

高難度タンパク質をターゲットとした放射光X線結晶構造解析技術の開発

New development of crystal mounting method for the longer wavelength SAD phasing

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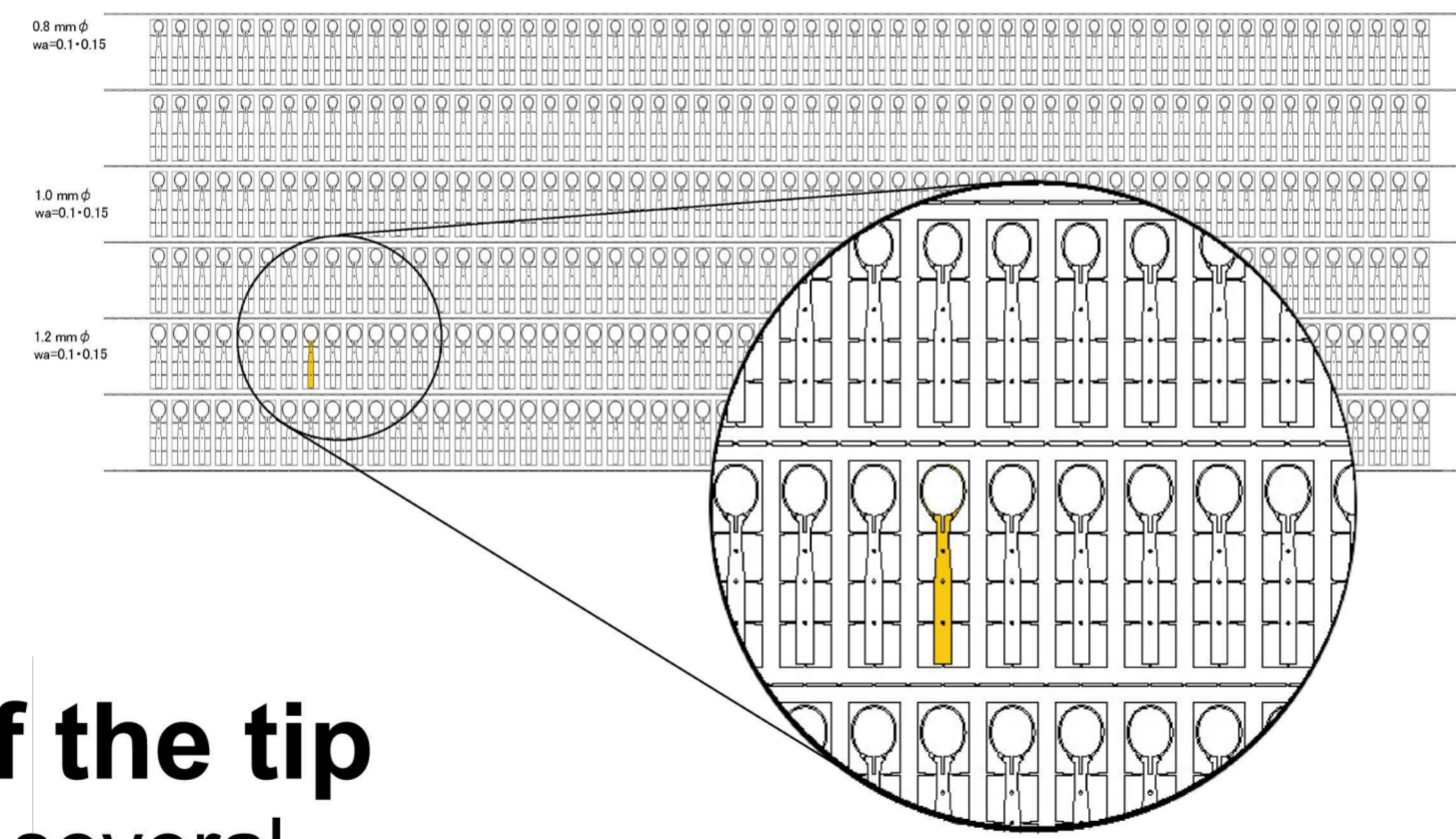
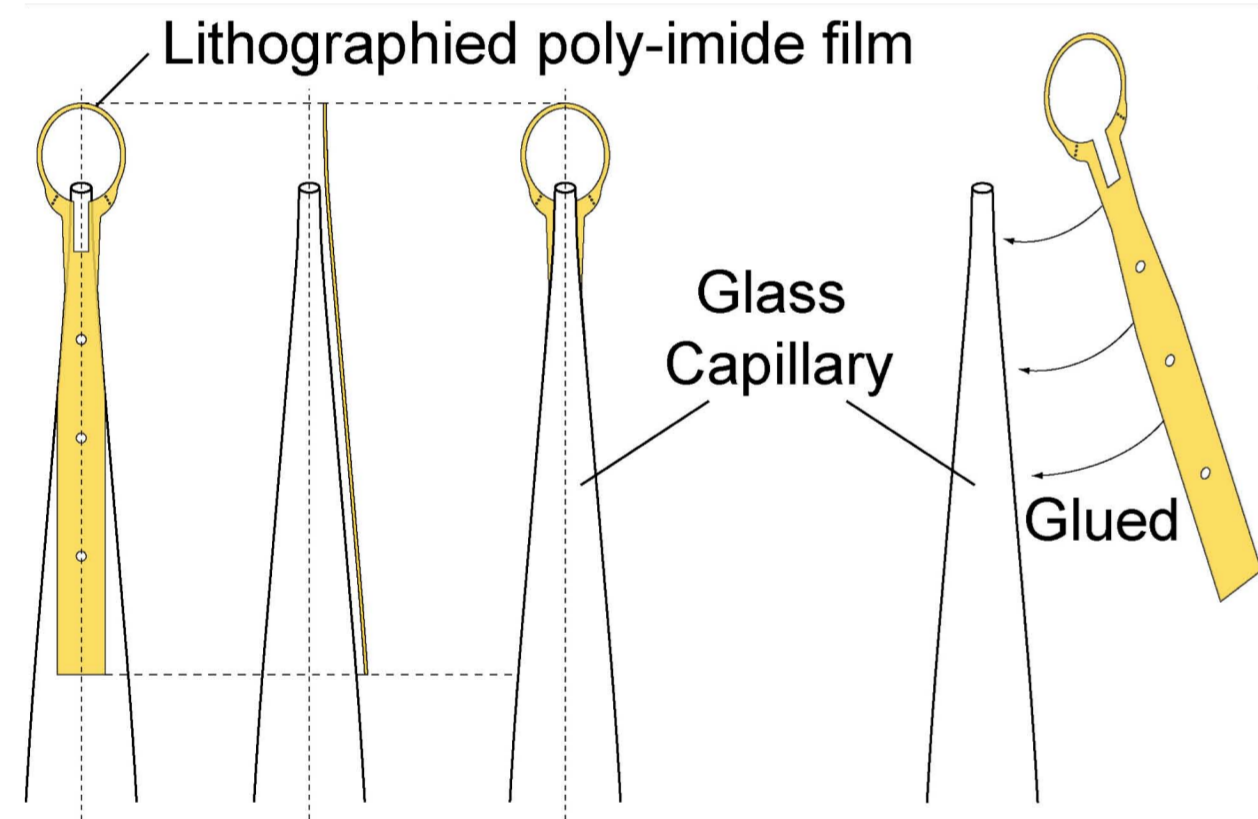
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New loop

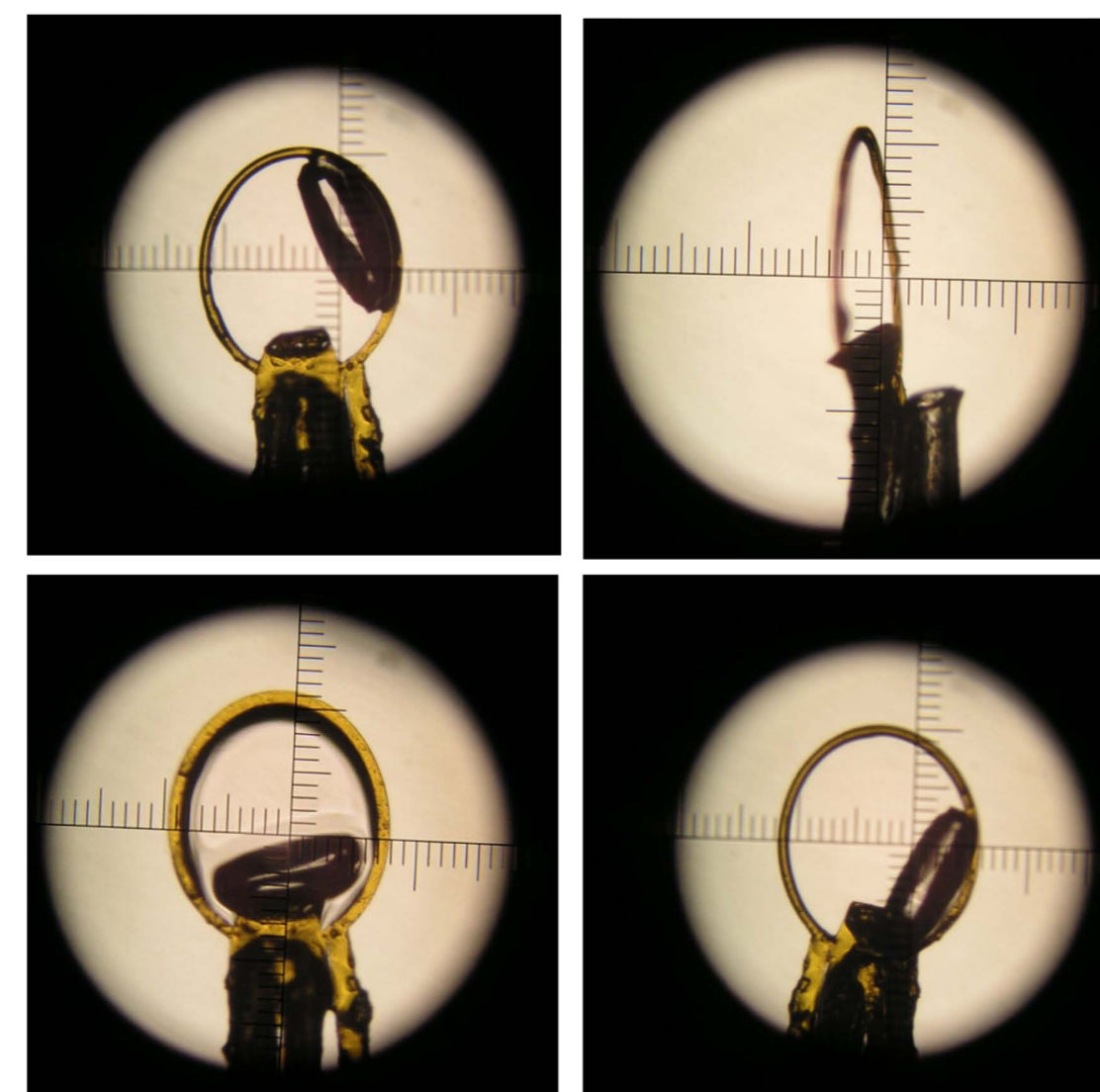
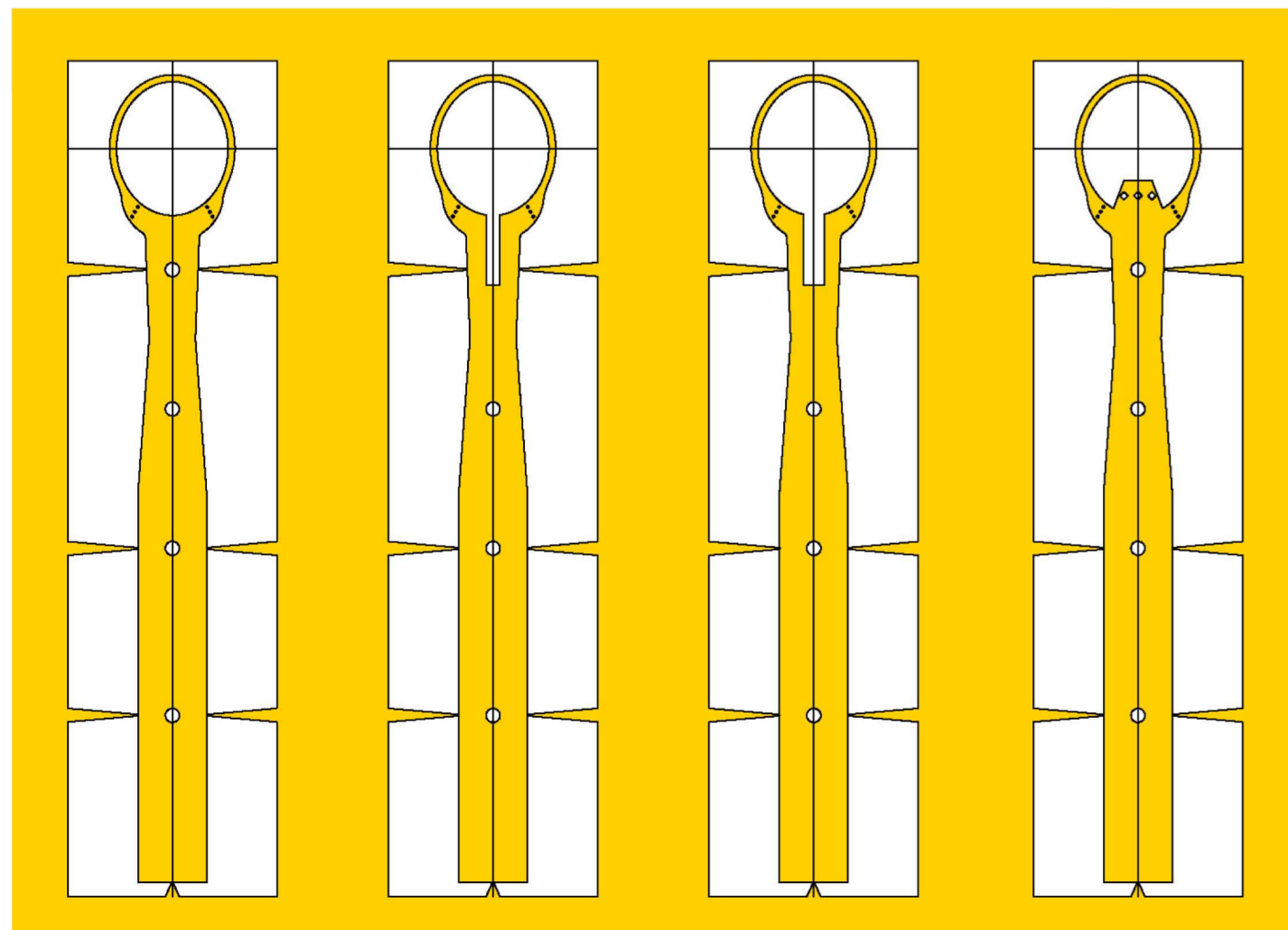
Nylon loop → **Lithographed polyimide film**

- Easy to glue on the tip of the glass capillary
- Less X-ray absorption (No need to remove)

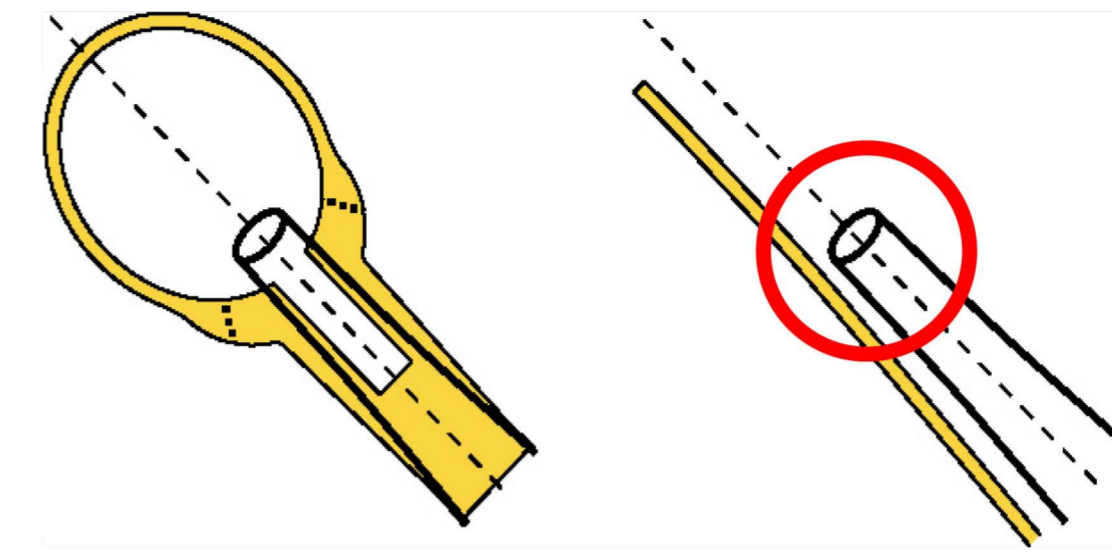


Variations of the shape of the tip

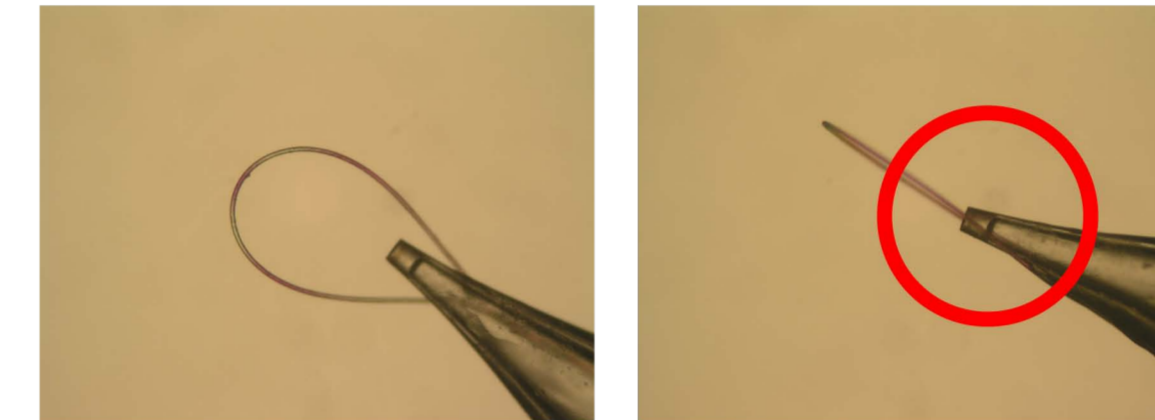
To make easy mounting possible, several shapes of the tips were tested.



Most of mounting failures were caused by disagreement of center lines of glass capillary and loop

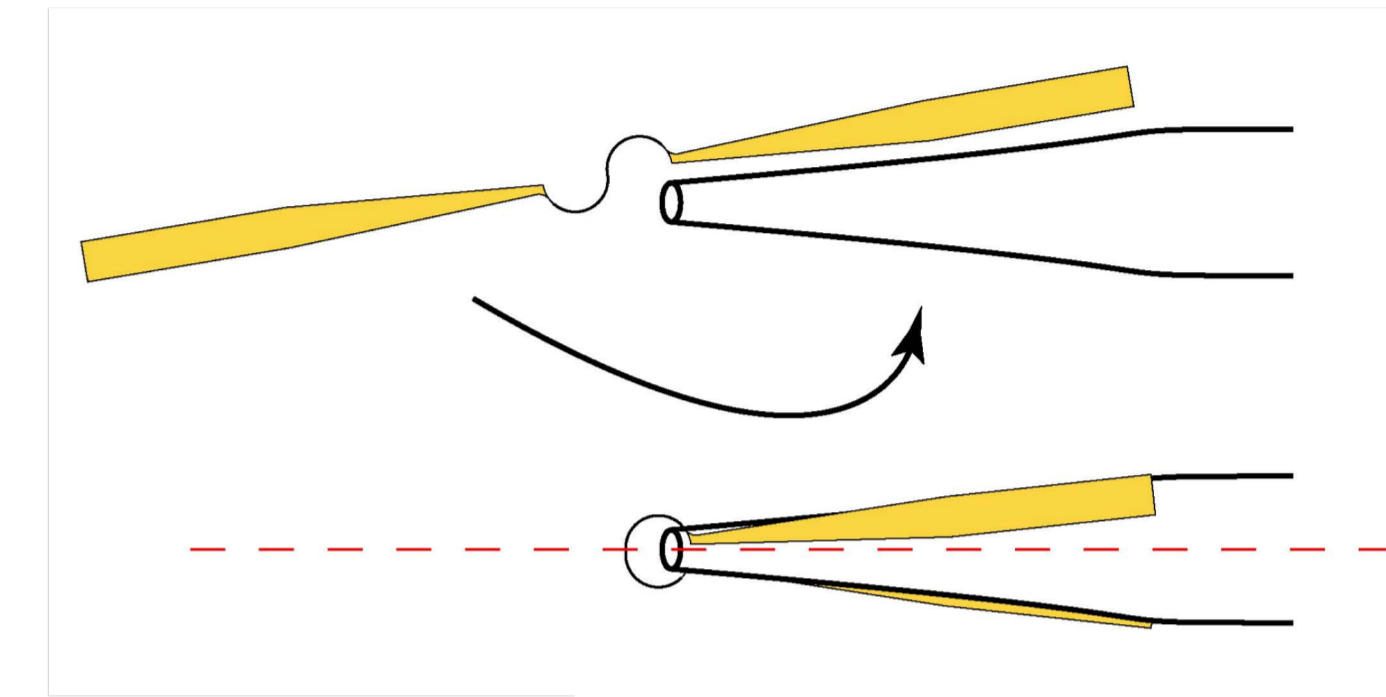


Polyimide loop

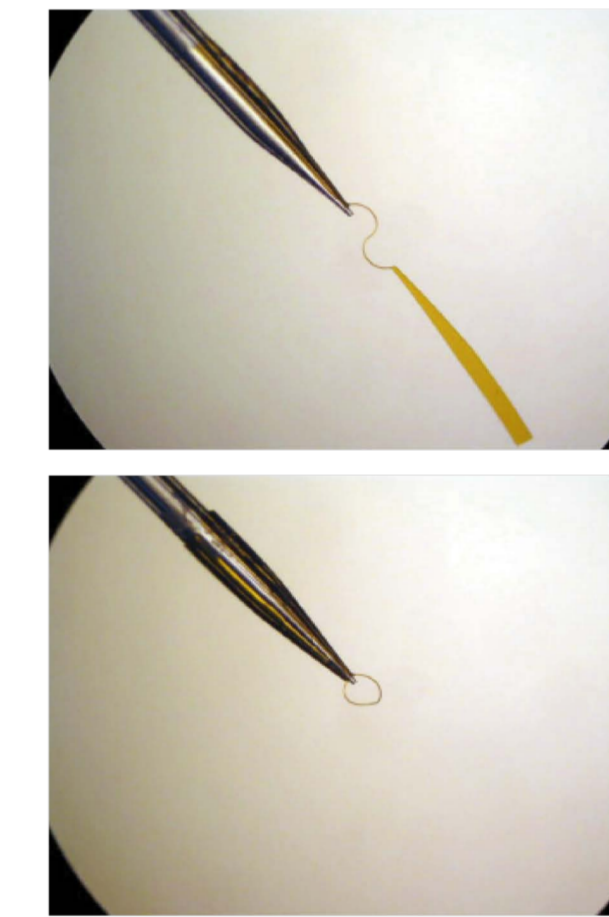
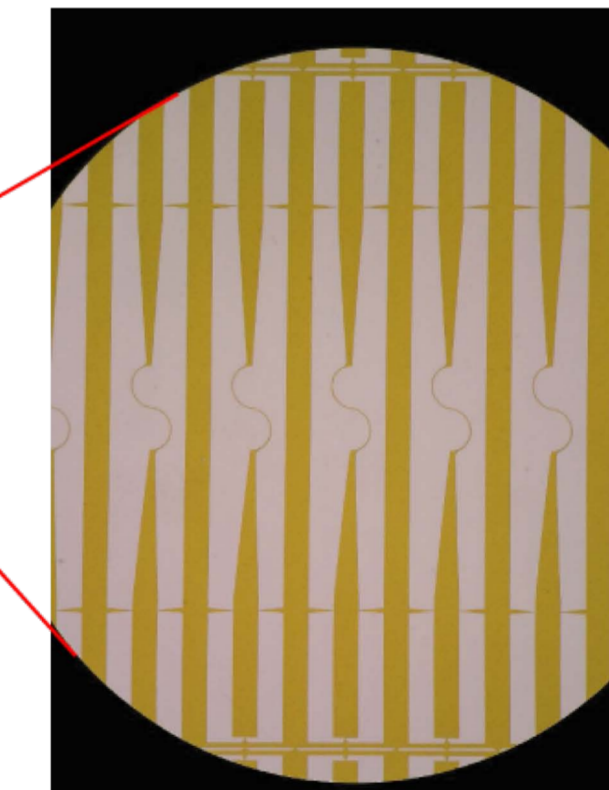


Nylon loop

To adjust the center line, new type of microfabricated loop was designed.



New design of microfabricated polyimide loop



This development makes it possible to adjust the center line of the glass capillary and the loop.

The tip of the new loop and Thaumatin crystal mounted on a new loop.

