

Materials List for:

Fabrication And Characterization Of Photonic Crystal Slow Light Waveguides And Cavities

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Materials

Name	Company	Catalog Number	Comments
Acetone	Fisher Scientific	A/0520/17	CAUTION: flammable, use good ventilation and avoid all ignition sources.
Isopropanol	Fisher Scientific	P/7500/15	CAUTION: flammable, use good ventilation and avoid all ignition sources.
Electron Beam resist	Marubeni Europe plc.	ZEP520A	CAUTION: flammable, harmful by inhalation, avoid contact with skin and eyes.
Xylene	Fisher Scientific	X/0100/17	CAUTION: flammable and highly toxic, use good ventilation, avoid all ignition sources, avoid contact with skin and eyes.
Microposit S1818 G2	Chestech Ltd.	10277866	CAUTION: flammable and causes irritation to eyes, nose and respiratory tract.
Microposit Developer MF-319	Chestech Ltd.	10058721	CAUTION: alkaline liquid and can cause irritation to eyes, nose and respiratory tract.
Hydrofluoric Acid	Fisher Scientific	22333-5000	CAUTION: extremely corrosive, readily destroys tissue; handle with full personal protective equipment rated for HF.
Microposit 1165 Remover	Chestech Ltd.	10058734	CAUTION: flammable and causes irritation to eyes, nose and respiratory tract.
Sulphuric Acid	Fisher Scientific	S/9120/PB17	CAUTION: corrosive and very toxic; handle with personal protective equipment and avoid inhalation of vapours or mists.
Hydrogen Peroxide	Fisher Scientific	BPE2633-500	CAUTION: very hazardous in case of skin and eye contact; handle with personal protective equipment.

Equipment

Silicon-on-Insulator wafer	Soitec	G8P-110-01	
Diamond Scribe	J M Diamond Tool Inc.	HS-415	
Microscope slides	Fisher Scientific	FB58622	
Beakers	Fisher Scientific	FB33109	
Tweezers	SPI Supplies	PT006-AB	
Ultrasonic Bath	Camlab	1161436	
Spin-Coater	Electronic Micro Systems Ltd.	EMS 4000	

Pipette	Fisher Scientific	FB55343	
E-beam Lithography System	Raith GmbH	Raith 150	
Reactive Ion Etching System	Proprietary In-house Designed	--	
UV Mask Aligner	Karl Suss	MJB-3	
ASE source	Amonics	ALS-CL-15-B-FA	CAUTION: invisible IR radiation.
Single mode fibers	Thorlabs	P1-SMF28E-FC-2	
3 dB fiber splitters	Thorlabs	C-WD-AL-50-H-2210-35-FC/FC	
Aspheric lenses	New Focus	5720-C	
XYZ stages	Melles Griot	17AMB003/MD	
Polarizing beamsplitter cube	Thorlabs	PBS104	
IR detector	New Focus	2033	
100× Objective	Nikon	BD Plan 100x	
Oscilloscope	Tektronix	TDS1001B	
Optical Spectrum Analyzer	Advantest	Q8384	
IR sensor card	Newport	F-IRC2	
TLS source	Agilent	81940A	CAUTION: invisible IR radiation.
IR Camera	Electrophysics	7290A	
IR Detector	New Focus	2153	
Digital Multimeter	Agilent	34401A	
Illumination	Stocker Yale	Lite Mite	
Monochromator	Spectral Products	DK480	
Array Detector	Andor	DU490A-1.7	
GIF Fiber	Thorlabs	31L02	