Investigation of Chemically Recyclable Thiol-ene Crosslinked Photopolymers
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Background: Thiol-ene materials contain dynamic disulfide backbones which may be degraded via base-catalyzed disulfide exchange reactions, allowing chemical degradation of the polymer network. (i.e. molecular recycling of rubber materials)

Research Question: How many dynamic linkages may be replaced by permanent linkages before the film is no longer degradable?

Findings: 50% of the dynamic linkages may be replaced with permanent linkages before the network is no longer degradable.