

MICRO-413

Advanced additive manufacturing methods

addon slides

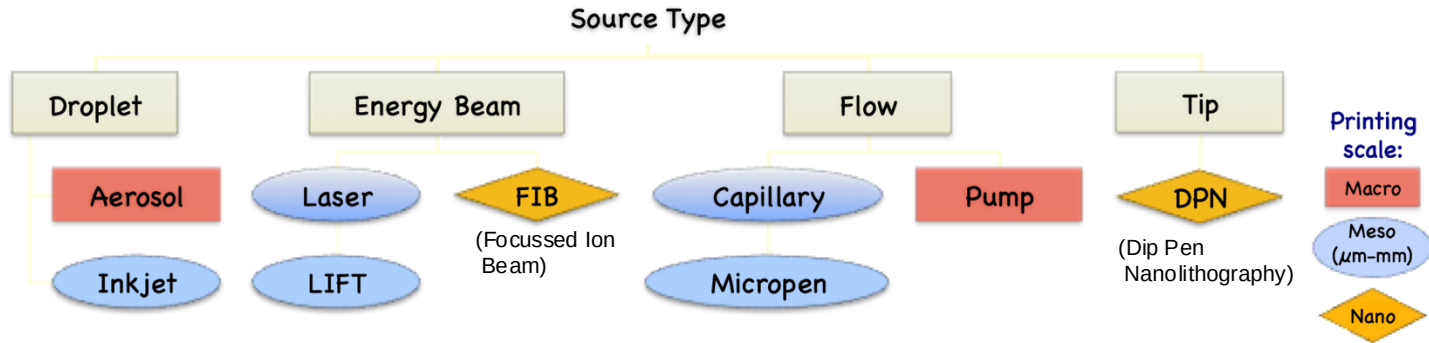
LIFT

PhD thesis Zhiwei Zhang (2023)

Spring semester 2025

Various printing techniques

Digital Microfabrication Techniques



Digital μ -fabrication techniques allow the discrete processing of functional materials for the prototyping, customization and/or repair of microelectronic systems.

LIFT printing of prefabricated dies

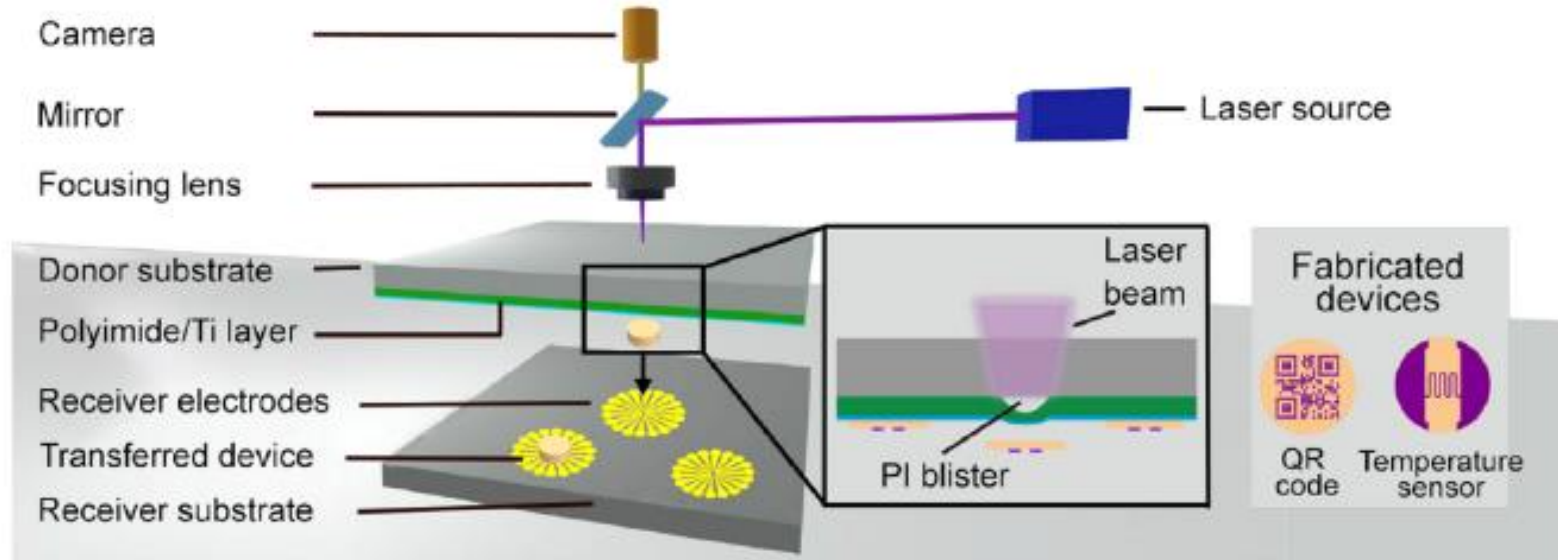
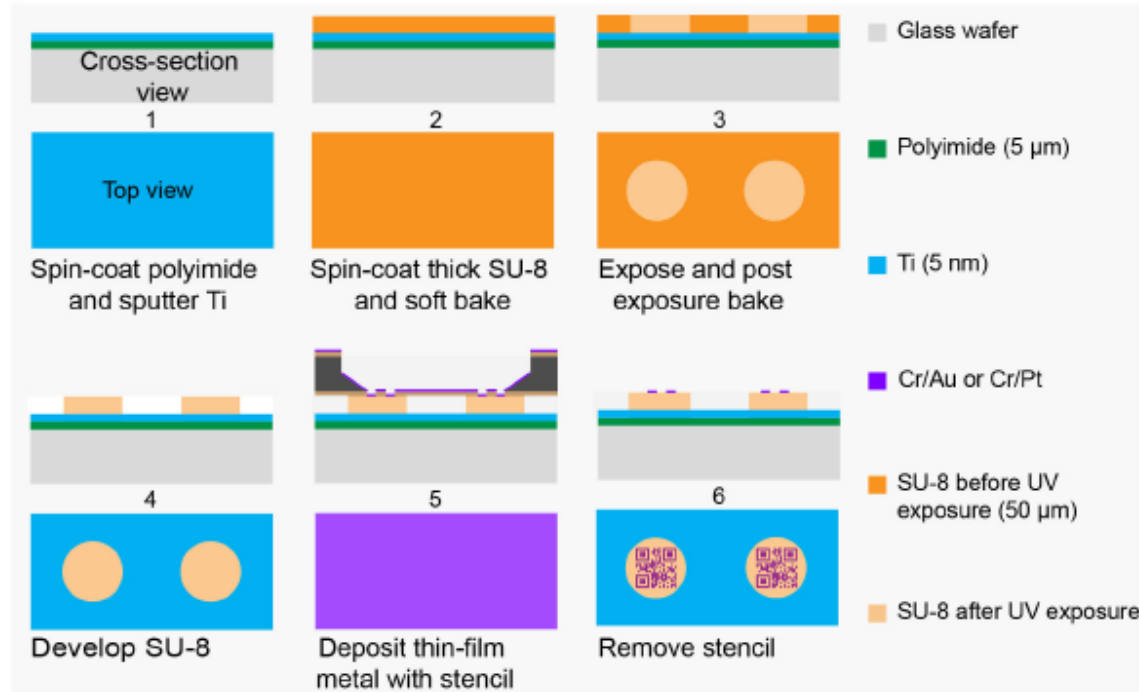


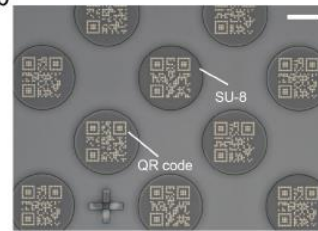
Figure 1: Schematic illustration of the LIFT setup and its principle.

Die fabrication on donor

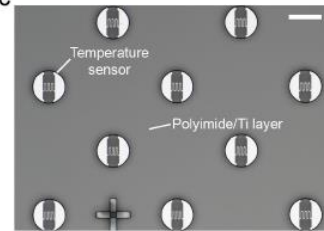
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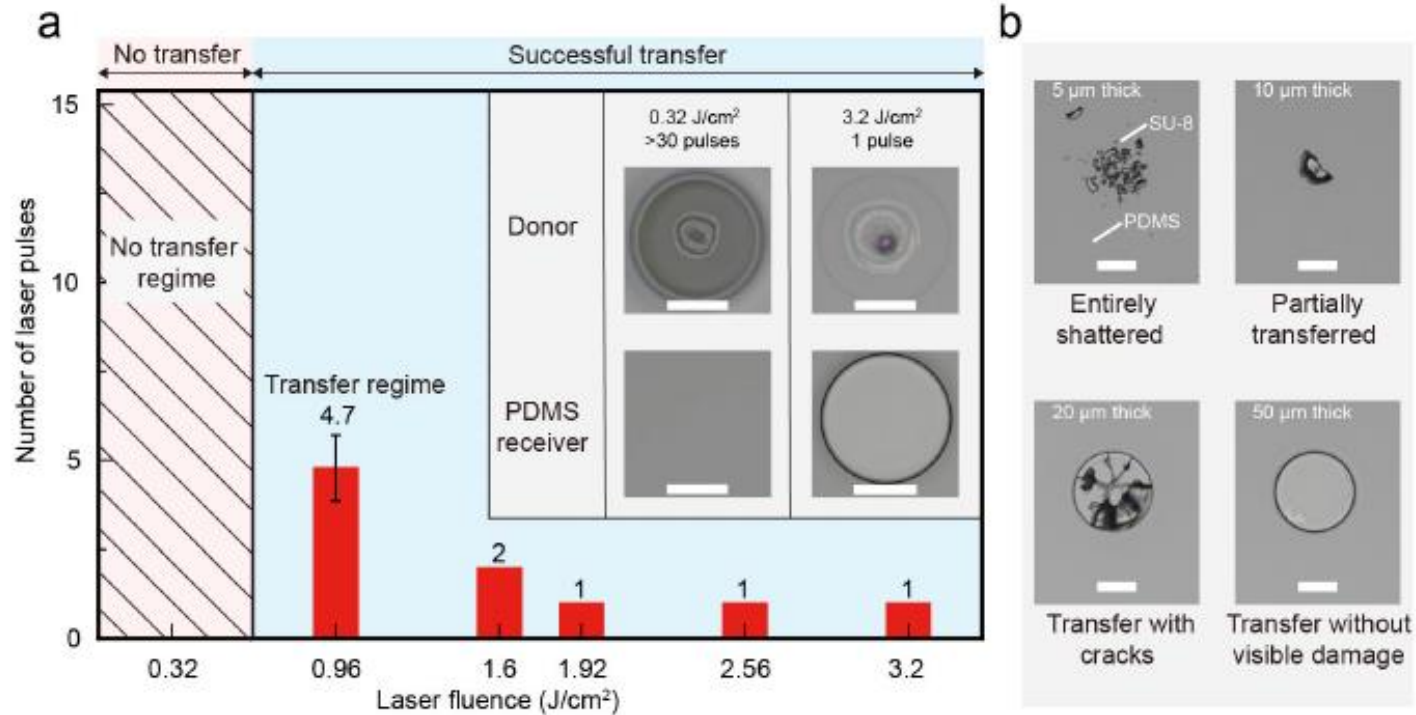
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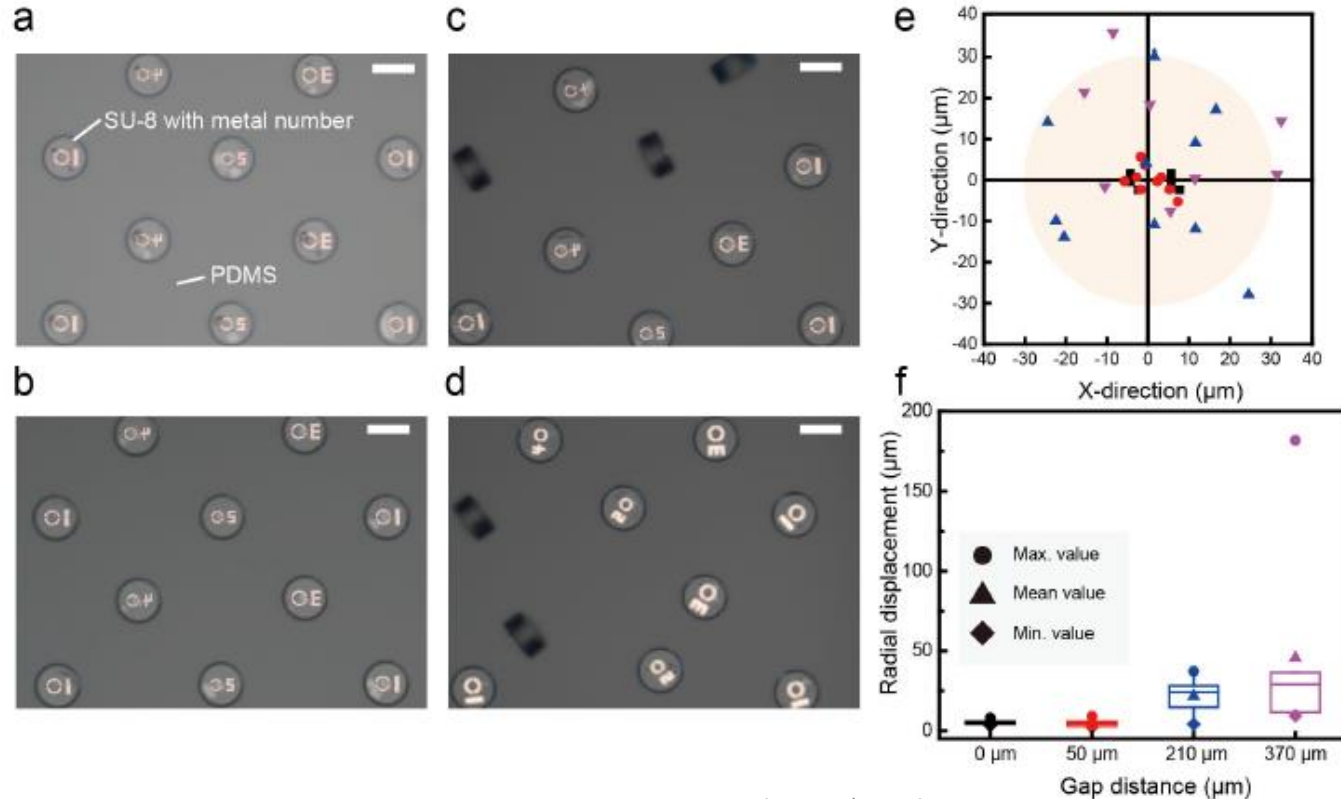
c



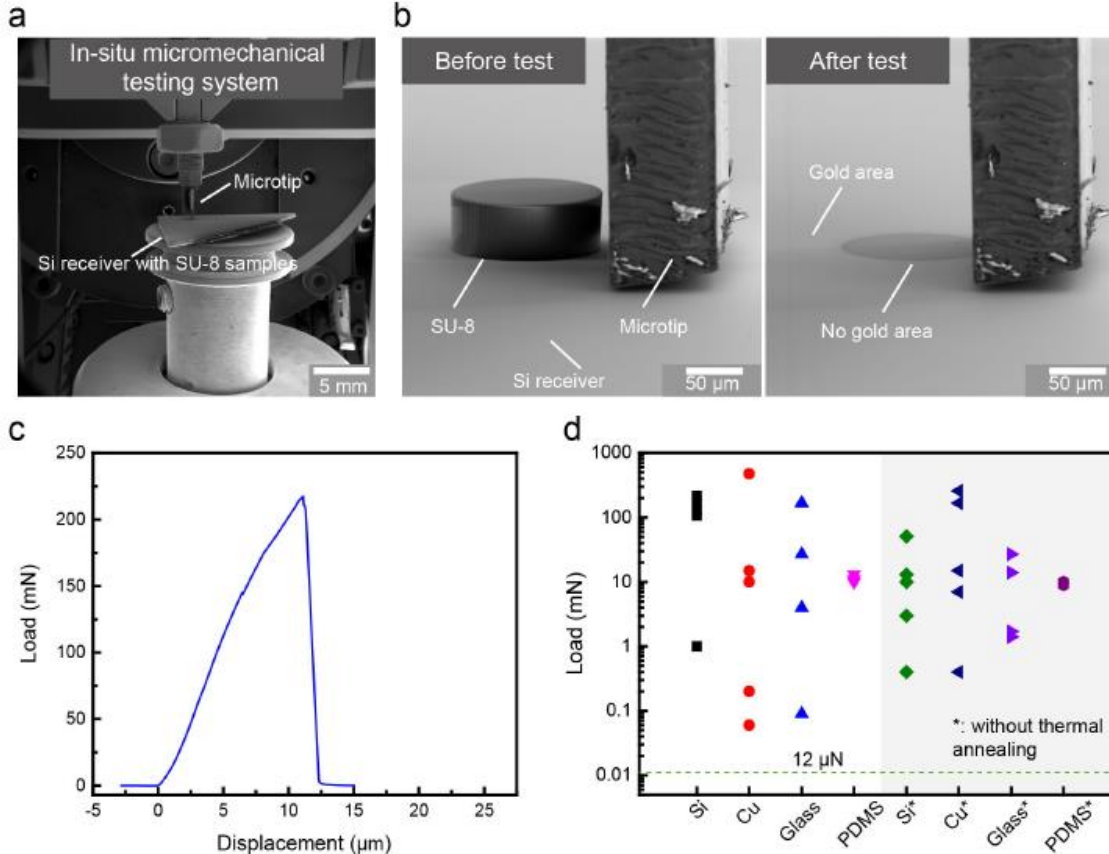
Transfer efficiency



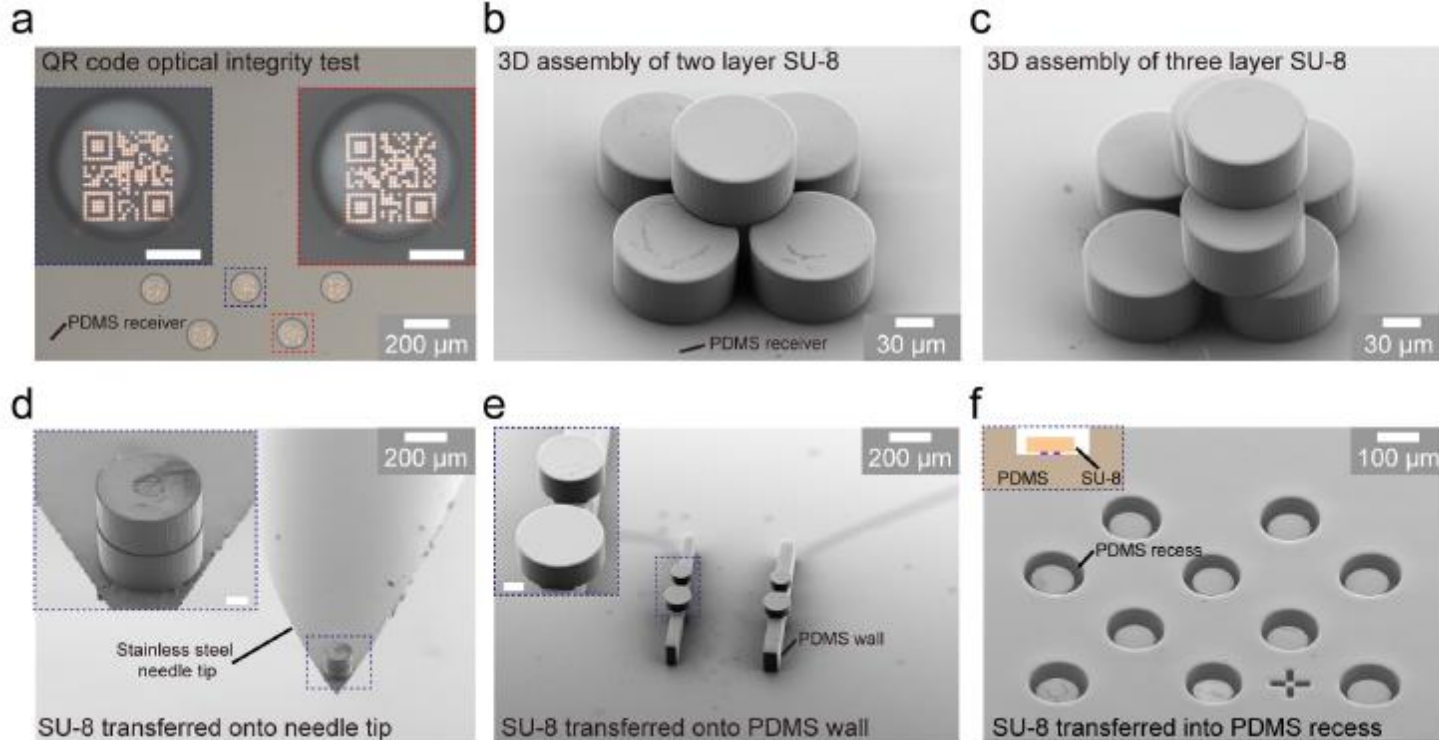
Landing accuracy



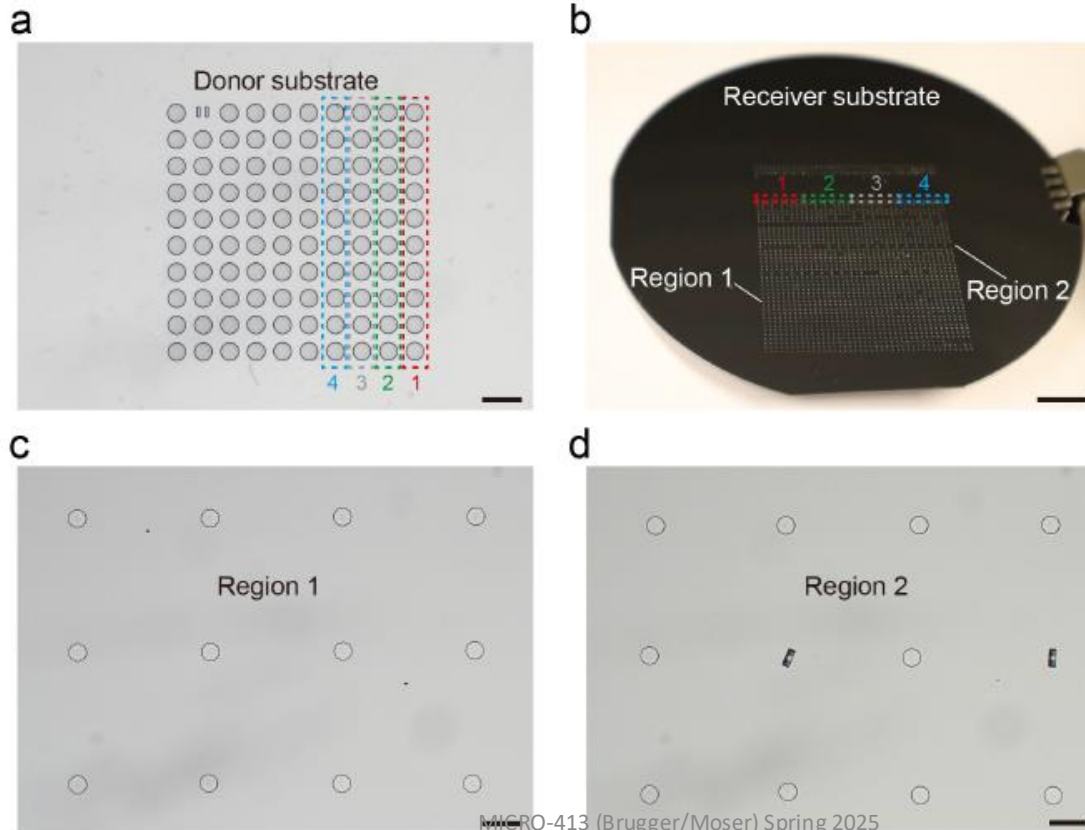
Adhesion test



Transfer results



Scaling to full wafer



Transfer print with electrical contact

