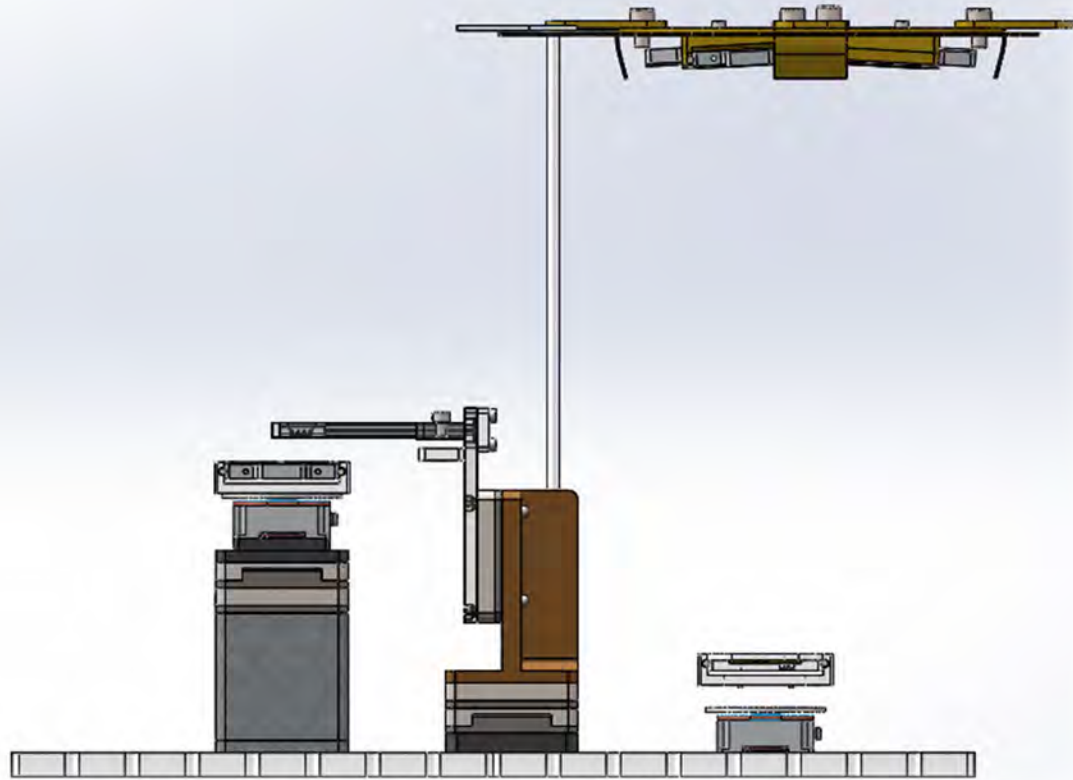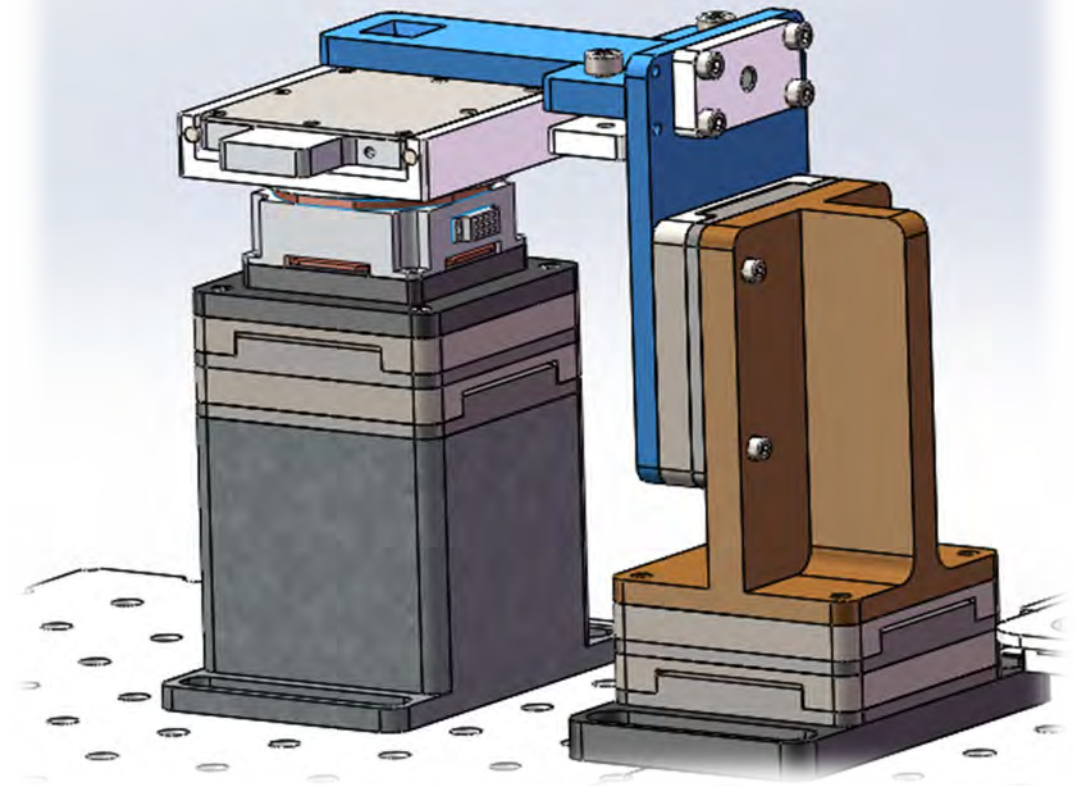# Automated 2D device fabrication system in glove box
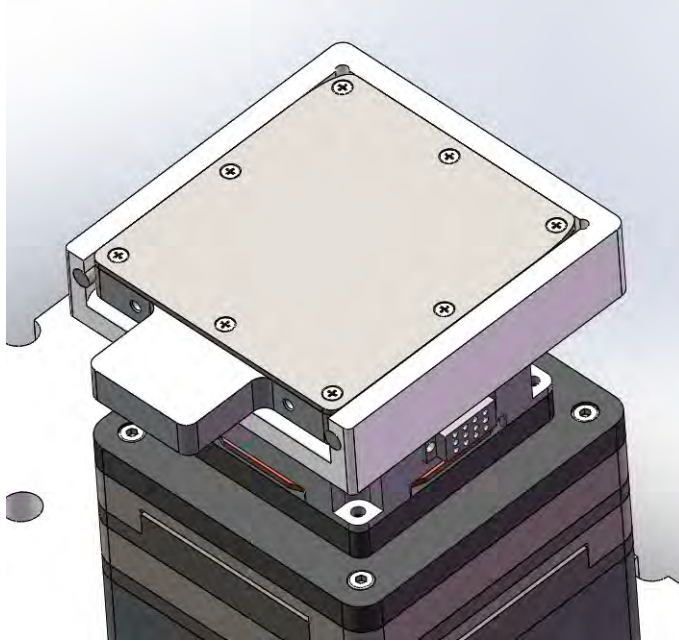
Outlook

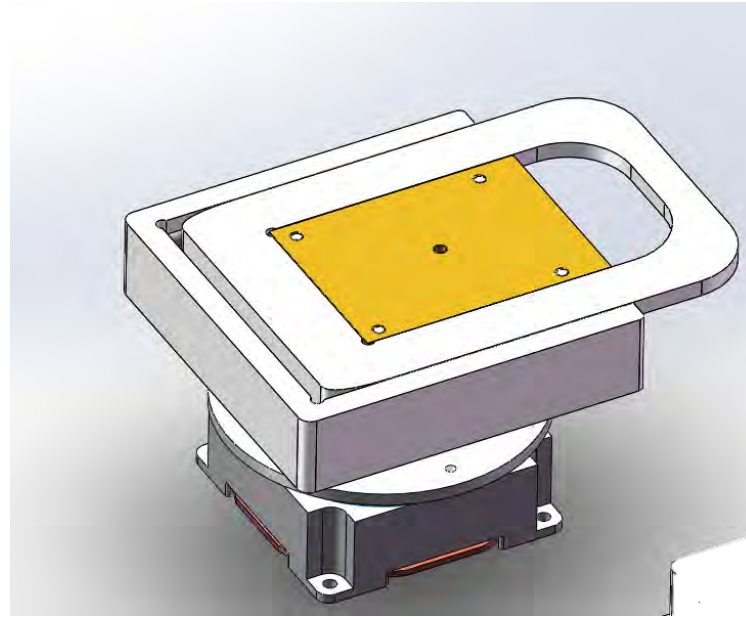- Magnetic mask table
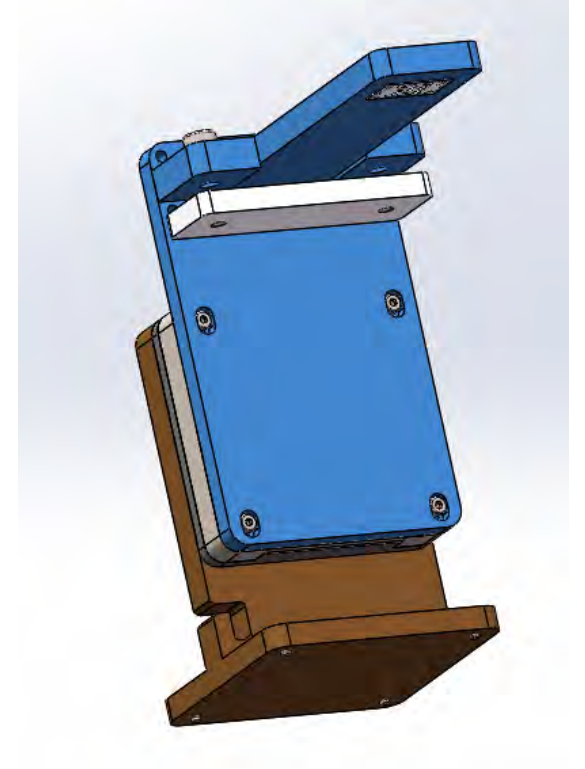- Vacuum tube
- Transfer station
- Evaporating pan

Improvements
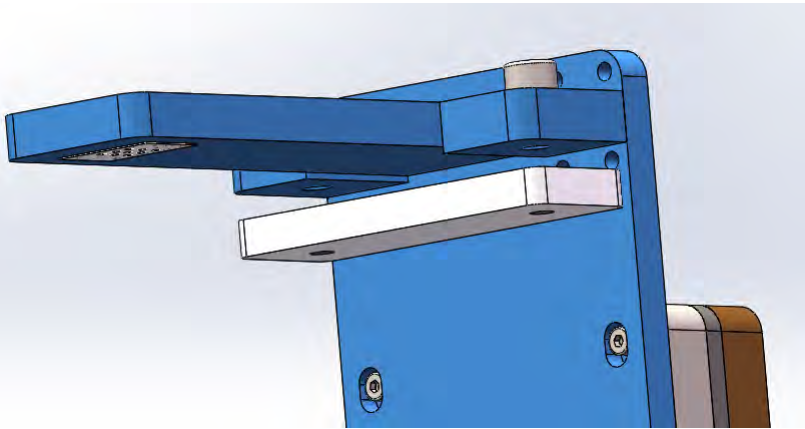

- Different types of countersunk
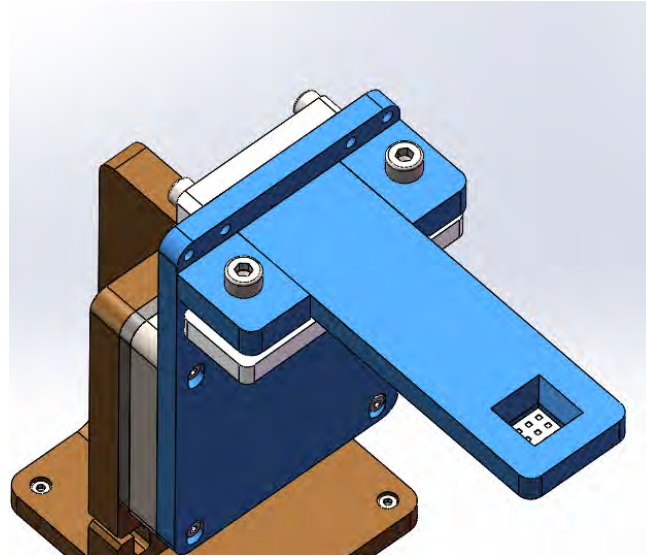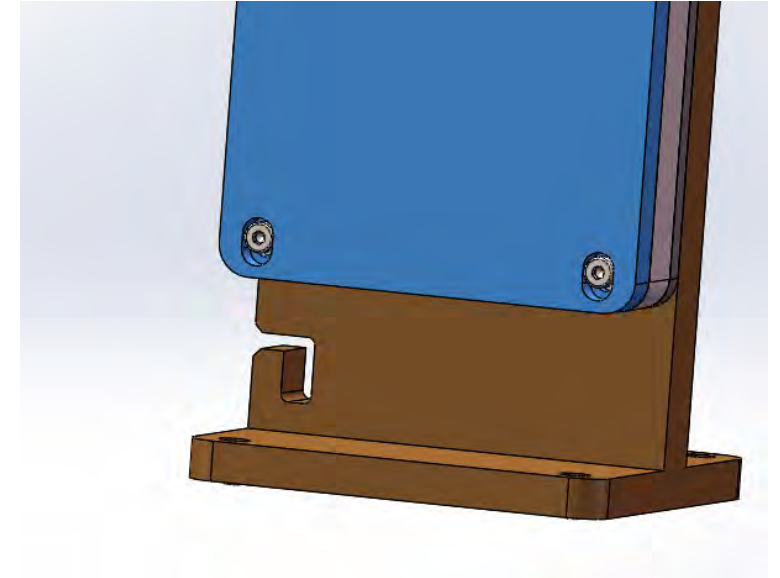
- New handle

- 4 screws to fix the adsorber

Improvements —— sample transferring
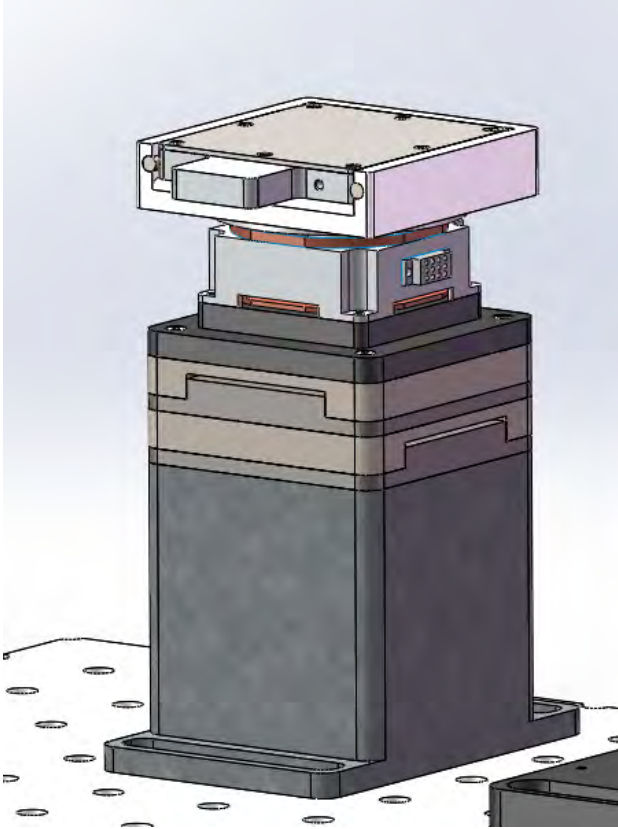

- A trough to hold the glass slide
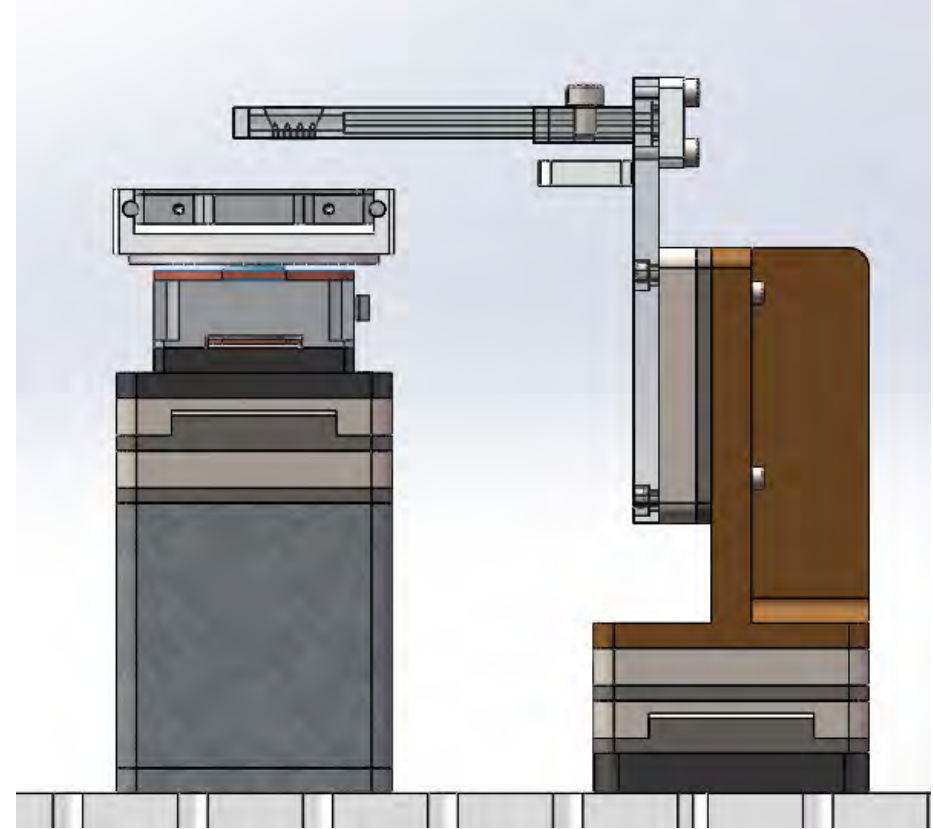
- Observing the sample through the window

- Wire spacing

changes
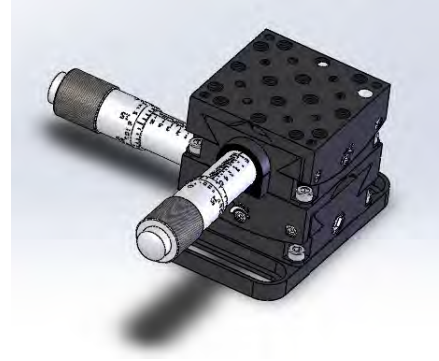

- No tilt table but a furring

- Satisfy the relative sapcing
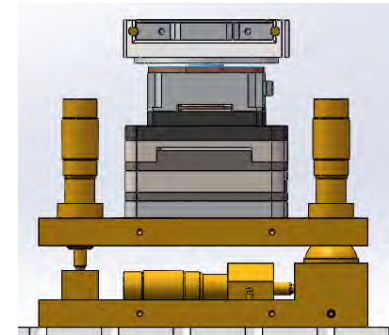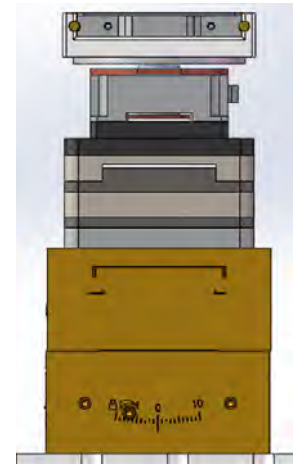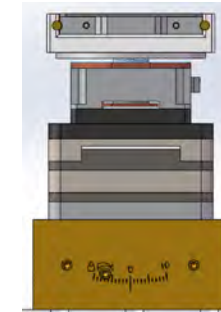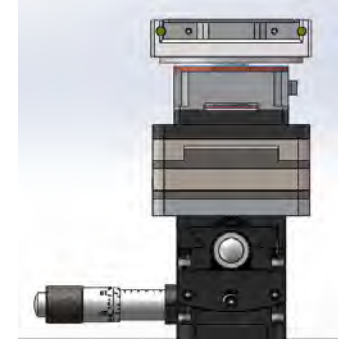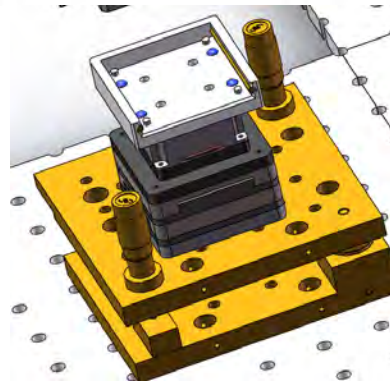
Choice —— kinds of tilt table

- From Thorlabs, has a tiny surface

Advantage：free moving distance.

Disadvantage：unstable, low-load.

- From Newport, large surface

Advantage：stable, high-load, suitable surface size.

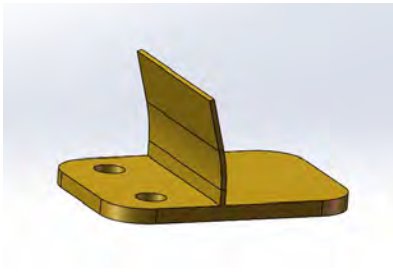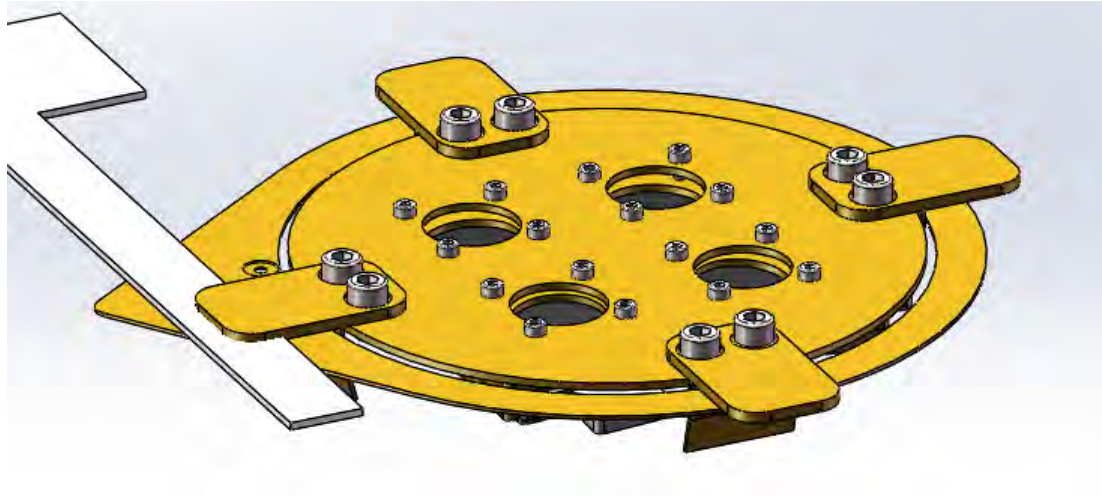Disadvantage: lack of the handle, need two table (expensive), hard to combine.

- From Newport, huge surface
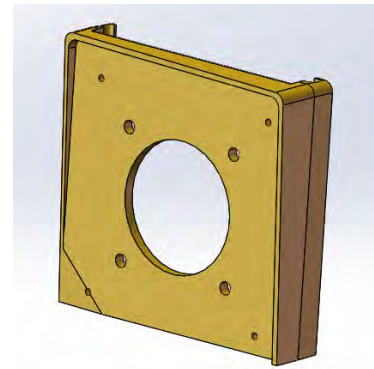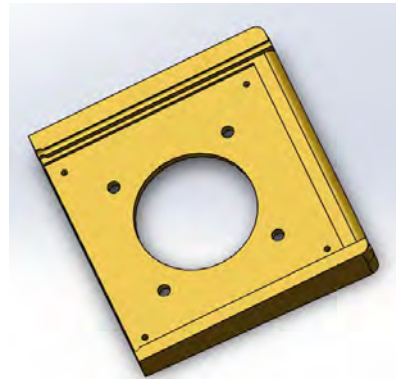
Advantage：stable, easy to adjust,

Disadvantage:

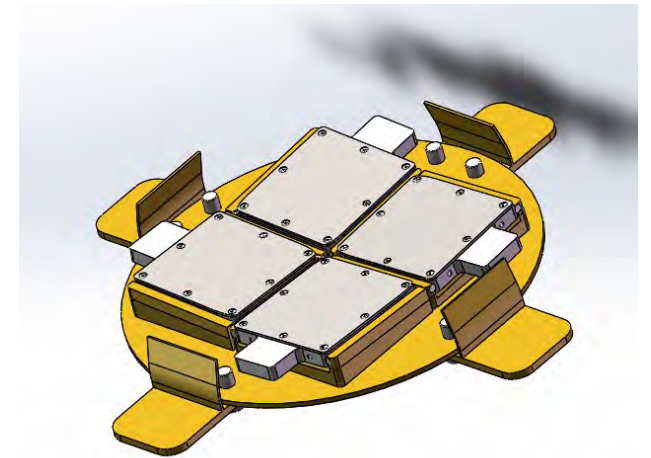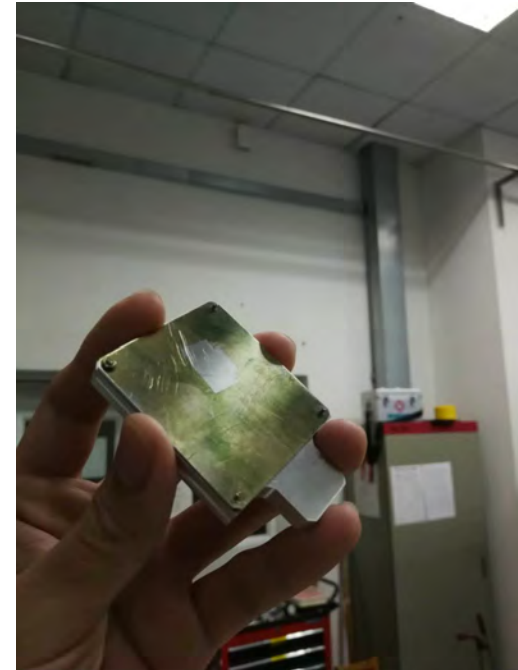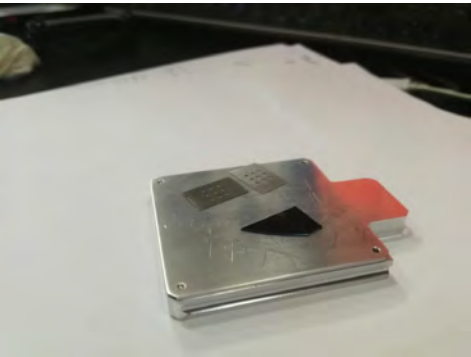| GON65-L	GON65-U
Lower Goniometric	Upper Goniometric
-5 to +5°	-10 to +10°
1°	1°
65 x 65 mm	65 x 65 mm
45 N	45 N
30 mm	30 mm
80 mm	50 mm
6-32 and 1/4-20	6-32 and 1/4-20

evaporator

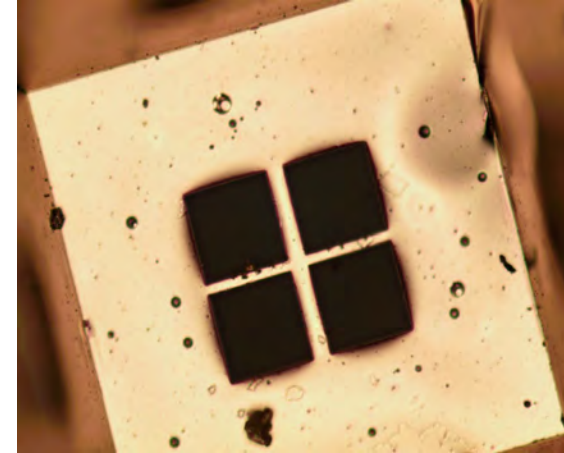- Fixing and spacing

- Smaller and lighter holder

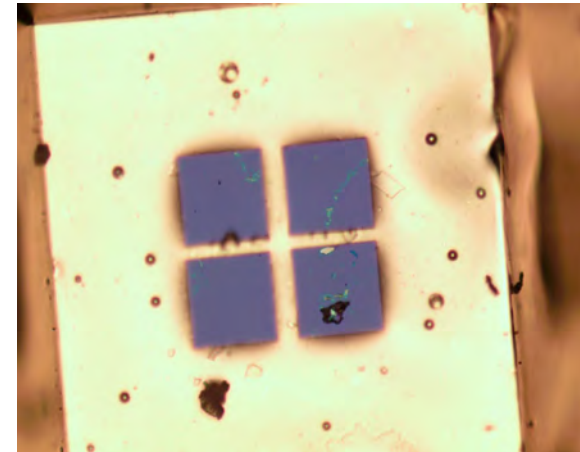- 160 mm diameter

Mask holder is coming

Tests

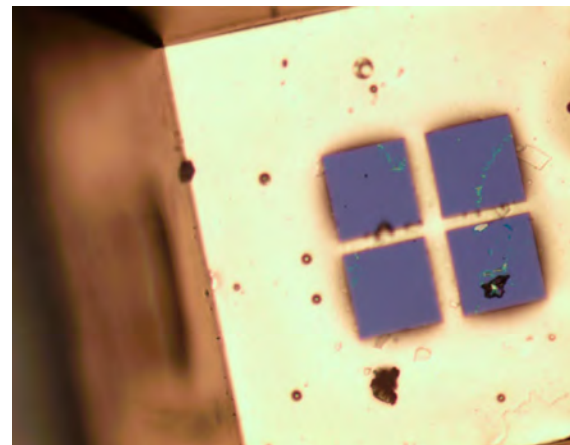- Attaches the mask on the permalloy slice by elargol (sliver glue)
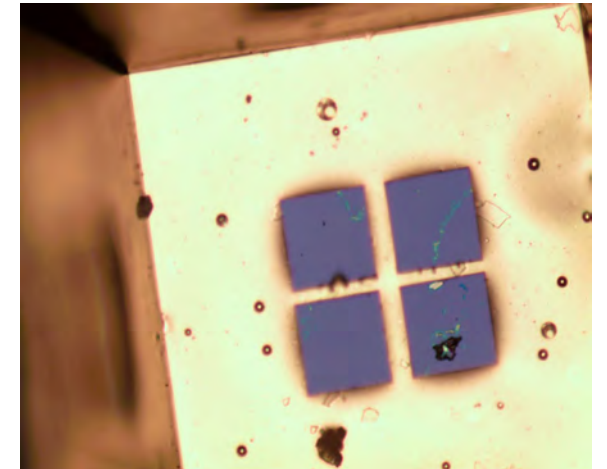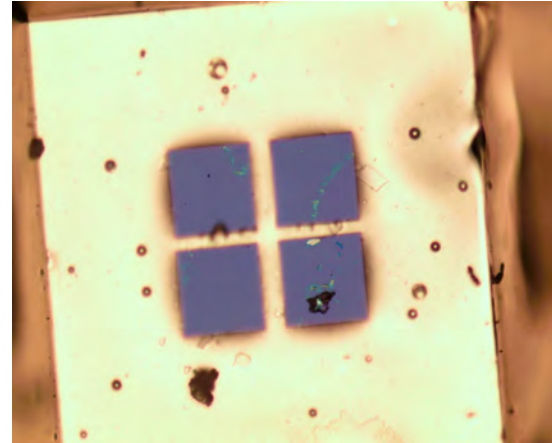

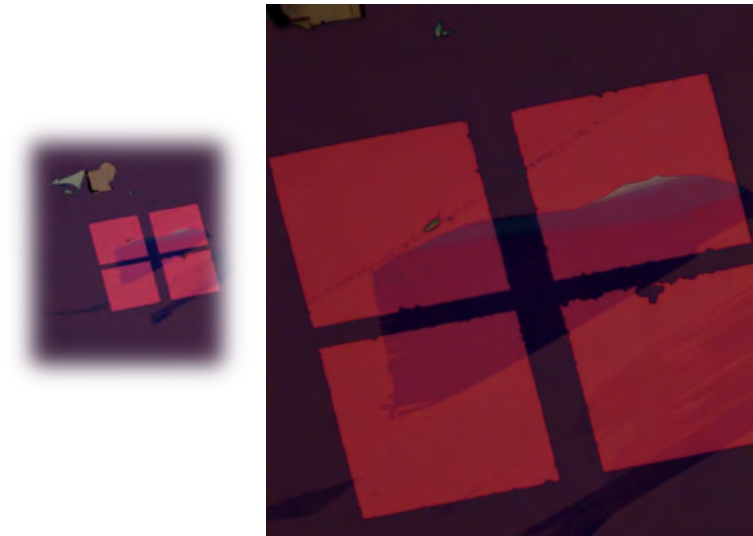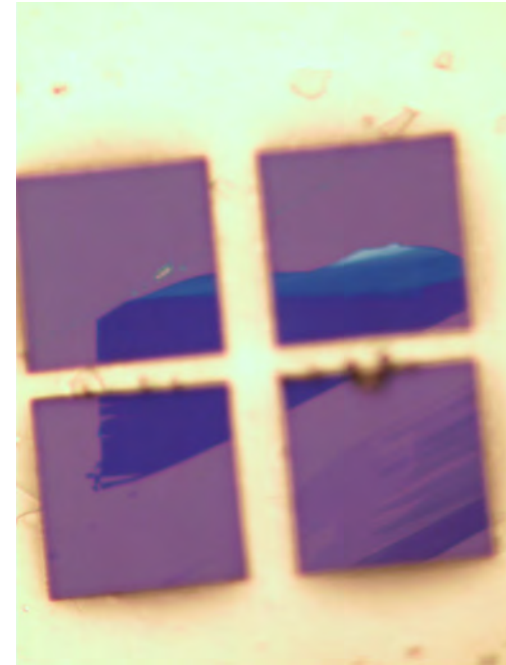- Align the mask and the sample

Tests

- Original image

- Swift and accelerate ----
  remain stable

- Flipflop and turn around

Coincide completely

Tests - - - - evaporating

- Find a piece of graphene and align it with the mask

- No moving and no diffusion of the golden vapor which indicates that it's tight enough

Mask's mask