

Abstract Submitted
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Soft solvent-free elastomers and elastomer composites¹ WILLIAM DANIEL, YANG ZHOU, SAM KIRBY, SERGEI SHEIKO, University of North Carolina at Chapel Hill — There are numerous filler based methods for altering the mechanical properties of elastomers. Hard particles and fibers enhance stiffness, strength and toughness while solvents and gas inclusions greatly reduce elastic moduli. Here we will discuss temperature responsive microsphere elastomer composites capable of reversible changing between a reinforced hard microsphere composites and soft syntactic foam.

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