

Materials List for:

An Electrochemical Cholesteric Liquid Crystalline Device for Quick and Low-Voltage Color Modulation

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URL: <https://www.jove.com/video/59244>

DOI: [doi:10.3791/59244](https://doi.org/10.3791/59244)

Materials

Name	Company	Catalog Number	Comments
1-Ethyl-3-methylimidazolium Trifluoromethanesulfonate, 98%	TCI	E0494	
4-Cyano-4'-pentyloxybiphenyl, 98%	TCI	C1551	
Diamond tipped glass cutter	AS ONE	6-539-05	
Dichloromethane, 99.5%	KANTO CHEMICAL	10158-2B	HPLC grade
Differential Scanning Calorimeter	METTLER TOLEDO	DSC 1	
Digital microscope	KEYENCE	VHX-5000	
Extran MA01	Merck	107555	
Fully ITO-coated glass plate			Custom order, Resistance: ~30Ω
Glass beads	Thermo Fisher Scientific	2005ATS	5 ± 0.3 μm in diameter
Hot stage	INTEC	mK1000	
ITO-patterned glass plate			Custom order, Resistance: ~30Ω
Oil rotary vacuum pump	SATO VAC	TSW-150	Pressure: ~5 Pa
Optical adhesive	Noland	NOA81	
Poly(3,4-ethylenedioxythiophene), bis-poly(ethyleneglycol), lauryl terminated	Sigma Aldrich	687316	0.7 wt% (dispersion in nitromethane)
Potentiostat	TOHO TECHNICAL RESEARCH	PS-08	
Rubbing machine	EHC	MRJ-100S	
Spectrophotometer	JASCO	V-670 UV/VIS/NIR	
Spin coater	MIKASA	1H-D7	
Ultrapure water	Merck	Milli-Q Integral 3	
Ultrasonic bath	AS ONE	ASU-2	Power: 40 W
Ultrasonic soldering	KURODA TECHNO	SUNBONDER USM-IV	
UV lamp	AS ONE	SLUV-4	Power: 4 W