

Materials List for

High Spatial Resolution Chemical Imaging of Implant-Associated Infections with X-ray Excited Luminescence Chemical Imaging Through Tissue

Apeksha C. Rajamanthrilage¹, Erin Levon², Unaiza Uzair¹, Cedric Taylor², Tzuen-Rong Tzeng², Jeffrey N. Anker^{1,3}

¹Department of Chemistry, Clemson University ²Department of Biological Sciences, Clemson University ³Department of Bioengineering, Clemson University

Corresponding Author

Jeffrey N. Anker
janker@clemson.edu

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Materials

Name	Company	Catalog Number	Comments
90 degree elbow	Produced in Hilltop Technology Laboratory, 51 Parker, Irvine, CA		
Bromo Cresol Green	Sigma-Aldrich	45ZW10	
Bromo Thymol Blue	Sigma	76-59-5	
ElectraCOOL Advanced thermoelectric cool plate	Pollock industries, White River, VT, USA	TCP 50	
Ethanol	Beantown Chemical, 9 Sagamore Park Road Hudson, NH 03051	64-17-5	
Gadolinium Oxysulfide Europium doped (Gd ₂ O ₂ S:Eu) particles~8.0 μm	Phosphor Technologies Inc., Stevenage, England	UKL63/N-R1	
LabVIEW	National Instruments, Austin, TX		
Motorized Linear Vertical Stage Model (for Z axis)	Motion Control, Smithtown, NY, USA	AT10-60	
National instruments c-DAQ 9171	National Instruments, Austin, TX	NI cDAQ™-9171	
One piece acrylic light guide	Produced in Hilltop Technology Laboratory, 51 Parker, Irvine, CA		
pH 4 buffer	VWR BDH Chemicals	BDH5024	
pH 8 buffer	VWR BDH Chemicals	BDH5060	
Phosphate Buffer Solution	MP Biomedicals, Irvine, CA, USA	2810305	
Photo multiplier tubes Model P25PC-16	SensTech, Surrey, UK	Model P25PC-16	
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> Rosenbach	American Type Culture Collection (ATCC), Manassas, VA	ATCC 25923	
Tryptic Soy Agar	Teknova, Hollister, CA, USA	T0520	
Tryptic Soy Broth	EMD Millipore, Burlington, MA, USA	1005255000	

X-ray source-iMOXS	Institute for Scientific Instruments GmbH, Berlin, Germany		
X,Y motorized stage-30 cm x 15 cm x 6 cm travel	Thorlabs Inc., Newton, NJ, USA	LTS300 and LTS150	