



Supplementary Materials

Super-Toughened Fumed-Silica-Reinforced Thiol-Epoxy Composites Containing Epoxide-Terminated Polydimethylsiloxanes

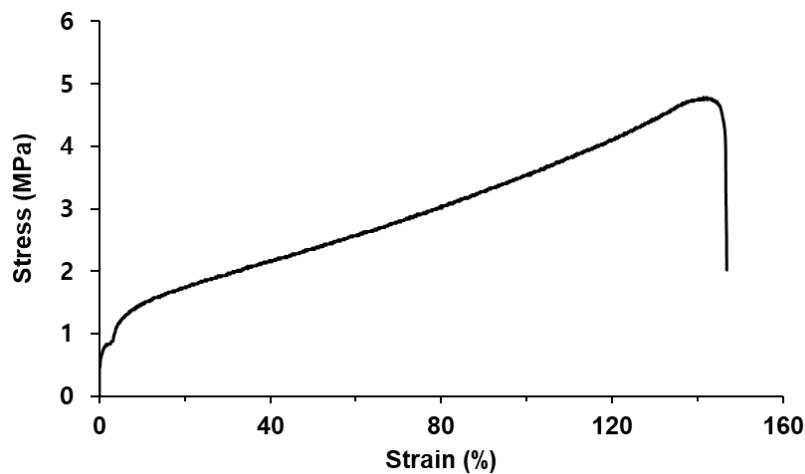


Figure S1. A stress-strain curve of BPDGE/thiol/MI.

Table S1. Mechanical properties of the BPDGE/thiol/MI system and control composite.

	BPDGE/thiol/MI	Control composite
Tensile strength (MPa)	5.2 ± 0.4	5.8 ± 0.3
Elongation at break (%)	143 ± 3.8	93 ± 5.9
Young's modulus (MPa)	12.8 ± 0.4	25.9 ± 0.3
Toughness (MJ/m ³)	4.48 ± 0.16	3.37 ± 0.55
Impact strength (KJ/m ²)	40.2 ± 2.0	26.0 ± 1.2

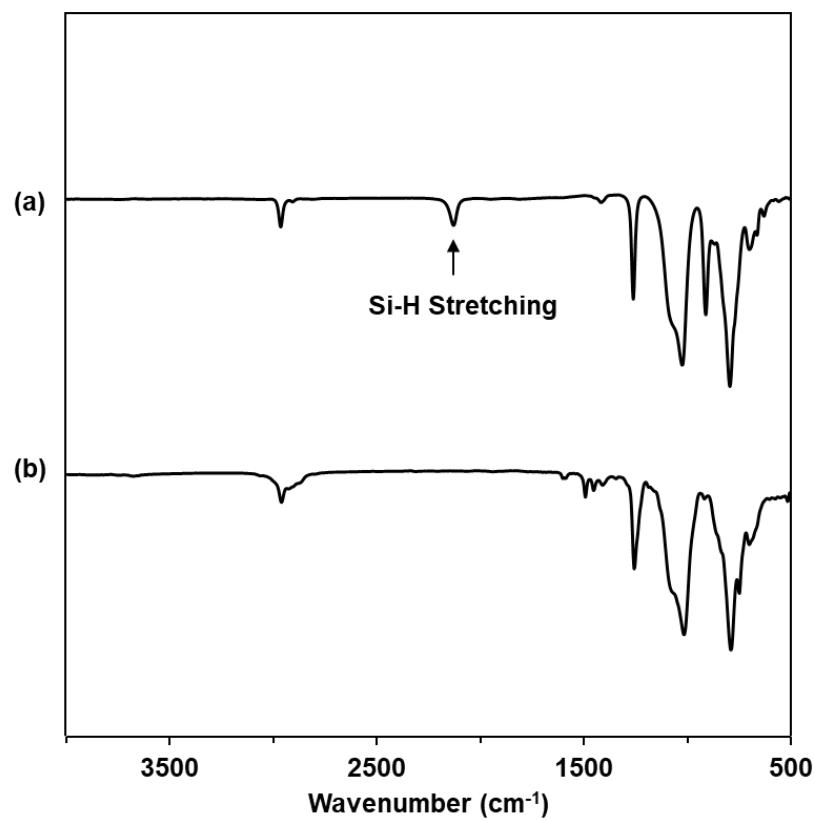


Figure S2. FTIR spectra of (a) h-PDMS and (b) ep-PDMS.

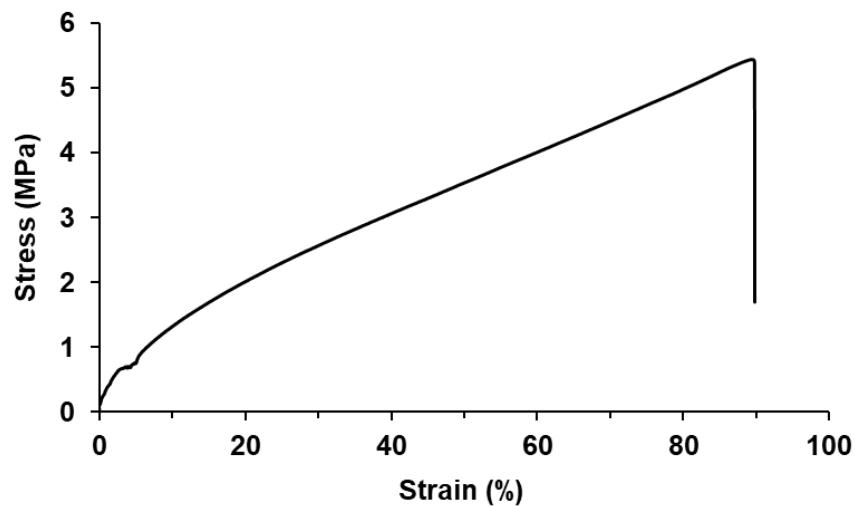


Figure S3. A stress-strain curve of the control composite.

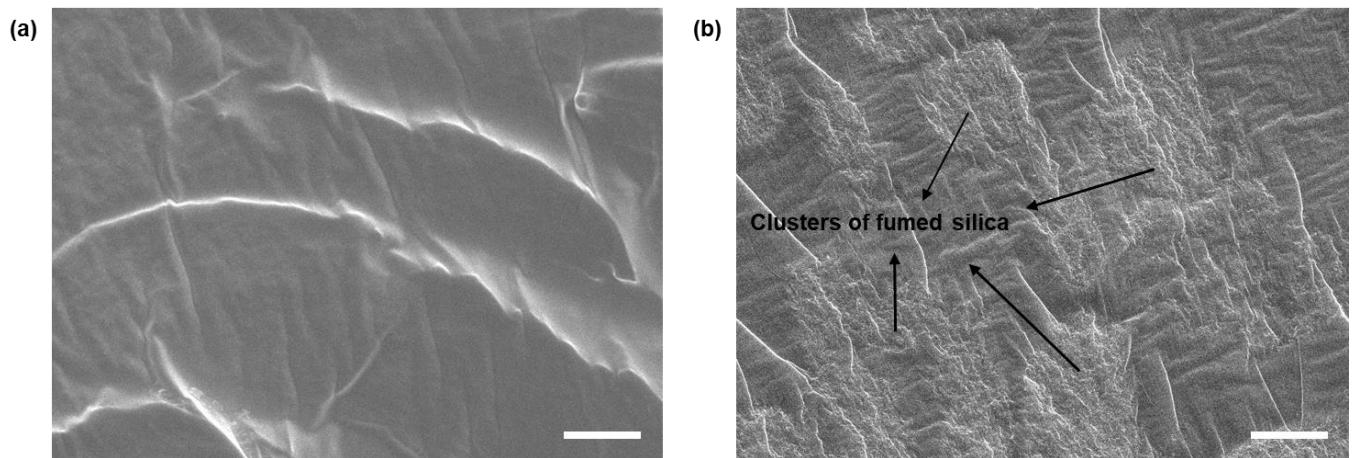


Figure S4. FESEM images of the fractured surfaces of (a) NC-3 and (b) the control composite. A scale bar represents 10 μm .

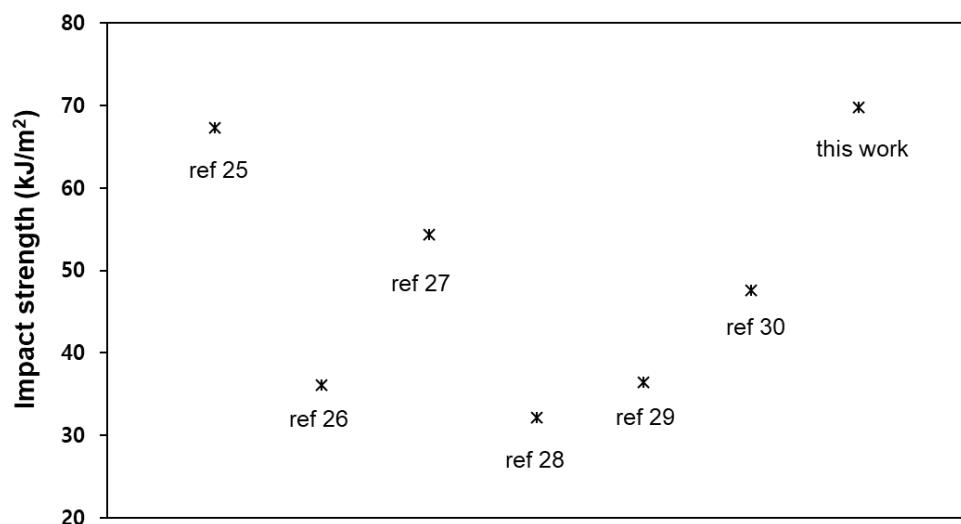


Figure S5. Selected reinforced epoxy composites and their maximum impact strength.