

Materials List for:

Optical Trap Loading of Dielectric Microparticles In Air

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Materials

Name	Company	Catalog Number	Comments
ScotchBlue Painter's Tape Original	3M	3M2090	
Scotch 810 Magic Tape	3M	3M810	
Function/Arbitrary Waveform generator	Agilent	HP33250A	
Power supply/Digital voltage supplier	Agilent	E3634A	
Ring-type piezoelectric transducer	American Piezo Company	item91	
Electro-optic modulator	Con-Optics	350-80-LA	
Amplifier for Electro-optic modulator	Con-Optics	302RM	
Mitutoyo NIR infinity Corrected Objective	Edmund optics	46-404	Manufactured by Mitutoyo and Distributed by Edmund optics
LOCTITE SUPER GLUE LONGNECK BOTTLE	Loctite	230992	
3D printer	MakerBot	Replicator 2	
Polylactic acid (PLA) filament	MakerBot	True Red PLA Small Spool	
Data Acquisition system	National Instruments	780114-01	
Quadrant-cell photodetector	Newport	2031	
Translational stage	Newport	562-XYZ	
Inverted optical microscope	Nikon Instruments	EclipsTE2000	
Fluorescence filter (green)	Nikon Instruments	G-2B	
Flea3/CCD camera	Point Grey	FL3-U3-13S2M-CS	Trapping laser
Diode pumped neodymium yttrium vanadate(Nd:YVO ₄)	Spectra Physics	J20I-8S-12K/ BL-106C	
Indium tin oxide (ITO) Coated coverslips	SPI supplies	06463B-AB	Polystyrene microparticles
Fast Drying Silver Paint	Tedpella	16040-30	
Dri-Cal size standards	Thermo Scientific	DC-20	
Optical Fiber	Thorlabs	P1-1064PM-FC-5	bottom plate
Aluminium plate	Thorlabs	CP4S	
High voltage power amplifier	TREK	PZD700A M/S	