

Elaborate Control of Inkjet Printer for Fabrication of Chip-based Supercapacitors

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Materials

Name	Company	Catalog Number	Comments
2" x 3" FR4 board	Voltera	SKU: 1000066	PCB substrate
Activated carbon	MTI	Np-Ag-0530HT	
Eagle CAD	Autodesk		PCB CAD program
Ethyl cellulose	Sigma Aldrich	46070	48.0-49.5% (w/w) ethoxyl basis
Flex 2 conductive ink	Voltera	SKU: 1000333	Flexible Ag ink
Lithium perchlorate	Sigma Aldrich	634565	
Propylene carbonate	Sigma Aldrich	310328	
PVDF	Sigma Aldrich	182702	average Mw ~534,000 by GPC
Smart Manager	ZIVE LAB	ver : 6. 6. 8. 9	Electrochemical analysis program
Super-P	Hyundai		
Terpineol	Sigma Aldrich	432628	
Thinky mixer	Thinky	ARE-310	Planetary mixer
Triton-X	Sigma Aldrich	X100	
V-One printer	Voltera	SKU: 1000329	PCB printer
ZIVE SP1	Wonatech		Potentiostat device