

Abstract Submitted  
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**Fabrication of Micropatterned, Free-Standing, Flexible Thin Films of SU8 and SQ** LUKE D'IMPERIO, ANDREW F. MCCROSSAN, JEFFREY R. NAUGHTON, YITZI M. CALM, JUAN M. MERLO, MICHAEL J. BURNS, MICHAEL J. NAUGHTON, Boston College — Motivations for improving techniques and devices in thin film sciences are numerous in areas such as thin film electronics, medical devices, etc. We describe the fabrication and characteristics of free-standing, flexible, optically transparent, micropatterned thin films made from negative photoresists SU8 and SQ. We motivate the importance of film thickness for applications in localized optical throughput from light sources. We demonstrate the robust and flexible qualities of samples in interest of possible uses in wearable electronics. We outline our next steps in the development of a platform for highly localized optical stimulation and electrical recording for e.g. bioelectronics and optogenetics.

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