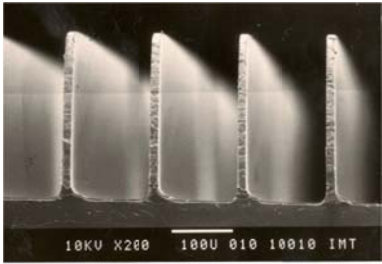
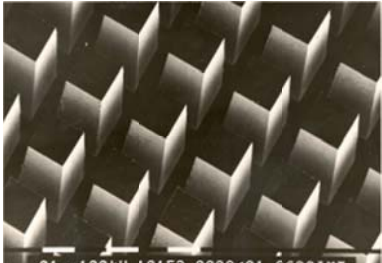
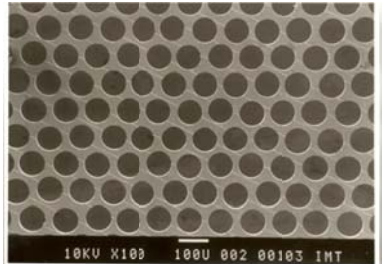
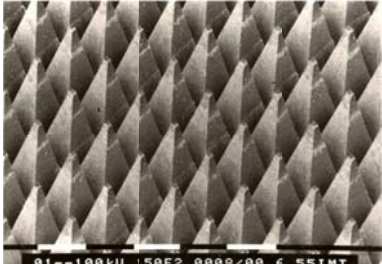


Micro Nano Patterning

HSPC micromachine (Diamond Milling)

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Material class:	Silicon X	Polymer X	Metal X	Ceramic	Glass X	Organic	Other
Short technology description:	Mechanical micro structuring is done by using a KERN milling machine. Highly precise structures can be realized using either off the shelf milling tools, or handmade special tools for specific applications. We do have experience in structuring nickel base alloys and diverse kinds of steels as well as brass and polymer.						
Typical structures and designs:			Channel structure – channel width 100 μm – wall width 10 μm				
			Pin structure for replication tool – pin dimensions 150*150 μm				
			Metal pattern with holes \varnothing 80 μm				
			Pyramidal structures for a replication tool				
Special features:	– Free form milling with high precision						
Limitations, constraints:	– Accuracy up to 1 μm on request – Cutting width routinely about 50 μm , finer structures on request – Aspect ratio routinely in the range of 10 with structures in the range of 50 μm						
Material examples:	– No undercuts						