

Materials List for:

Low-cost Custom Fabrication and Mode-locked Operation of an All-normal-dispersion Femtosecond Fiber Laser for Multiphoton Microscopy

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URL: <https://www.jove.com/video/60160>

DOI: [doi:10.3791/60160](https://doi.org/10.3791/60160)

Materials

Name	Company	Catalog Number	Comments
Adapters, mirrors, posts, mounts, and translational stage (optomechanics)	Thorlabs	TR6-P5 (3x), AD12NT (2x), PFSQ20-03-M01, PFSQ05-03-M01, KMS, KM100C, KM100CL, KM200S, LT1, LT101, UPH2-P5, UPH3-P5 (2x)	Standard optical components
Advanced optical fiber cleaver	AFL	CT-100	
Autocorrelator	Femtochrome	FR-103XL/IR/FA/CDA	
Beamsplitter mount	Thorlabs	BSH1/M	
Factory fusion splicer	AFL	FSM-100P	
Fiber collimators	OZ Optics (Canada)	LPC-08-1064-6/125-S-1.6-7.5AS-60-X-1-2-HPC	3x
Fiber-coupled, high-speed photodiode detector	Thorlabs	DET08CFC	
Free-space isolator	Thorlabs	IO-5-1050-HP	
Free-space isolator	Thorlabs	IO-3D-1050-VLP	
Half waveplate	Union Optics (China)	WPZ2312	2x
High power multimode fiber pump module	Gauss Lasers (China)	Pump-MM-976-10	
High power pump and signal combiner	ITF Technology (Canada)	MMC02112DF1	
Index matching gel	Thorlabs	G608N3	
Optical spectrum analyzer	Keysight	Agilent 70951B	
Oscilloscope	Keysight	Agilent 54845A	
Passive double clad fiber(5/130 μm)	ITF Technology (Canada)	MMC02112DF1	3m, Included with combiner
Polarizing beamsplitter	Thorlabs	PBS253	
Quarter waveplates	Union Optics (China)	WPZ4312	2x
Quartz birefringent filter plate	Newlight (Canada)	BIR1060	
RF spectrum analyzer	Tektronix	RSA306B	
Single mode fiber (6/125 μm)	OZ Optics (Canada)	LPC-08-1064-6/125-S-1.6-7.5AS-60-X-1-2-HPC	1m, Included with collimators
Single mode fiber coupler	AFW (Australia)	FOSC-2-64-30-L-1-H64-2	
Transmission diffraction grating 1	LightSmyth	T-1000-1040-3212-94	For compressor
Transmission diffraction grating 2	LightSmyth	T-1000-1040-60x12.3-94	For compressor
Waveplate rotation mount	Thorlabs	RSP1/M	4x

Ytterbium-doped single mode double clad fiber	Thorlabs	YB1200-6/125DC	3m
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