

Materials List for:

Picoinjection of Microfluidic Drops Without Metal Electrodes

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Materials

Name	Company	Catalog Number	Comments
1 ml Luer-Lok™ syringes	BD Medical	309628	
LocTite UV-cured adhesive	Henkel	35241	
PE-2 tubing	Scientific Commodities	BB31695-PE/2	
Novec HFE-7500	3M	98-0212-2928-5	
NaCl	Sigma Aldrich	S9888	
1.5 ml centrifuge tubes	Eppendorf	22363531	
BD Falcon 15 ml tube	BD Biosciences	352097	
Air pressure control pump	Control Air Inc.		We recommend one under the control of DAQ and control software
Syringe pumps	New Era		Must be capable of holding 1 ml syringes and flowing at rates as low as 100 µl/hr
HV-amplifier			Must be capable of 1,000x amplification of signals between 0.01 and 10 V
Plasma bonder/cleaner	Harrick Plasma		
3" silicon wafers	Sigma Aldrich	647535	
PDMS	Dow Corning		Sylgard 184 with curing agent should be included
SU-8 photoresist	MicroChem		Viscosity depends on device dimensions