

Materials List for:

High-resolution Thermal Micro-imaging Using Europium Chelate Luminescent Coatings

Timothy M. Benseman^{1,2,3}, Yang Hao^{1,2}, Vitalii K. Vlasko-Vlasov¹, Ulrich Welp¹, Alexei E. Koshelev¹, Wai-Kwong Kwok¹, Ralu Divan⁴, Courtney Keiser⁵, Chiharu Watanabe⁶, Kazuo Kadowaki⁶

¹Materials Science Division, Argonne National Laboratory

²Department of Physics, University of Illinois at Chicago

³Department of Physics, CUNY Queens College

⁴Center for Nanoscale Materials, Argonne National Laboratory

⁵Department of Physics, University of Northern Iowa

⁶Institute for Materials Science, University of Tsukuba

Correspondence to: Timothy M. Benseman at tbenseman@anl.gov

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Materials

Name	Company	Catalog Number	Comments
Europium thenoyltrifluoroacetate powder	Sigma-Aldrich	176494-1G	Also known as Europium tris[3-(trifluoromethylhydroxymethylene)-(+)-camphorate]
Mercury short-arc lamp with flexible light guide	Lumen Dynamics	X-Cite Exacte	Light source includes internal iris and photosensor for output intensity feedback.
Peltier-cooled CCD camera	Princeton Instruments	PIXIS 1024	1,024 x 1,024 pixels, 16-bit resolution
610 nm band-pass filter	Edmund Optics	65-164	Passband has CWL 610 nm, FWHM 10 nm
500 nm short-pass filter	Edmund Optics	84-706	OD4 in stopband
Helium flow cryostat with optical window	Oxford Instruments	MicrostatHe2	
high vacuum grease	Dow Corning		
Digital Current source	Keithley	Model 2400	Computer-controllable current & voltage source
Digital Voltmeter	Hewlett-Packard	Model 34420A	Digital Nanovoltmeter now available as Agilent Model 34420A