

Materials List for:

Construction of a High Resolution Microscope with Conventional and Holographic Optical Trapping Capabilities

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Materials

Name	Company	Catalog Number	Comments
Optical table	Newport corporation	ST-UT2-56-8	Irvine, CA
Microscope, Inverted, Eclipse Ti	Nikon USA	MEA53220	Melville, NY
Plan apo 100X oil objective (1.4 NA)	Nikon USA	MRD01901	Melville, NY
Oil condenser Lens 1.4 NA	Nikon USA	MEL41410	Melville, NY
EMCCD camera	Andor technology USA	Ixon DU897	South Windsor, CT
1/3" CCD IEEE1394 camera	NET USA Inc	Foculus FO124SC	Highland IN
Laser, TEM00, SLM, 1,064 nm wavelength	Klatsch Laser Technologies	Senza-1064-1000	Dortmund; Germany
laser diode, TEM00, SLM, 980 nm	Axcel Photonics	BF-979-0300-P5A	Marlborough, MA
laser diode mount	ILX Lightwave	LXD-3545, LDT-5525, and LDM-4984	Bozeman, MT
adjustable fiber ports	Thorlabs	PAF-X-11-B	Newton, NJ
holographic system	Arryx	HOTKIT-ADV-1064	Chicago, IL
holographic mirror	Boulder Non-linear Systems	this is a part of HOTKIT-ADV-1064	Lafayette, CO
Calcite polarizer	Thorlabs	GL10-B	Newton, NJ
half-wave plate	Thorlabs	WPH05M-1064	Newton, NJ
Polarizer rotation mount	Thorlabs	PRM1	Newton, NJ
half-wave plate rotation mount	Thorlabs	RSP1	Newton, NJ
Shutter	Thorlabs	SH05	Newton, NJ
dichroic mirrors (DM2 & DM3); 45 ° AOI	Chroma Technology	t750spxrt	Bellows Falls, VT
dichroic mirror (DM1); 45 ° AOI	Thorlabs	DMSP1000R	Newton, NJ
custom mechanical adapter	Thorlabs	SM1A11 and AD12F with enlarged inner bore	Newton, NJ
notch filter	Semrock	FF01-850/310-25	Rochester, NY
Acousto-Optic deflector (2-axis)	intraAction	DTD-584CA28	Bellwood, IL
goniometric stage	New Focus	9081	Santa Clara, CA
60 mm steering lenses	Thorlabs	LA1134-B	Newton, NJ
16 mm aspherical expander lens	Thorlabs	AC080-016-C	Newton, NJ
175 mm expander lens	Thorlabs	LA1229-C	Newton, NJ
Spot blocker (carbon-steel sphere)	Bal-Tec	0.0100" diameter	Los Angeles, CA
Microspheres (Carboxyl-polystyrene)	Spherotech	CP-45-10	Lake Forest, IL