

Materials List for:

Design and Fabrication of an Optical Fiber Made of Water

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Materials

Name	Company	Catalog Number	Comments
Deionized Water			18MOhm resistance
Micropipettes, Borosilicate Glass, round, inner diameter 850 micron	Produstrial.com	#133260	
Micropipettes, Borosilicate Glass, round, inner diameter 150 micron	Produstrial.com	#133258	
High voltage, low current source, 3kV with 5 mA.	Bertan	Model 215	
High voltage, low current source, 8 kV with 0.25 mA.	Home build		
Optical fiber	Corning	HI 780 C	5 meter
Optical fiber	Thorlabs	FTO 30	5 meter
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Fiber coupled laser	FIS	SMF 28E	
Photoreceiver	New Port/ New Focus	1801-FS	with fiber connection
Oscilloscope	Agilent Technologies	DSO-X 3034A	
2 Degree of freedom tilt stage	New Port/ New Focus	M-562F-TILT	
3 Degree of freedom linear micro translation stage	New Port/ New Focus	M-562F-XYZ	
A set of magnets			
Objective 5X	Mitutoyo	MY5X-802	
Objective 20 x	Mitutoyo	MY20X-804	
Zoom	Navitar	12x Zoom	
Microscope tube	Navitar	1-6015 standard tube	
Isopropanol	Sigma Aldrich	67-63-0	Spec Grad
2 x Bare Fiber holder	Thorlabs	T711-250	
2 x Translational Stage	Thorlabs	DT12	
Block of PMMA for fabricating the water reservoir and pipette holder			150 x 60 x 10 mm
PTFE-Tape	Gufero	240453	
Fiber coupled, cw Laser Light Source	New Port/ New Focus	TLB-6712	765-781 nm