

Supporting Information

Low Loss Photopatternable Matrix Materials for LWIR-Metamaterial Applications

Roger D. Rasberry,¹ Yun-Ju Lee,² James C. Ginn,^{3,4} Paul F. Hines,⁵ Christian L. Arrington,⁶ Andrea E. Sanchez,¹ Michael T. Brumbach,⁷ Paul G. Clem,⁸ David W. Peters,³ Michael B. Sinclair,² and Shawn M. Dirk^{1,*}

¹Organic Materials Department, ²Electronic Materials and Nanostructures Department, ³Applied Photonic Microsystems Department, ⁴Center for Integrated Nanotechnologies, ⁵Integrated Microdevice Systems Department, ⁶Photonic Microsystems Technologies Department, ⁷Materials Characterization Department, and ⁸Direct Write Technology Group, Sandia National Laboratories, P.O. Box 5800, Albuquerque, New Mexico 87185, United States

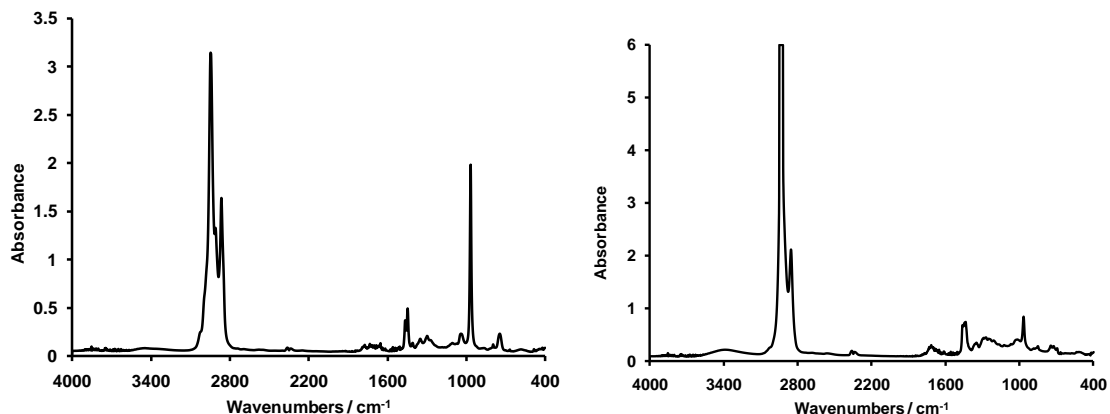


Figure S1. IR spectra for polynorbornene taken from free-standing films (20-25 μm) before (left) and after cross-linking (right).

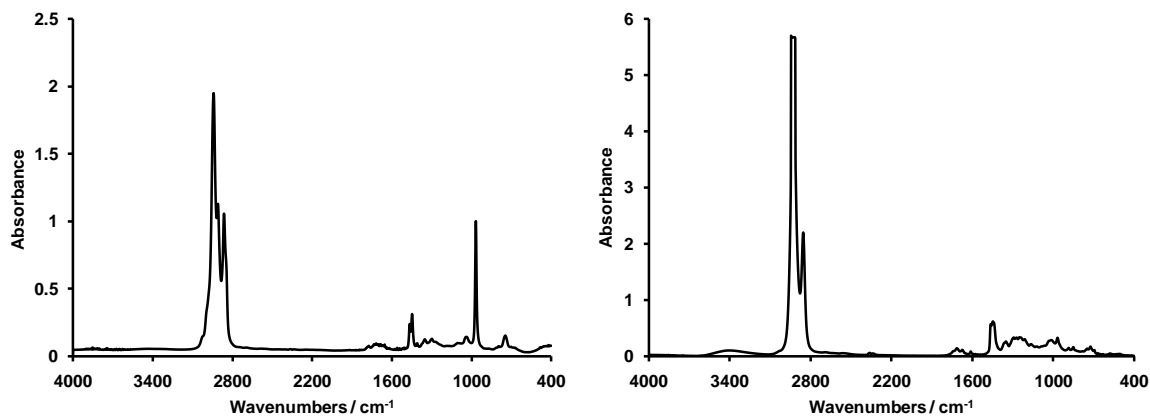


Figure S2. IR spectra for partially hydrogenated polynorbornene (18.2%) taken from free-standing films (20-25 μm) before (left) and after cross-linking (right).

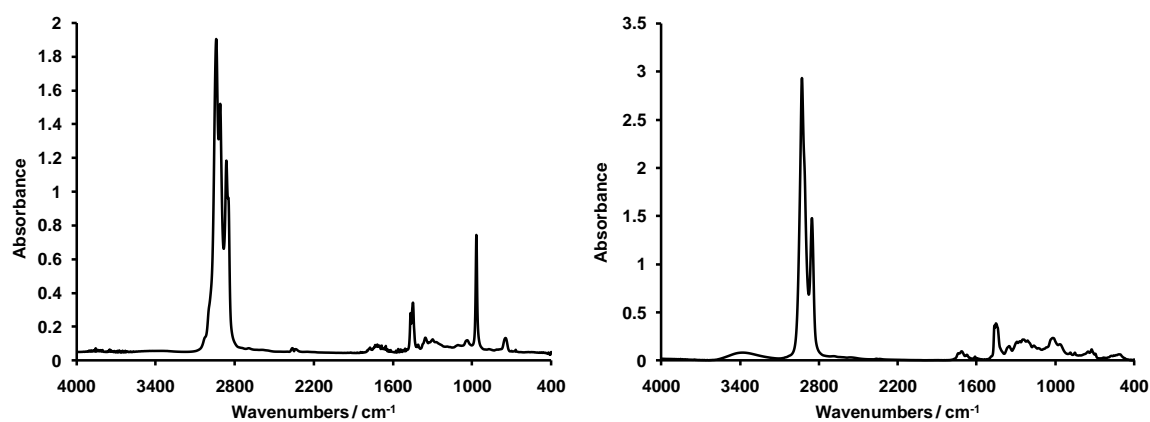


Figure S3. IR spectra for partially hydrogenated polynorbornene (41%) taken from free-standing films (20-25 μm) before (left) and after cross-linking (right).

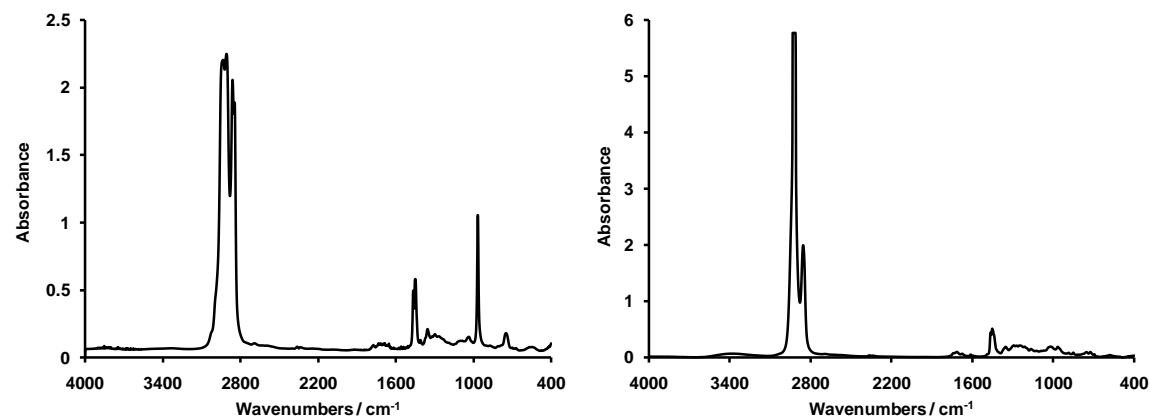


Figure S4. IR spectra for partially hydrogenated polynorbornene (55.9%) taken from free-standing films (20-25 μm) before (left) and after cross-linking (right).

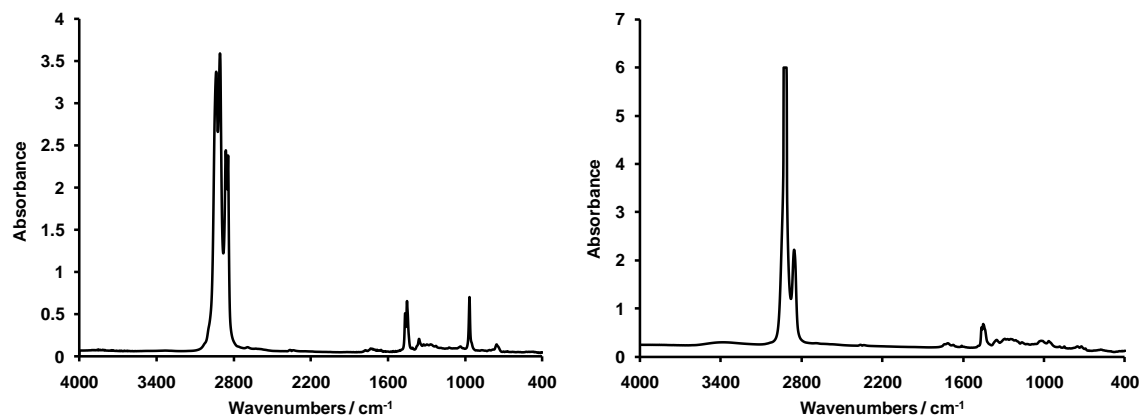


Figure S5. IR spectra for partially hydrogenated polynorbornene (72.4%) taken from free-standing films (20-25 μm) before (left) and after cross-linking (right).