Supporting Information

Adams *et al.* 10.1073/pnas.0809795105

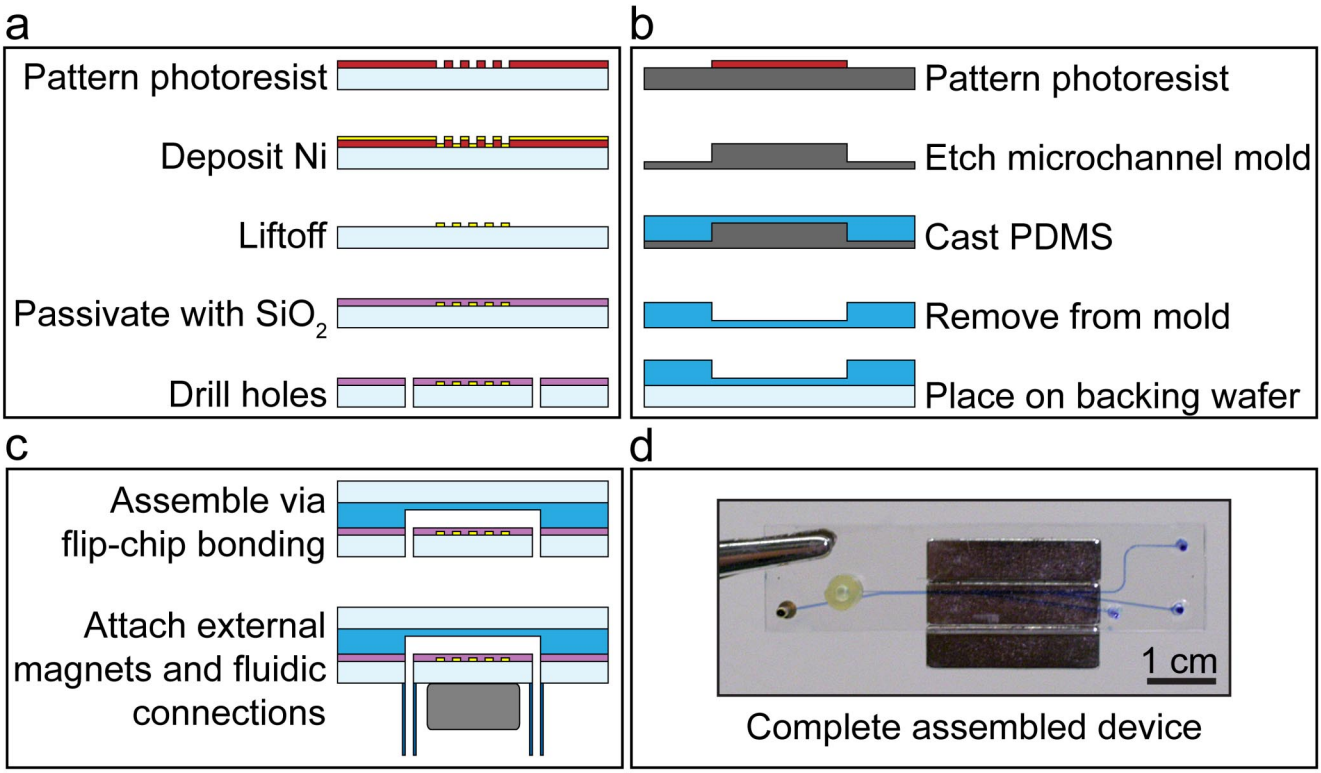

Fig. S1. Multitarget magnetic activated cell sorter (MT-MACS) device microfabrication procedure. (*a*) The microfabricated ferromagnetic strip regions are defined by electron beam physical vapor deposition of 20 nm of titanium and 200 nm of nickel on a glass wafer and using standard metal liftoff techniques to define the desired pattern. As a passivation layer, 100 nm of SiO_2 is subsequently deposited onto the wafer by plasma-enhanced chemical vapor deposition. Inlet and outlet fluidic connections are drilled by using a CNC mill with a diamond drill bit. (*b*) The fluidic channels are fabricated with polydimethylsiloxane (PDMS) by using a silicon mold defined with deep reactive ion etching. After curing, the PDMS is removed from the mold and placed on a glass backing wafer. (*c*) Alignment and assembly of the device layers is performed via flip-chip bonding. Microfluidic inlet and outlet connections are made with a brass eyelet for the buffer inlet, a microfluidic connector port (Labsmith) for the sample inlet, and Teflon tubing for the outlets. All connections are bonded in place with epoxy. (*d*) Micrograph of a complete MT-MACS device with external magnets.