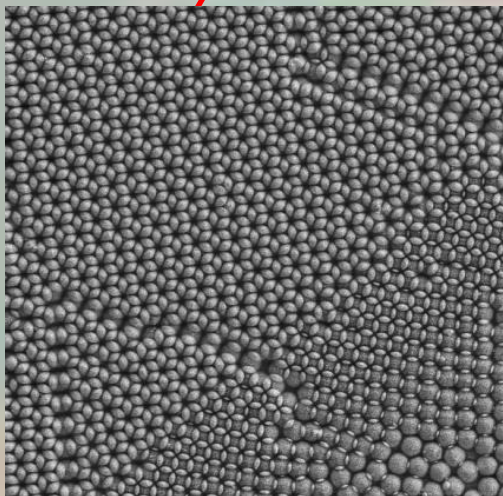
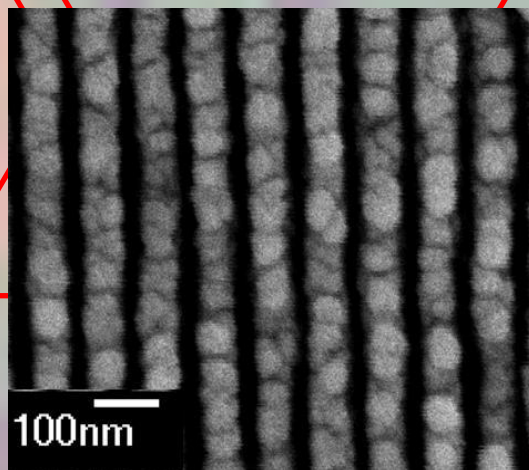
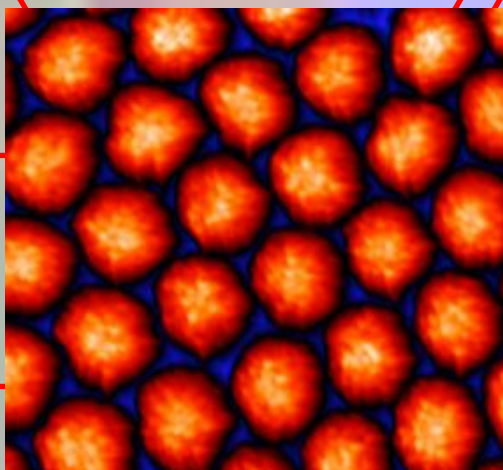


Products & Services

- Calibration Gratings for SEM and AFM*
- Masters for Imprint polymers & metals*
- Substrates for physical and chemical deposition*
- Scientific and technical support*

Specifications

- Patterns from 30 nm up to 500 μm .
- From 15 nm to 2 μm height structures.
- Up to 1 cm^2 of nanopatterned surface.
- Nanopattern resistance to H_2SO_4 , HNO_3 , HF and most common etchants
- Heat resistance up to 450°C
- Hydrofobic/hidrofocilic surface.
- Allows additional functionalizations.
- Transparent at Visible Spectra.



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