Targets for Laser Plasma Physics

Peter Hilz

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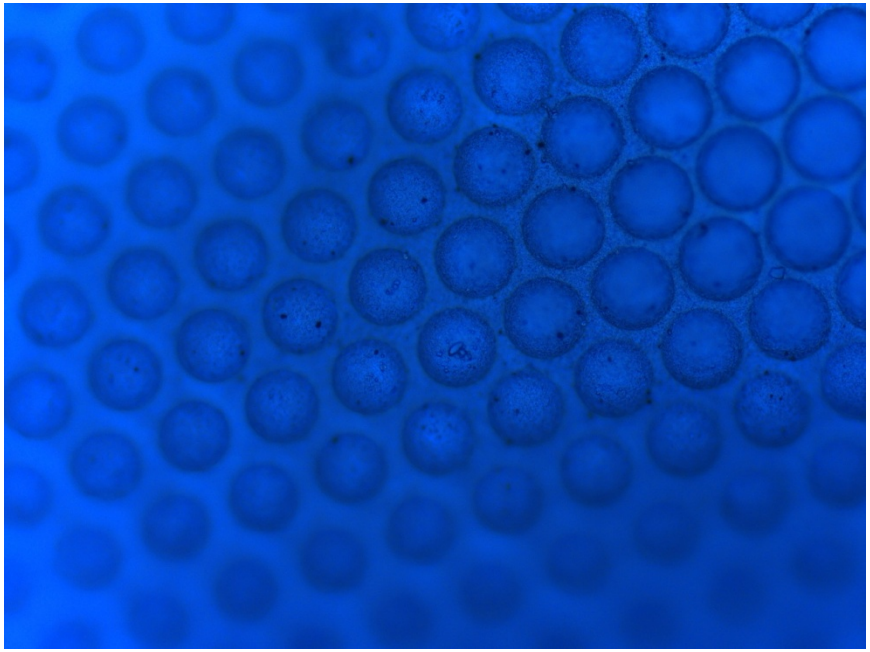
Summary



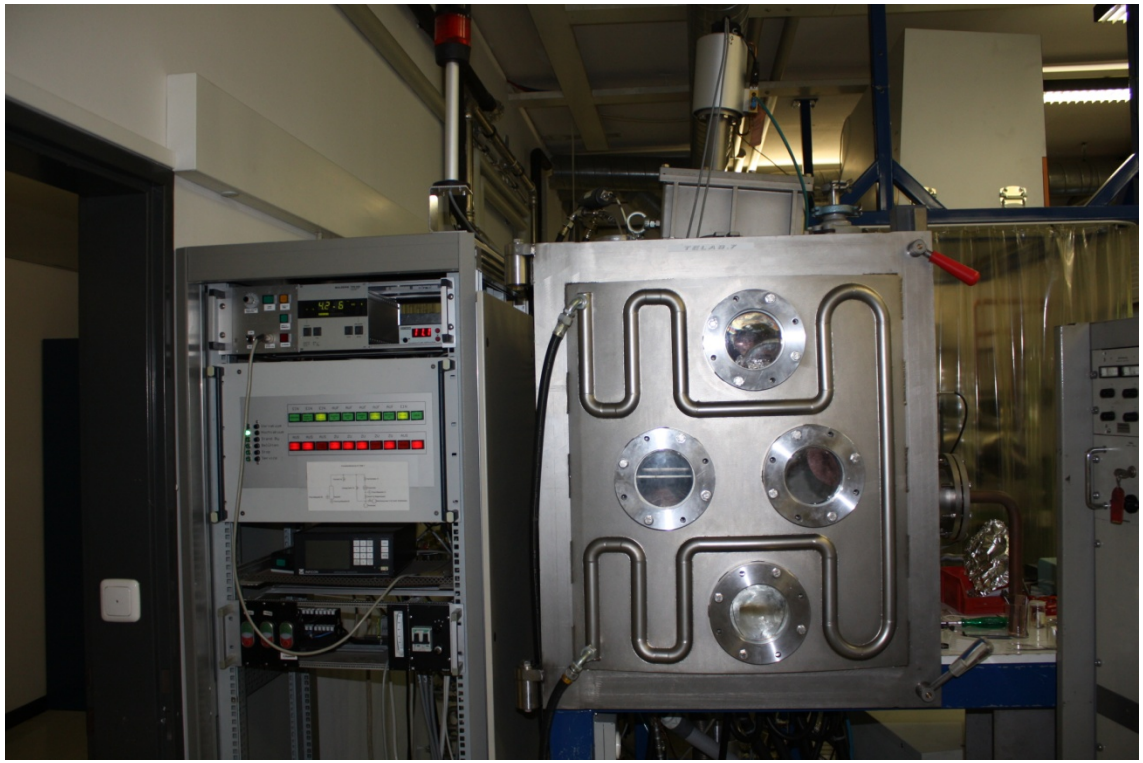
The (small) target lab in Munich

Presence and Future

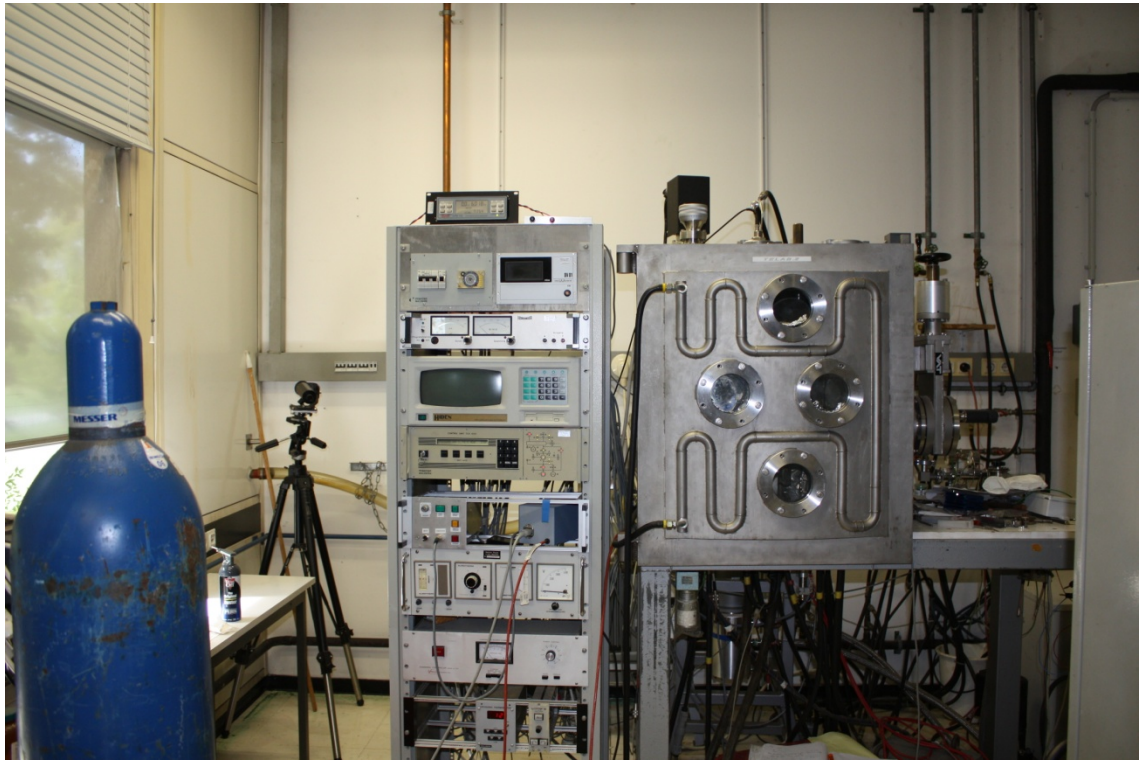
Fokus on DLC

A few words on MLTs

Our Infrastructure



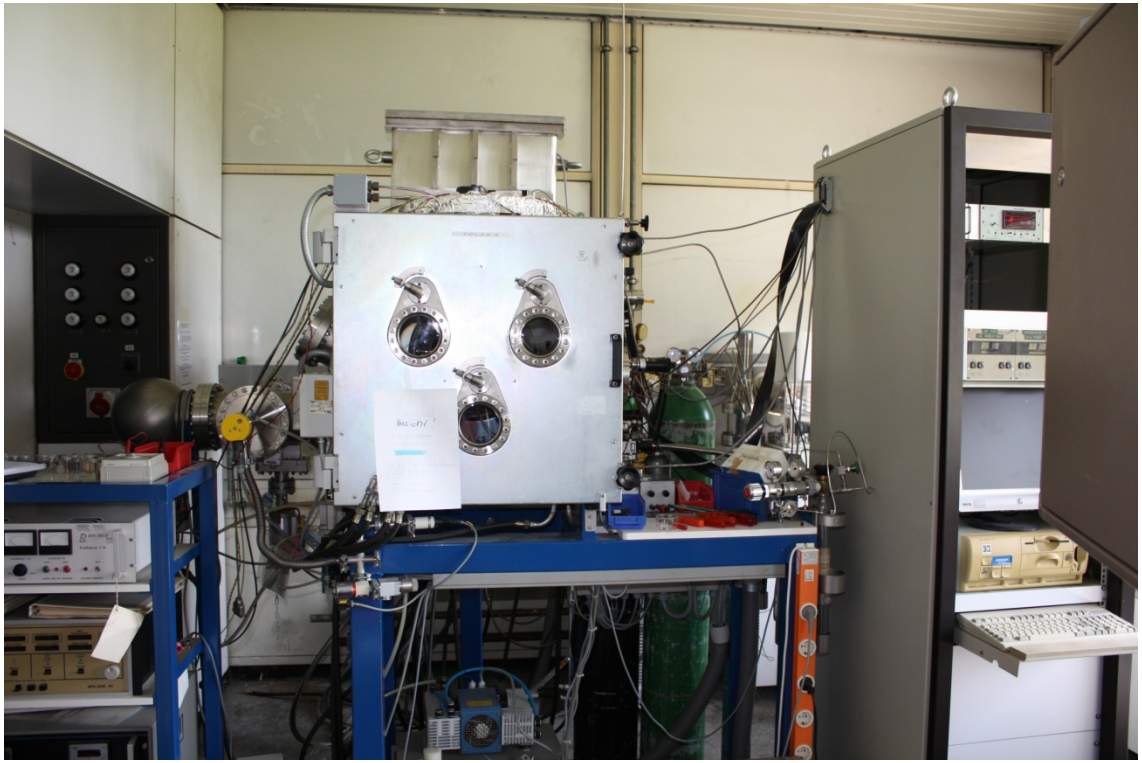
Our Infrastructure



Our Infrastructure

Our Infrastructure

Our Infrastructure



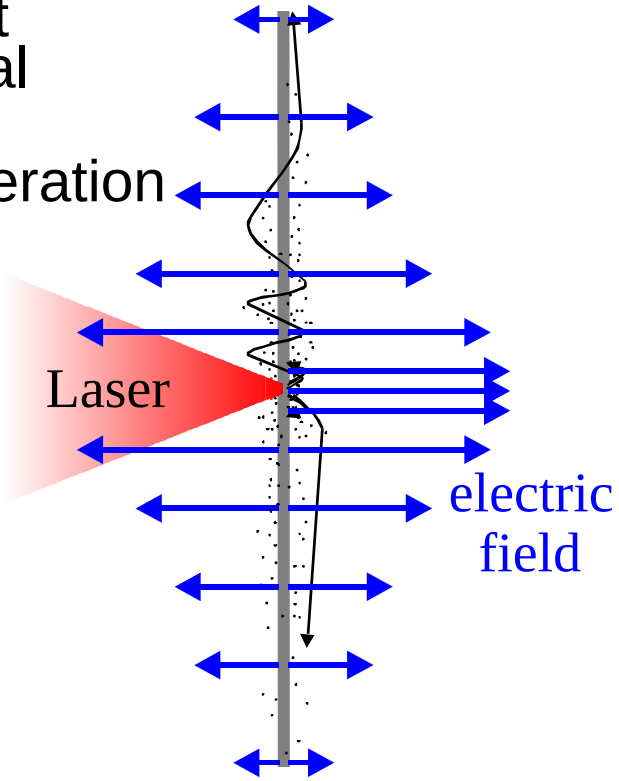
Our Infrastructure

Our Infrastructure

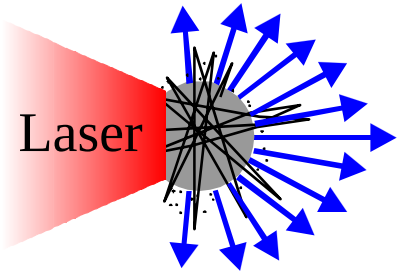
Our Infrastructure

$$n_e > n_c$$

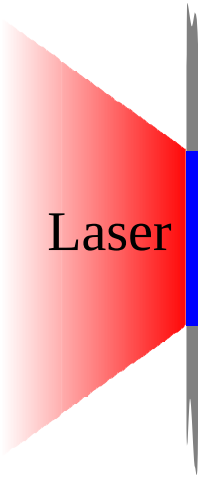
Target
Normal
Sheet
Acceleration



Mass
Limited
Targets



Radiation
Pressure
Acceleration



3 nm – 60 nm

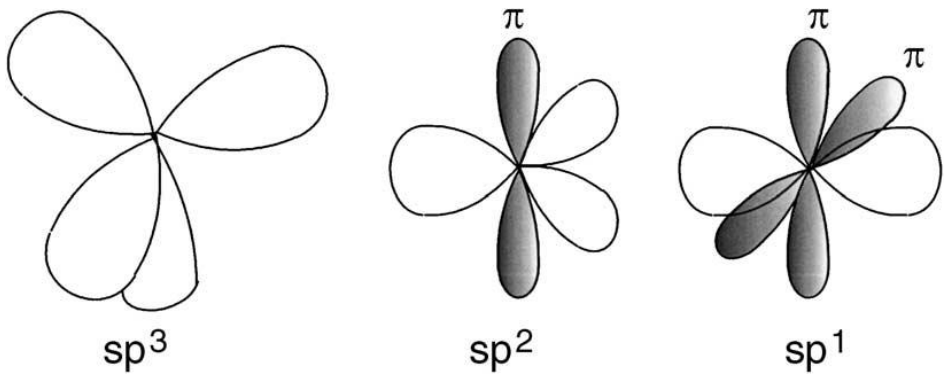
DLC

High optical transparency and high damage treshhold

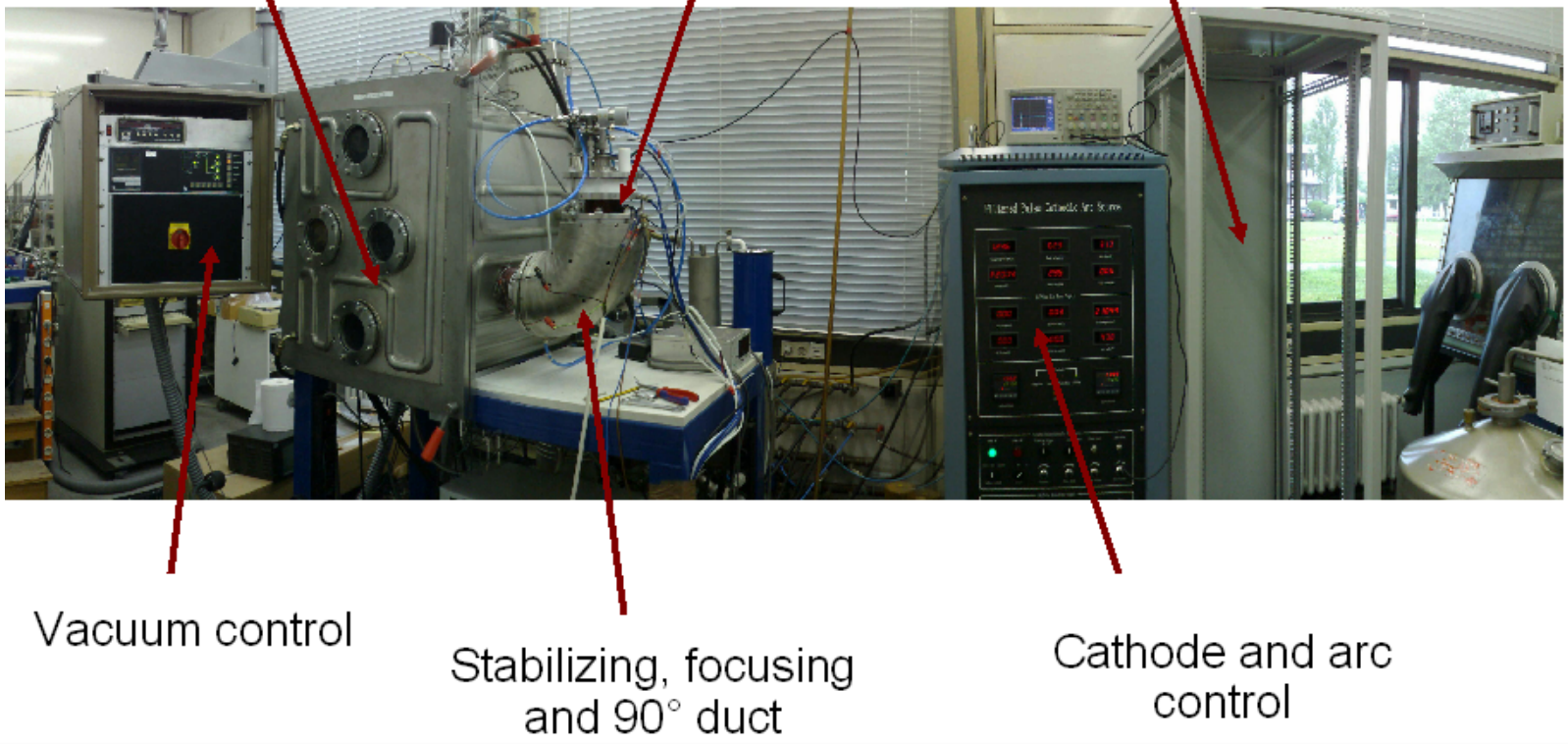
Mechanical hardness

Mechanical hardness

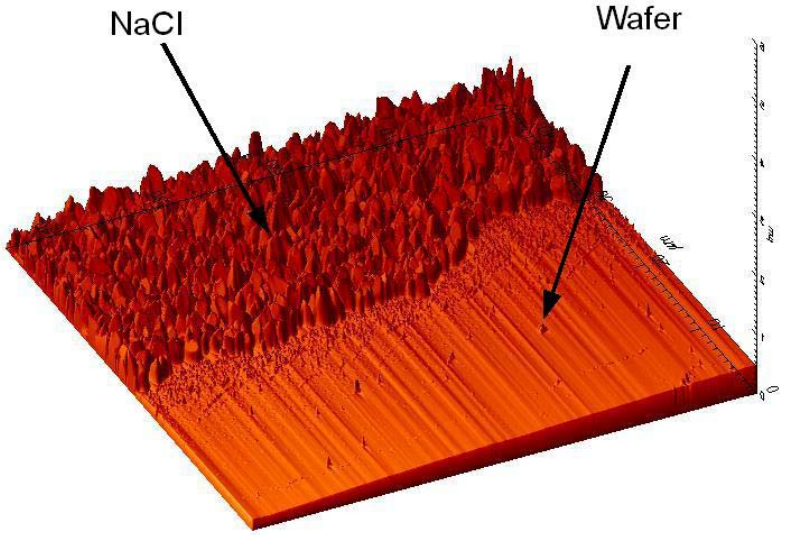
High optical transparency and high damage treshhold

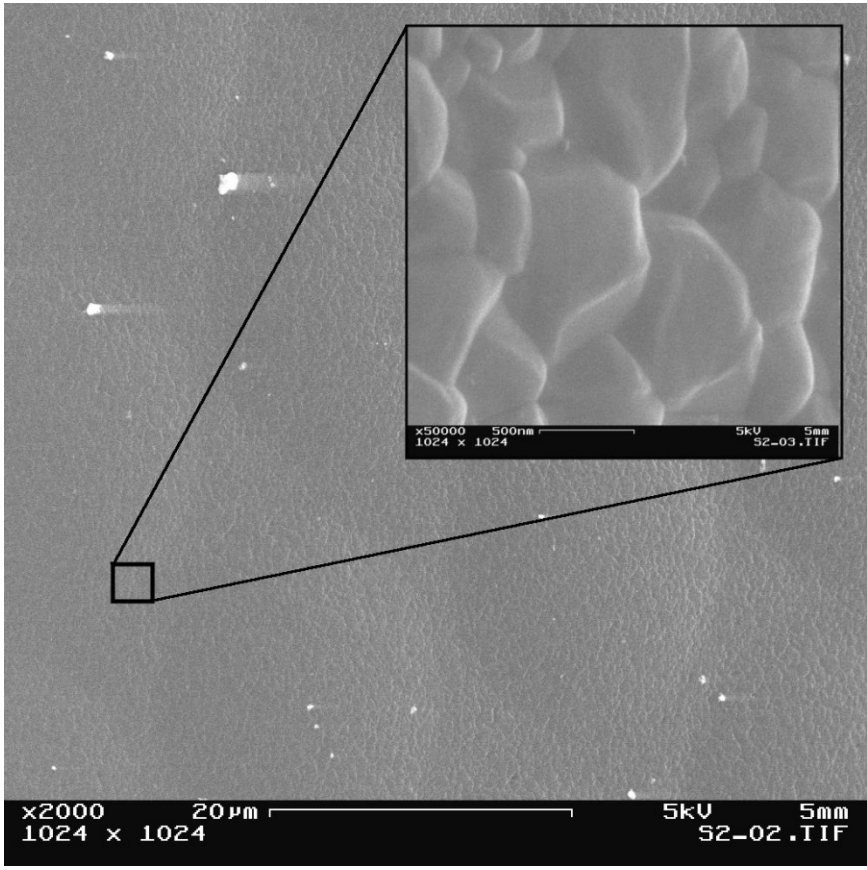


Production of DLC

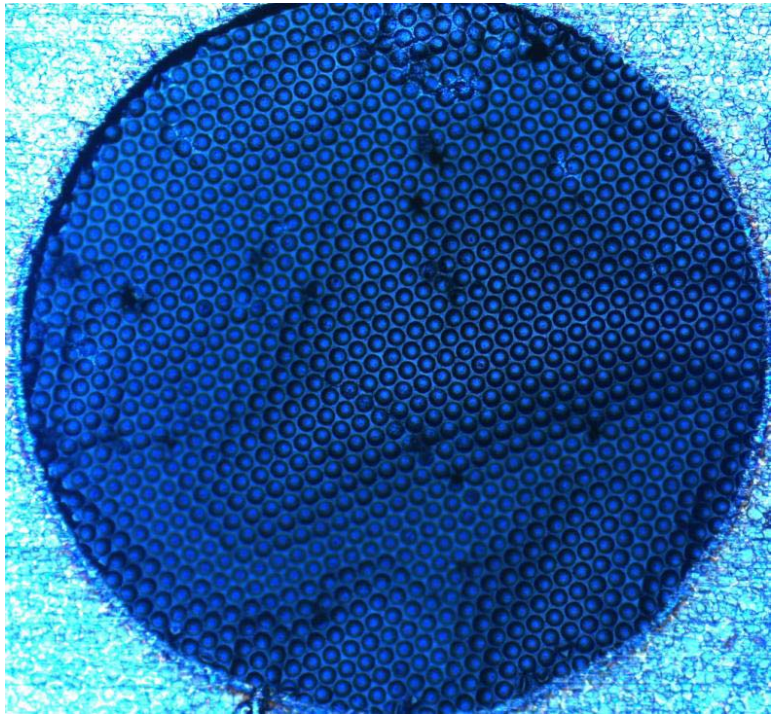


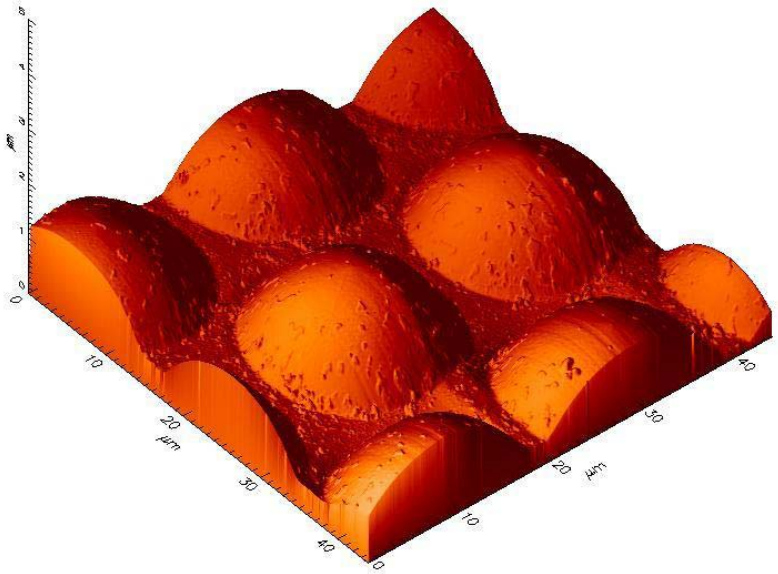
Release Agent



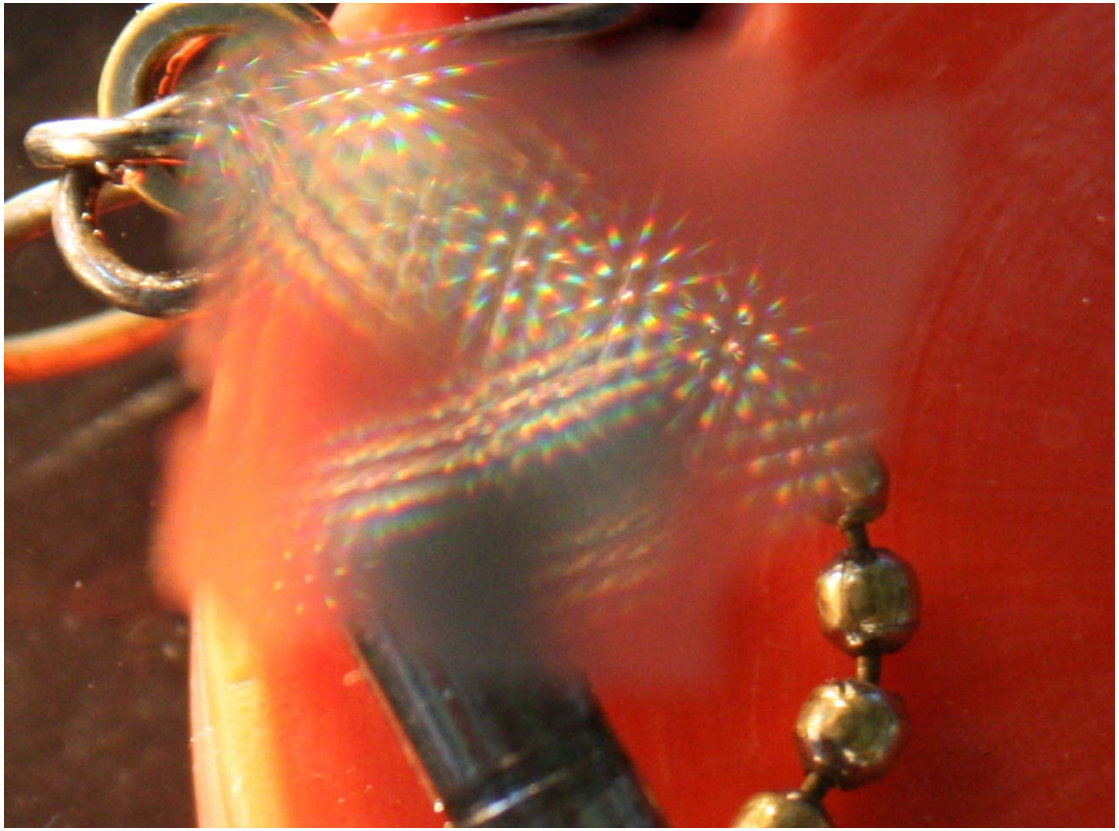


First Shaped DLC Foils

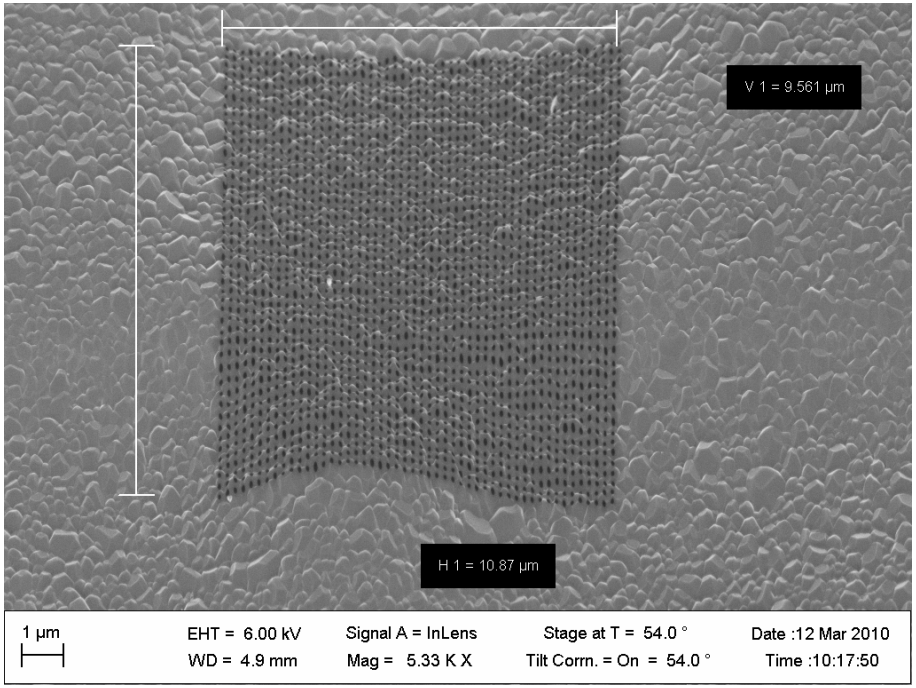


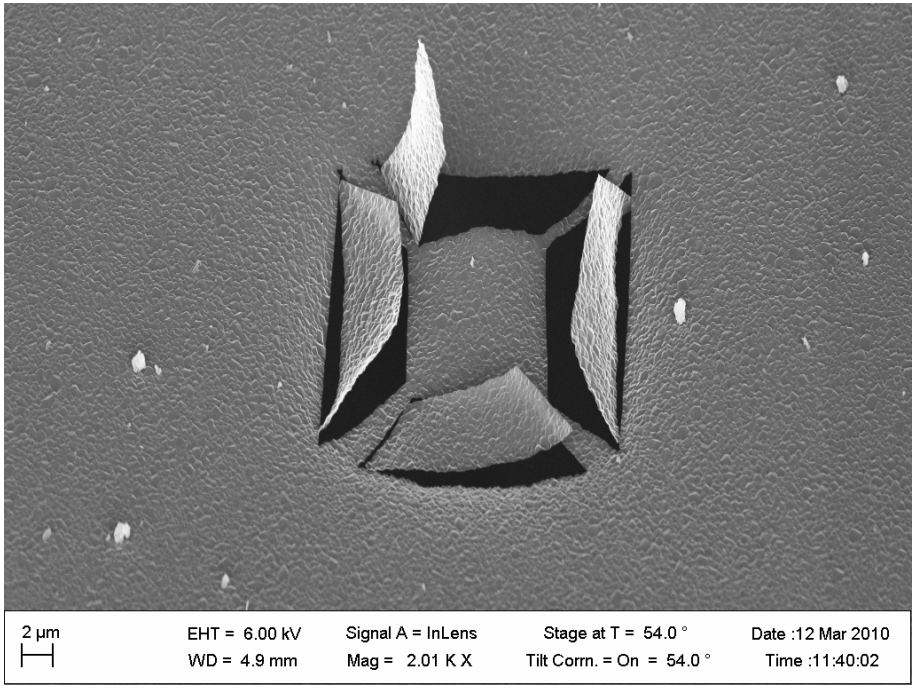


Floated DLC Foil

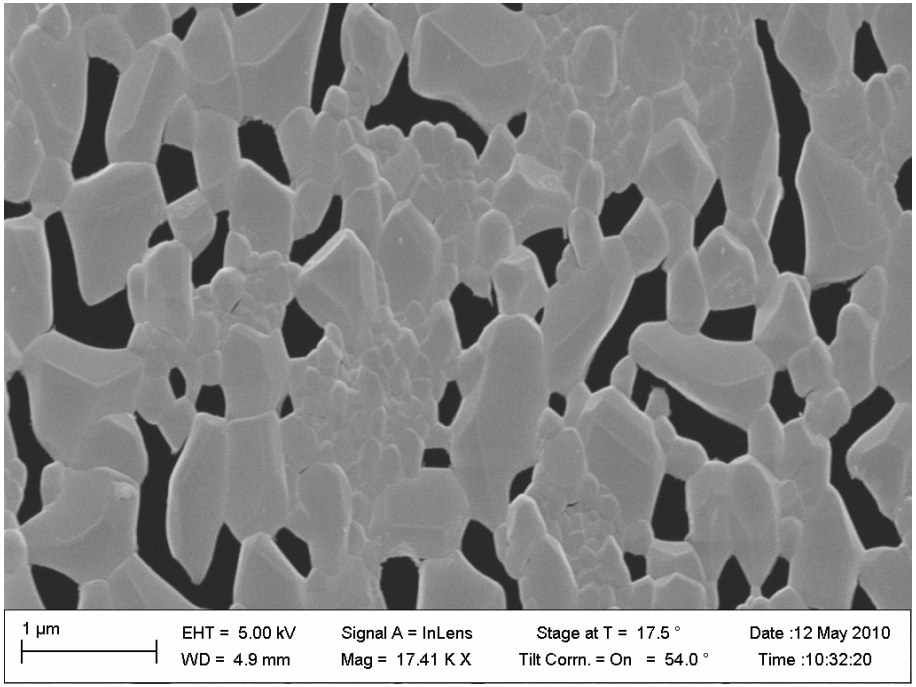


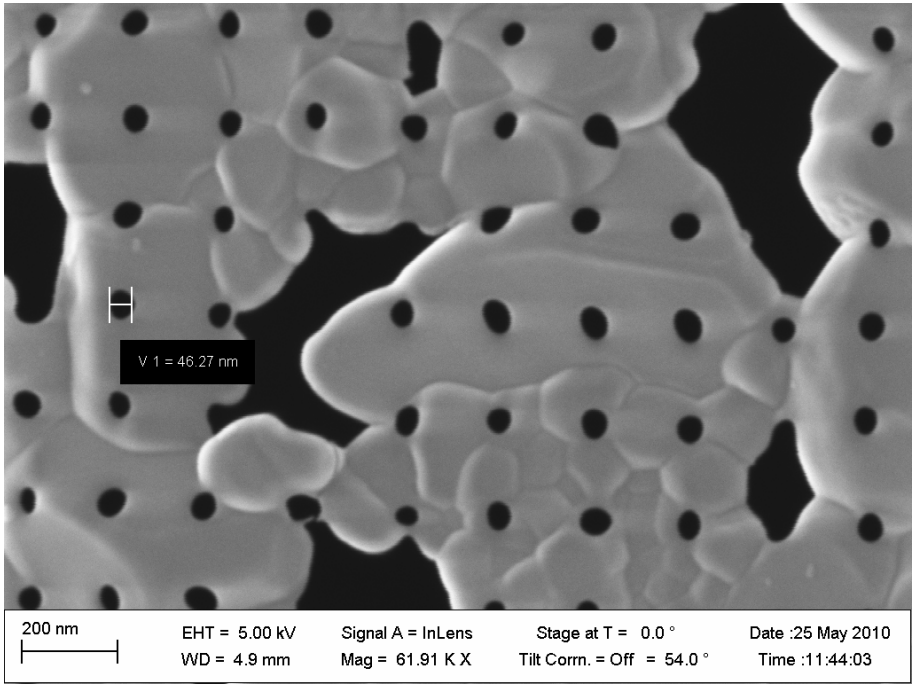
What we do with DLC



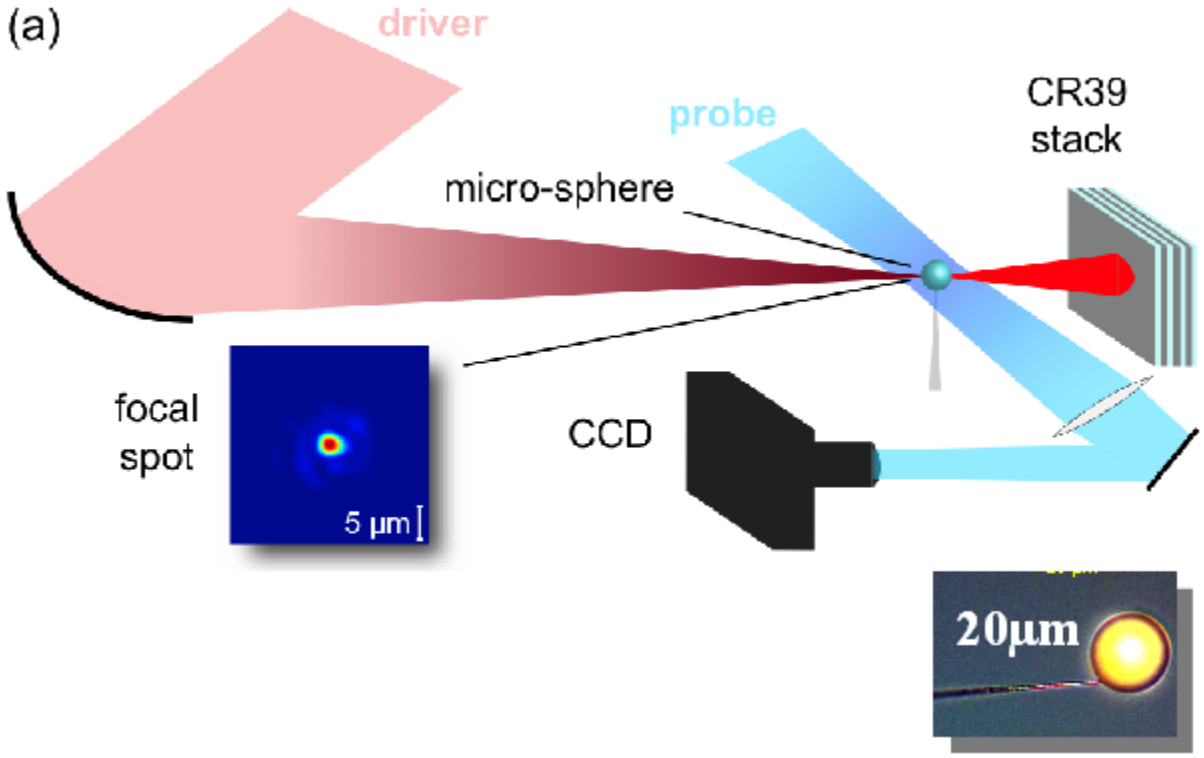


What we do with DLC

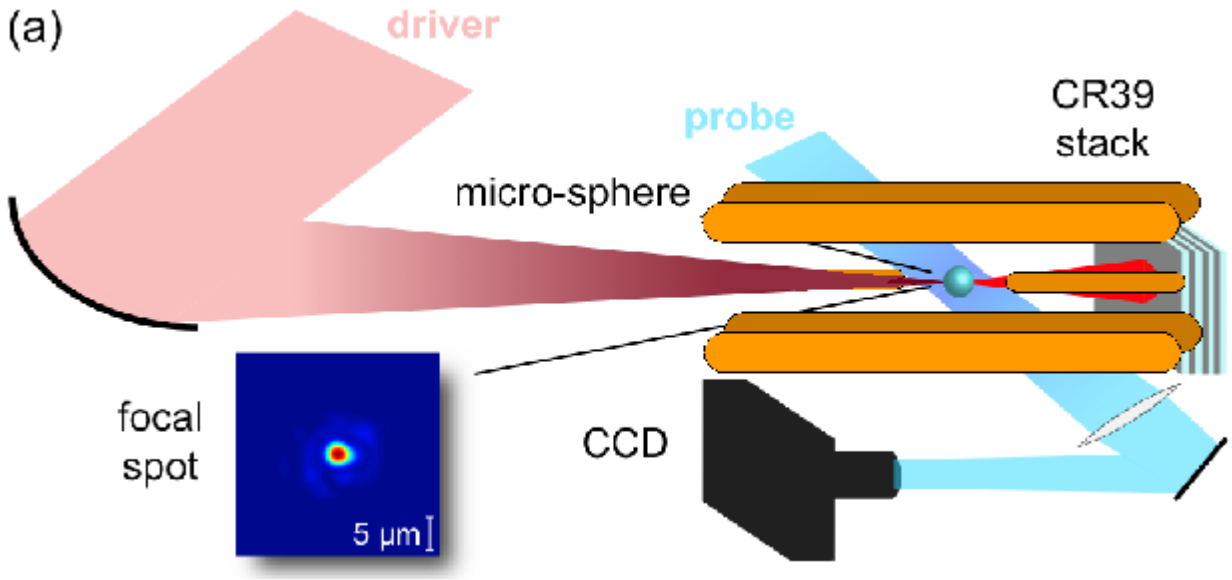




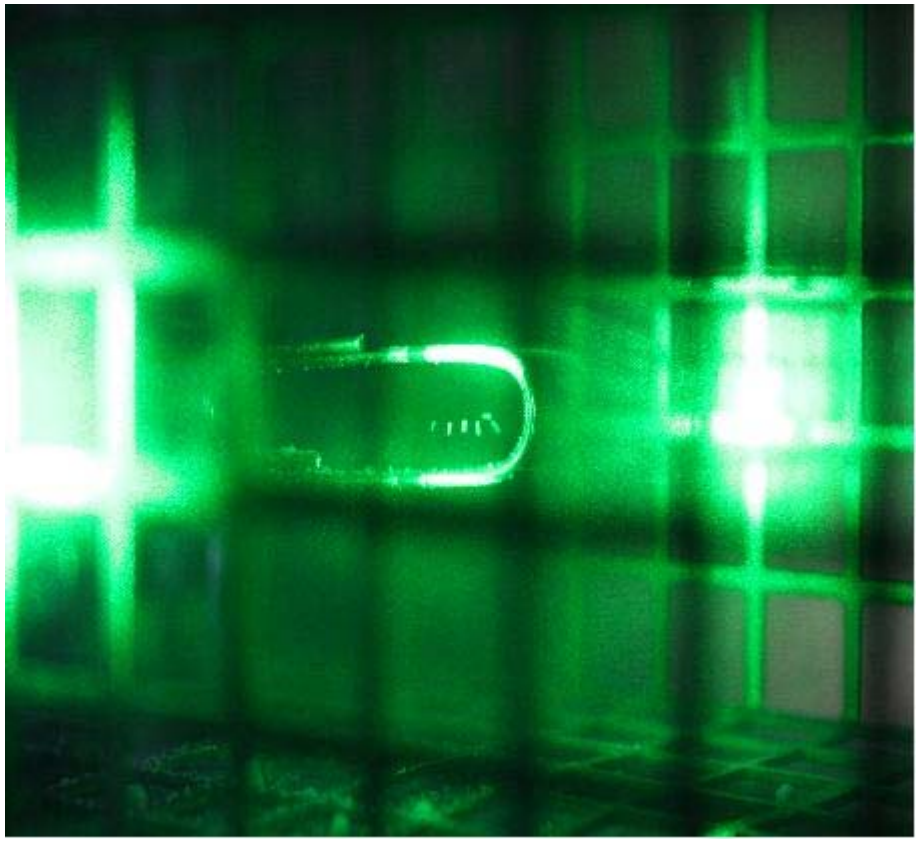
MLT

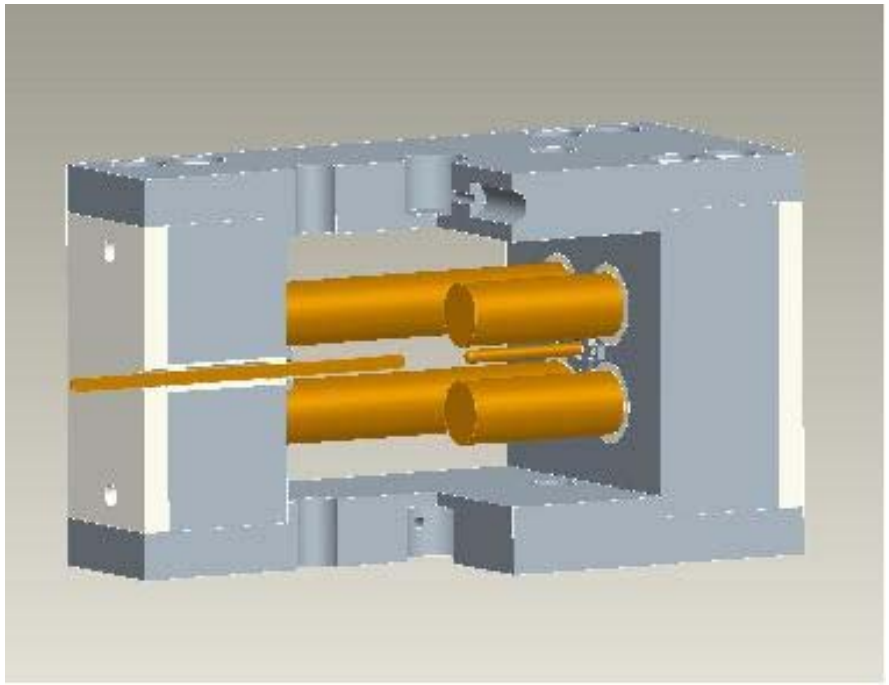

(a)
driver
probe
CR39 stack
micro-sphere
focal spot
5 µm
CCD
20µm

MLT

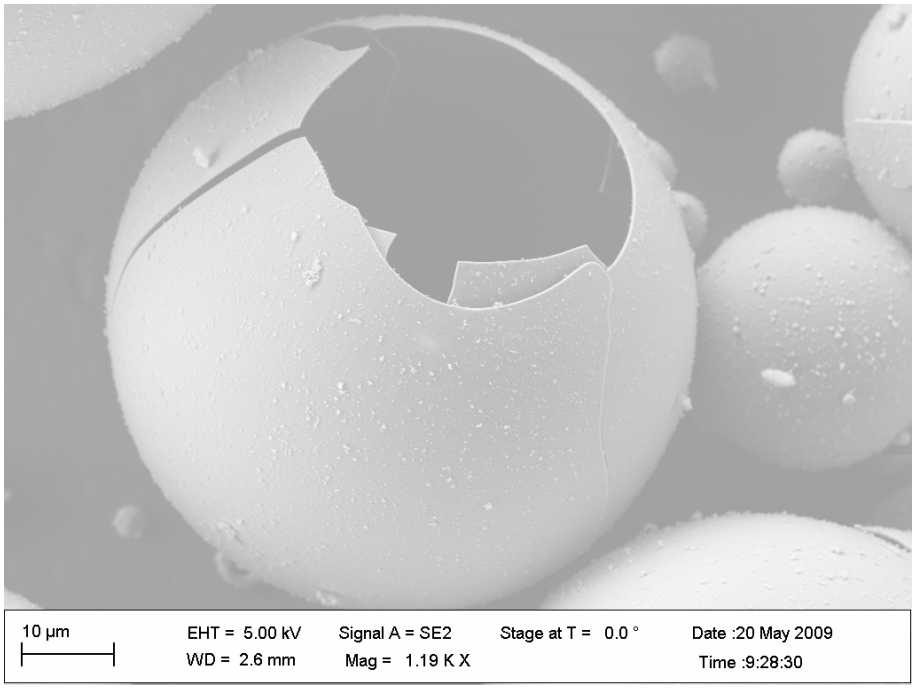


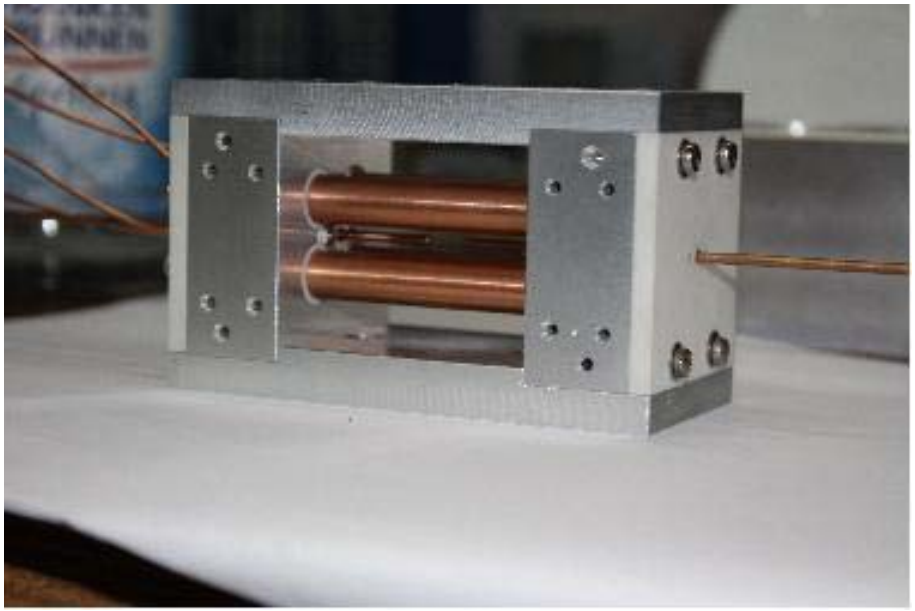
MLT





MLT


10 µm
EHT = 5.00 kV
WD = 2.6 mm
Signal A = SE2
Mag = 1.19 K X
Stage at T = 0.0 °
Date :20 May 2009
Time :9:28:30



Future

New Cleanroom

New DLC machine

Foams

Funny other stuffplaned

Tank you for your attention!