

# Enhanced Photoluminescence of *Curcuma longa* Extracts via Chitosan-Mediated Energy Transfer for Textile Authentication Applications

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jove.com/video/66035

## Materials

Name	Company	Catalog Number	Comments
(Curcumin) <i>C. longa</i> , spray dried	N/A	N/A	Naturally Sourced
100 mL Graduated Cylinder	n/a		
10 mL Serological Pipette	n/a		
200 mL Beaker	n/a		
365 nm UV Light	AloneFire		SV004 LG
50 mL Centrifuge Tube	n/a		
AATCC Multitester Fabric	Testfabrics, Inc.	401002	AATCC Multifiber test fabric # 1 precut pieces of 2 X 2 inches, Heat Sealed
Analytical Balance	Satorius		BSA 224S-CW
Aspirator	n/a		
ATR- FTIR	Bruker		Bruker Tensor II
Centrifuge	Hermle Labortechnik GmbH		Z 206 A
Chitosan	Tokyo Chemical Industries	9012-76-4	
Digital Camera	ToupTek		XCAM1080PHB
Drying Rack	n/a		
Ethanol	Chem-Supply	64-17-5	Undenatured, 99.9% purity
Glacial Acetic Acid	RCI-Labscan	64-19-7	AR Grade, 99.8% purity
Glass Slide	n/a		
Iron Clamp	n/a		
Iron Stand	n/a		
Magnetic Stirrer	Corning		PC-620D
Pasteur Pipette	n/a		
Propan-2-ol	RCI-Labscan	67-63-0	AR Grade, 99.8% purity
Sonicator	Jeio Tech Inc.		UCS-20
Spectrofluorometer	Horiba (Jovin Yvon)		Horiba Fluoromax Plus

Stirring Bar	n/a		
UV-Vis Spectrophotometer	Agilent		Cary UV 100
Wash bottle	n/a		
Zoom Stereo Microscope	Olympus		SZ61