JPL Lithographic Pinholes for Testing at Princeton University

Fabrication and Assessment of Pinholes

Pinholes Fabrication Completion Date: 2019.01.24

Shipped to Princeton University on 2019.01.25

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Optics Section 383, Jet Propulsion Laboratory. January, 25, 2019

Jet Propulsion Laboratory
California Institute of Technology

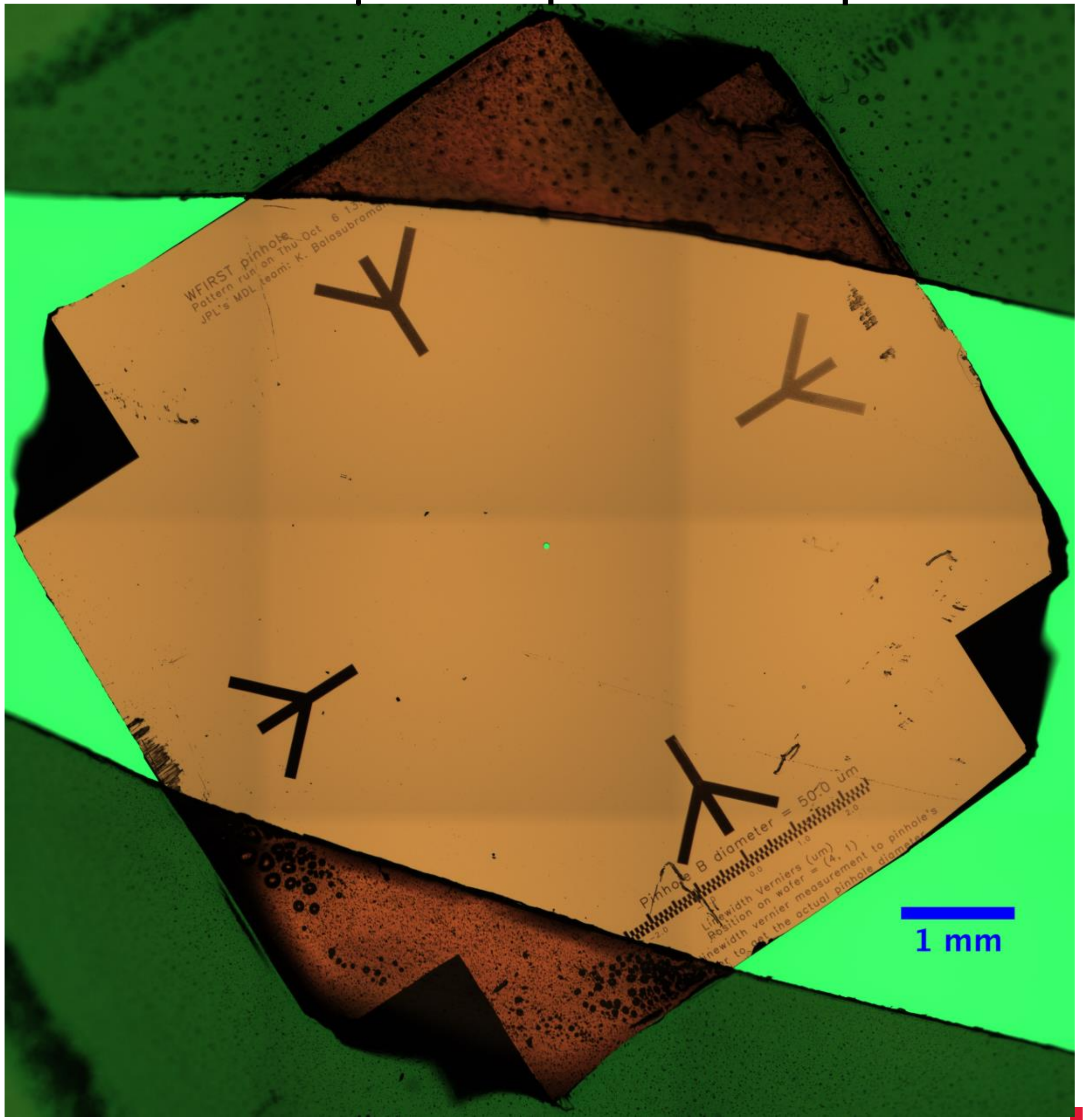
Pinholes Set

2019.01.24

- Device Completion Date: Jan 24, 2019
- Imaging Dates: Jan 24, 2019
- Ship Date: Jan 25, 2019
- A set of 7 pinholes in Si chips mounted on a glass wafer for shipping.
- Al coated side should face the incident light in the testbed
- Dimensions: 10 µm (1), 25 µm (2), 50 µm (2), 100 µm (2)
- Fabricated at MDL / JPL
- Cross section

  (not to scale)

A 50 µm dia pin hole chip



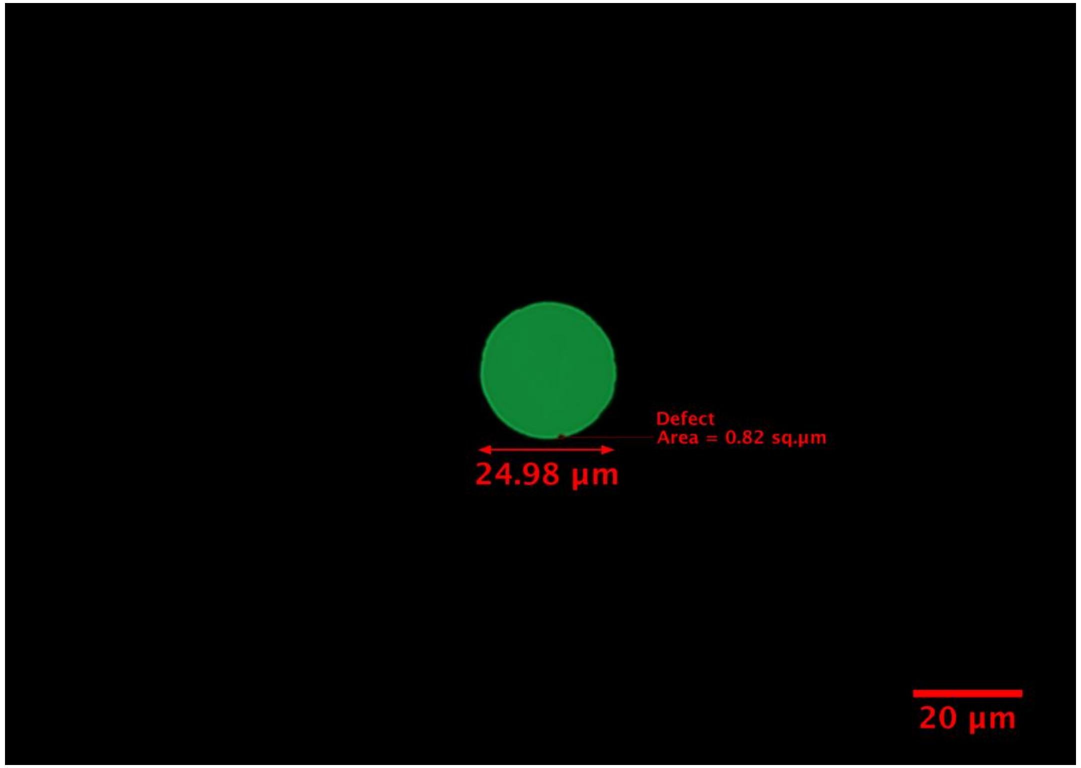
Pinhole Image in Transmission

Pinhole 10 µm

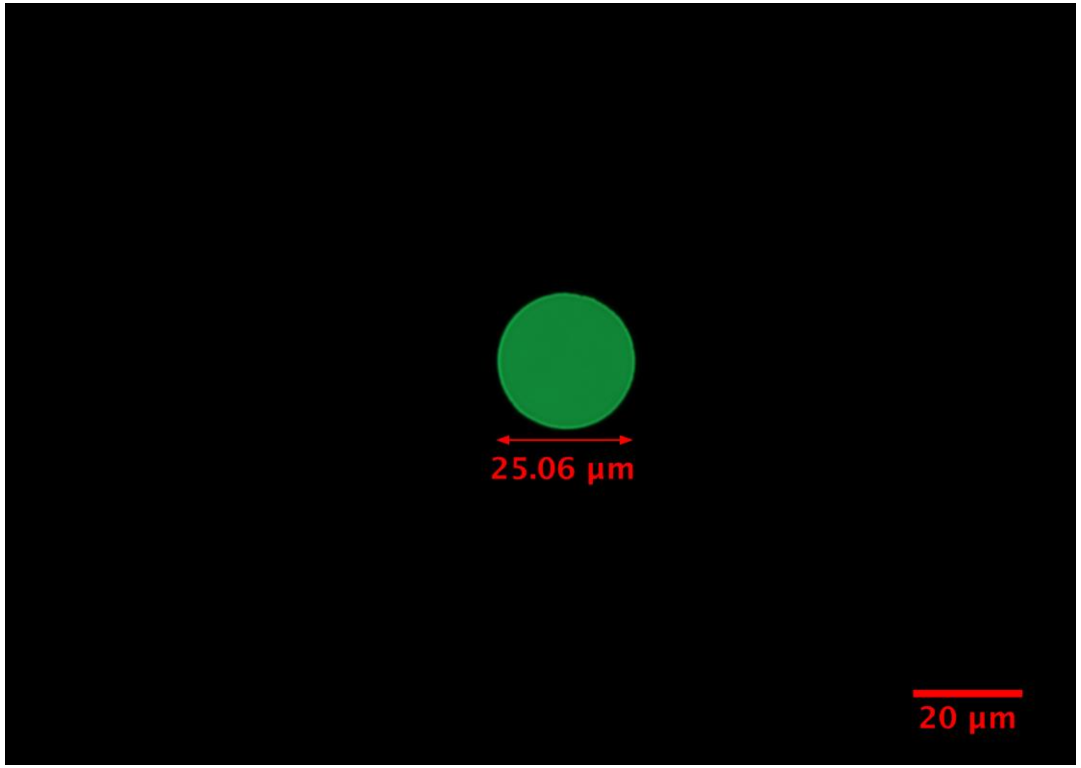
Green Areas: Transmitted light.
Arrows etched on the surface point to the pin hole in the center

Pinhole Image in Transmission

Pinhole 25 µm (A)



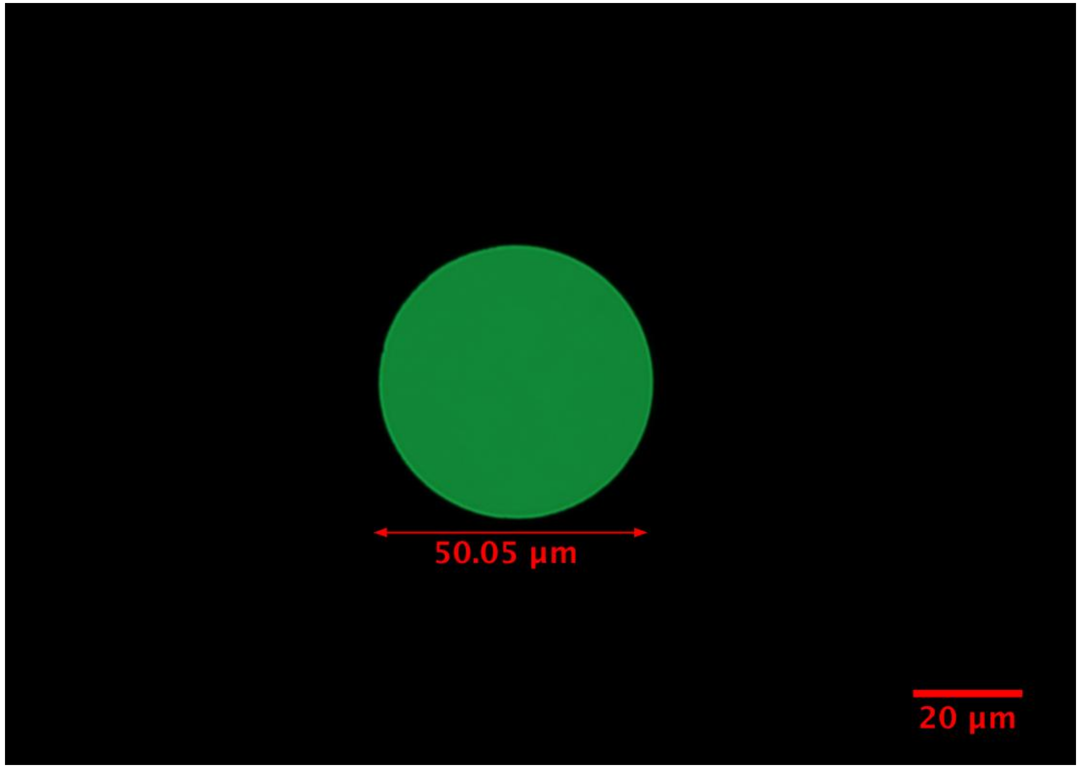
Pinhole 25 µm (B)



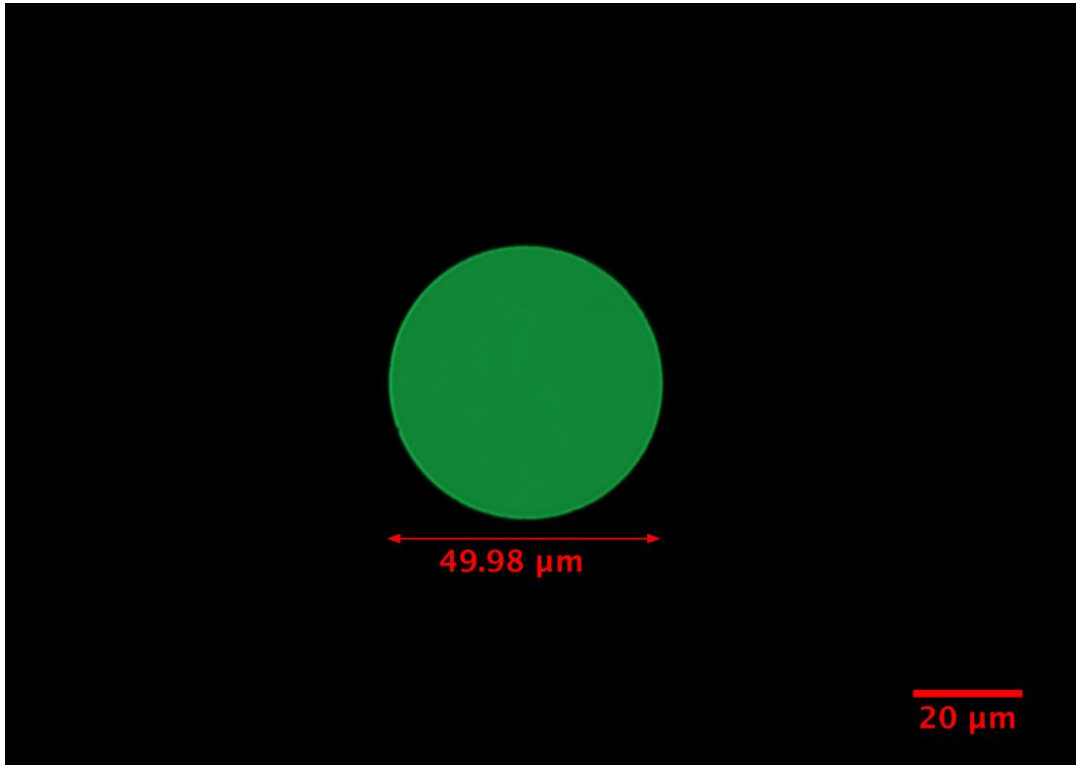
Green Areas: Transmitted light.
Arrows etched on the surface point to the pin hole in the center

Pinhole Image in Transmission

Pinhole 50 µm (A)



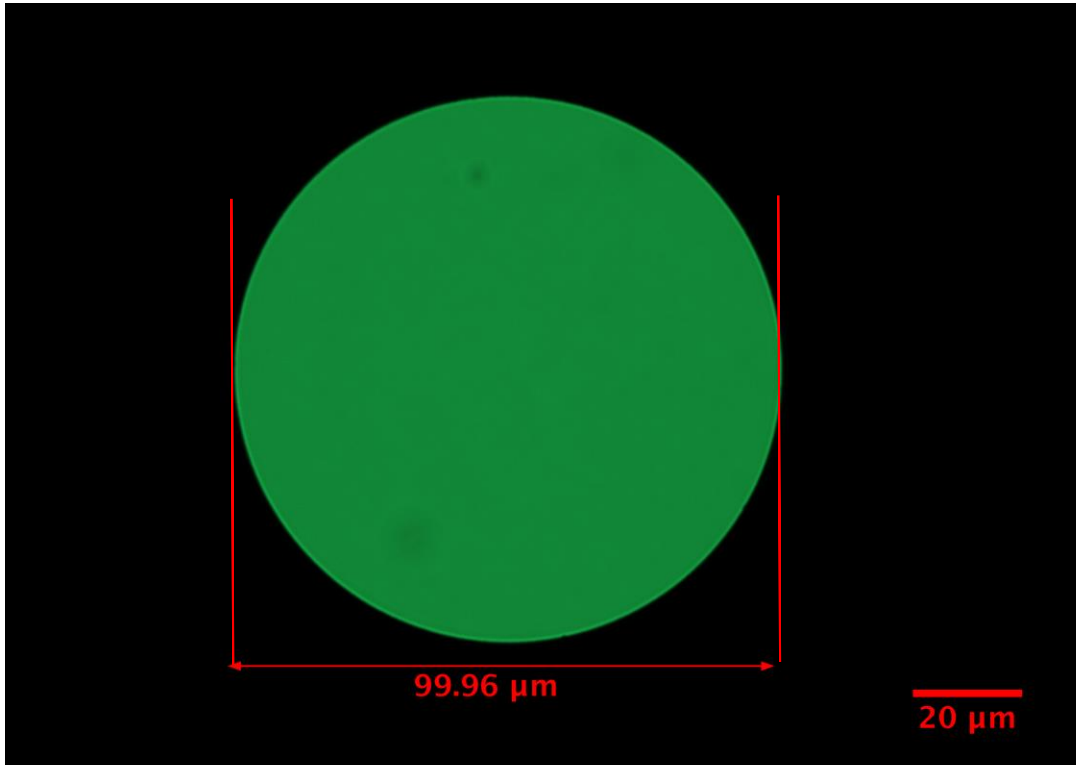
Pinhole 50 µm (B)



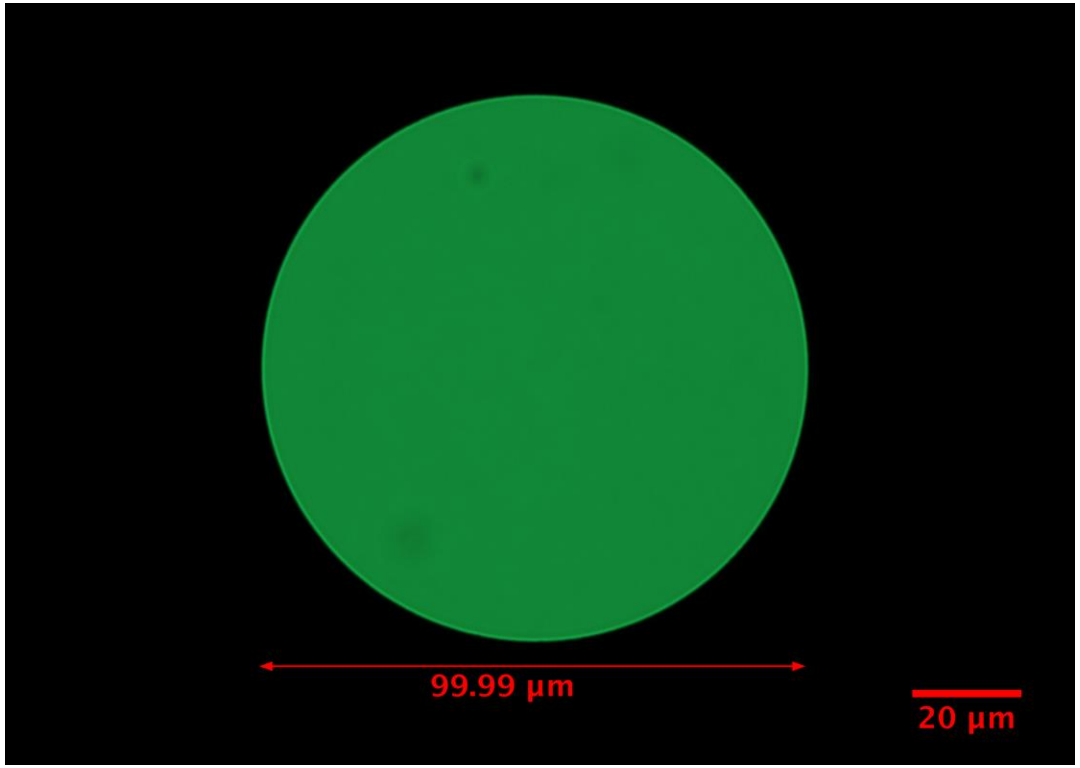
Green Areas: Transmitted light.
Arrows etched on the surface point to the pin hole in the center

Pinhole Image in Transmission

Pinhole 100 µm (B)



Pinhole 100 µm (C)



Green Areas: Transmitted light.

Arrows etched on the surface point to the pin hole in the center

Acknowledgements

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