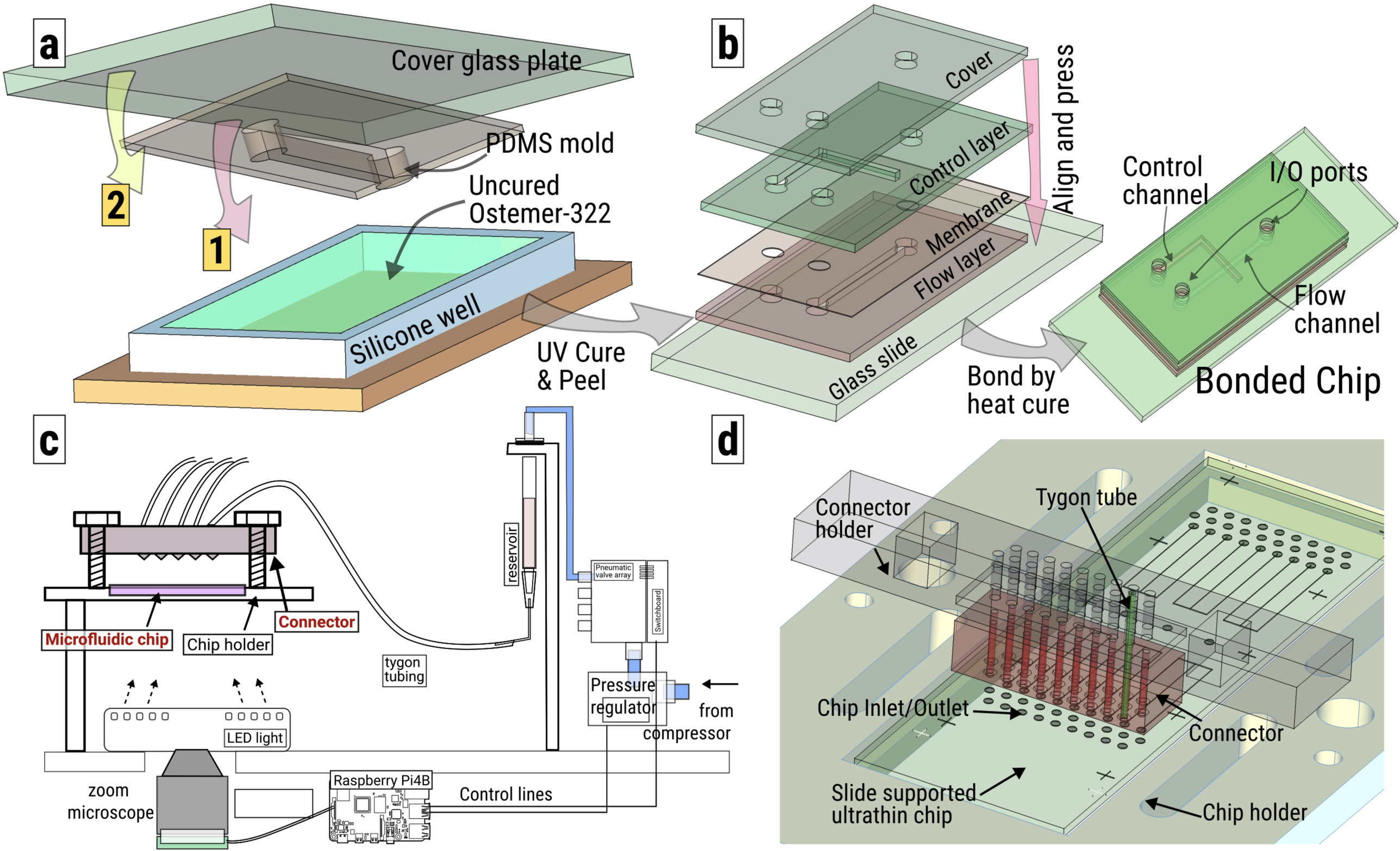
a
Cover glass plate
PDMS mold
Uncured
Ostemer-322
2
1
Silicone well
UV Cure
& Peel
b
Cover
Control layer
Membrane
Flow layer
Glass slide
Align and press
Bond by
heat cure
Control
channel
I/O ports
Flow
channel
Bonded Chip
c
Microfluidic chip
Chip holder
Connector
tygon
tubing
reservoir
Pneumatic
valve array
Switchboard
Pressure
regulator
from
compressor
LED light
zoom
microscope
Raspberry Pi4B
Control lines
d
Connector
holder
Tygon tube
Chip Inlet/Outlet
Connector
Slide supported
ultrathin chip
Chip holder