

Supplementary Information

Bio-Sourced, High-Performance Carbon Fiber Reinforced Itaconic Acid-Based Epoxy Composites with High Hygrothermal Stability and Durability

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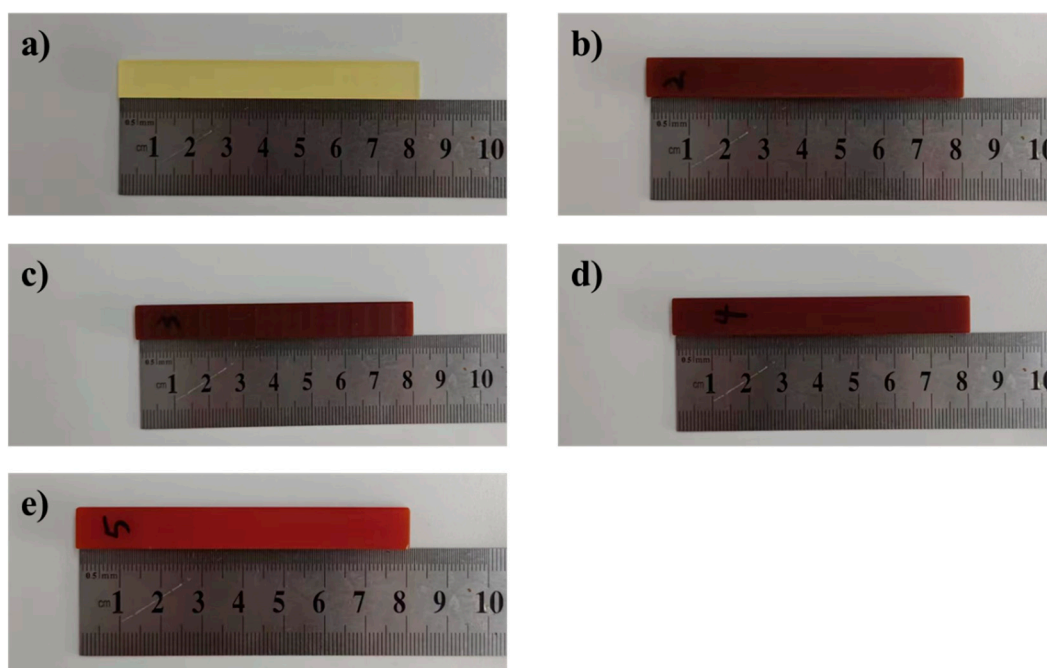


Figure. S1. The digital photos of EP samples. (a) EIA-0, (b) EIA-30, (c) EIA-40, (d) EIA-50, (e) Pure EIA.

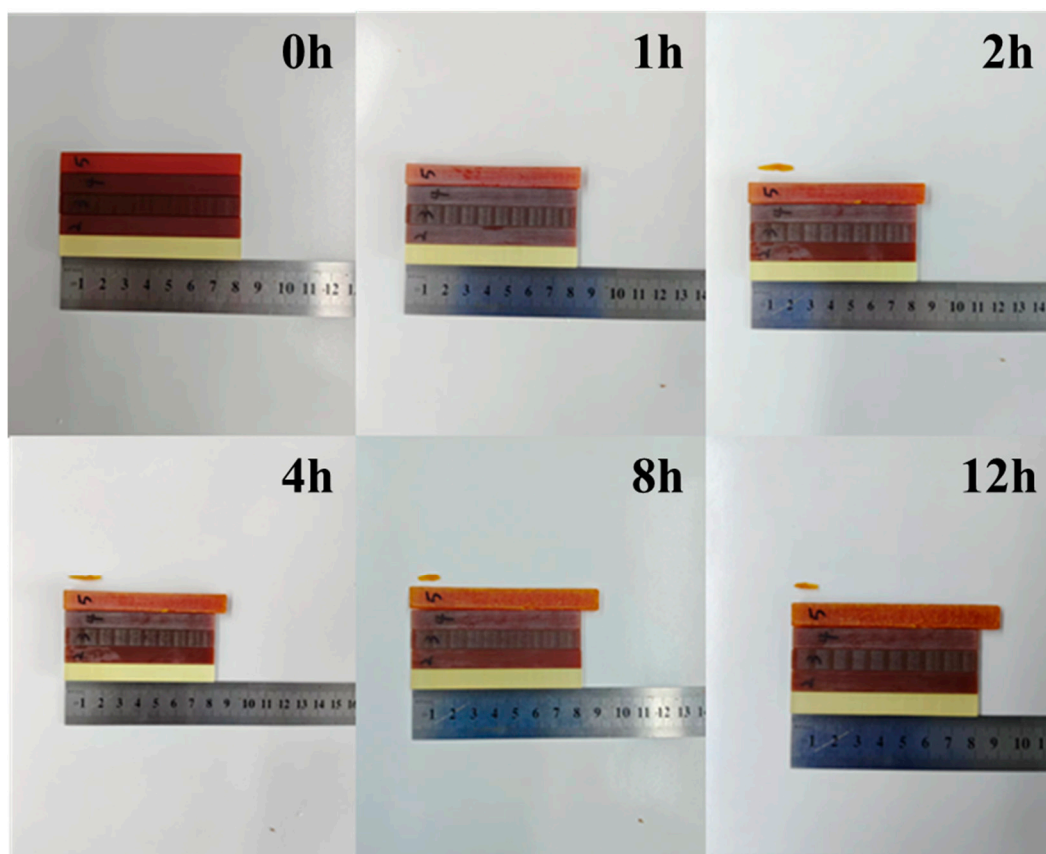


Figure. S2. The digital photos of the hygrothermal aging process of EP samples.

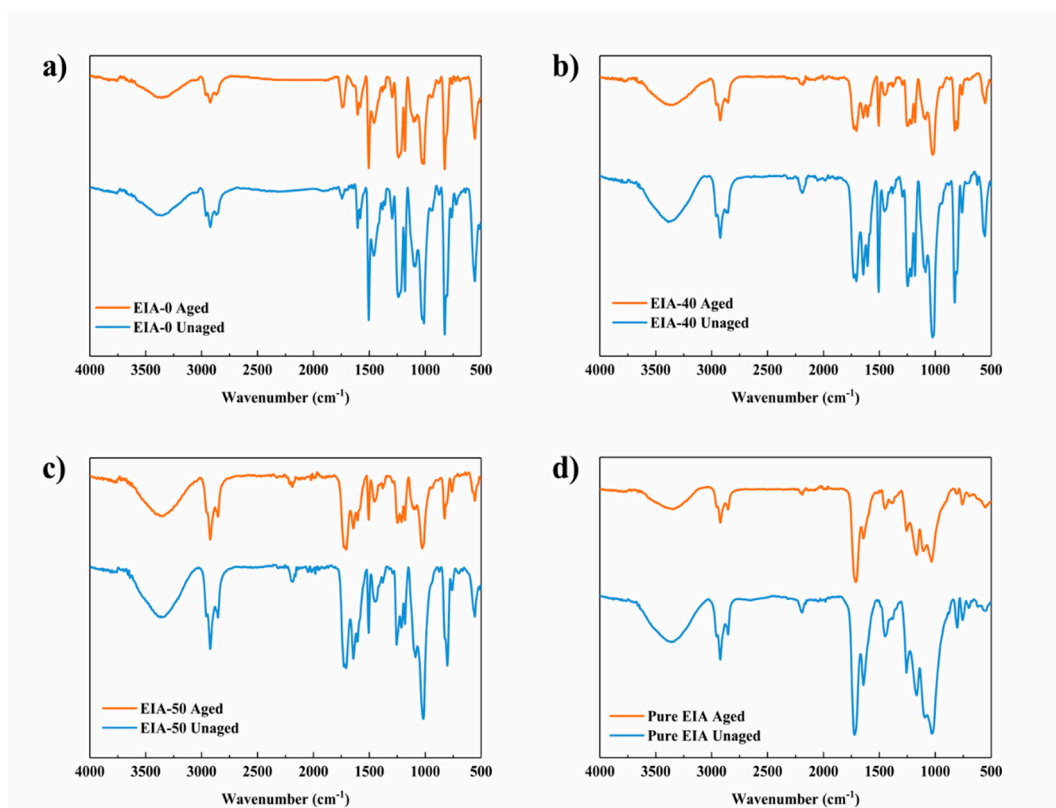


Figure. S3. (a) FTIR spectra of unaged EIA-0 resin and aged EIA-0 resin, (b) FTIR spectra of unaged EIA-40 resin and aged EIA-40 resin, (c) FTIR spectra of unaged EIA-50 resin and aged EIA-50 resin, (d) FTIR spectra of unaged Pure EIA resin and aged Pure EIA resin.

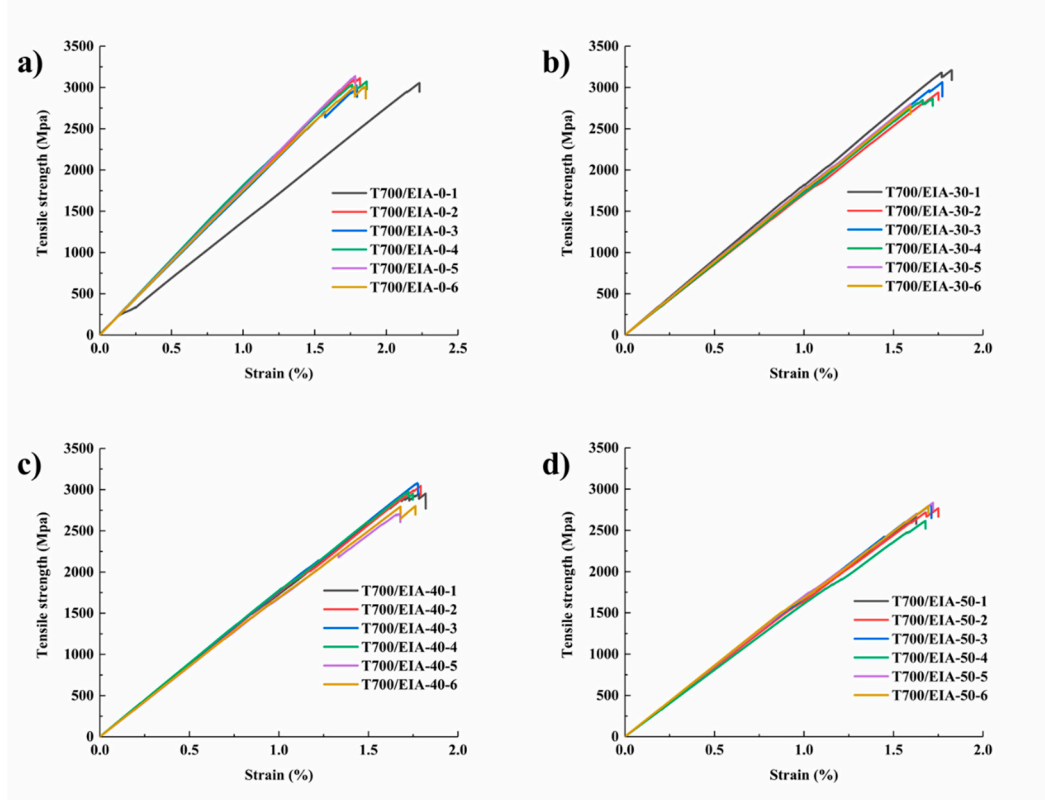


Figure. S4. Tensile stress-strain curves for CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.

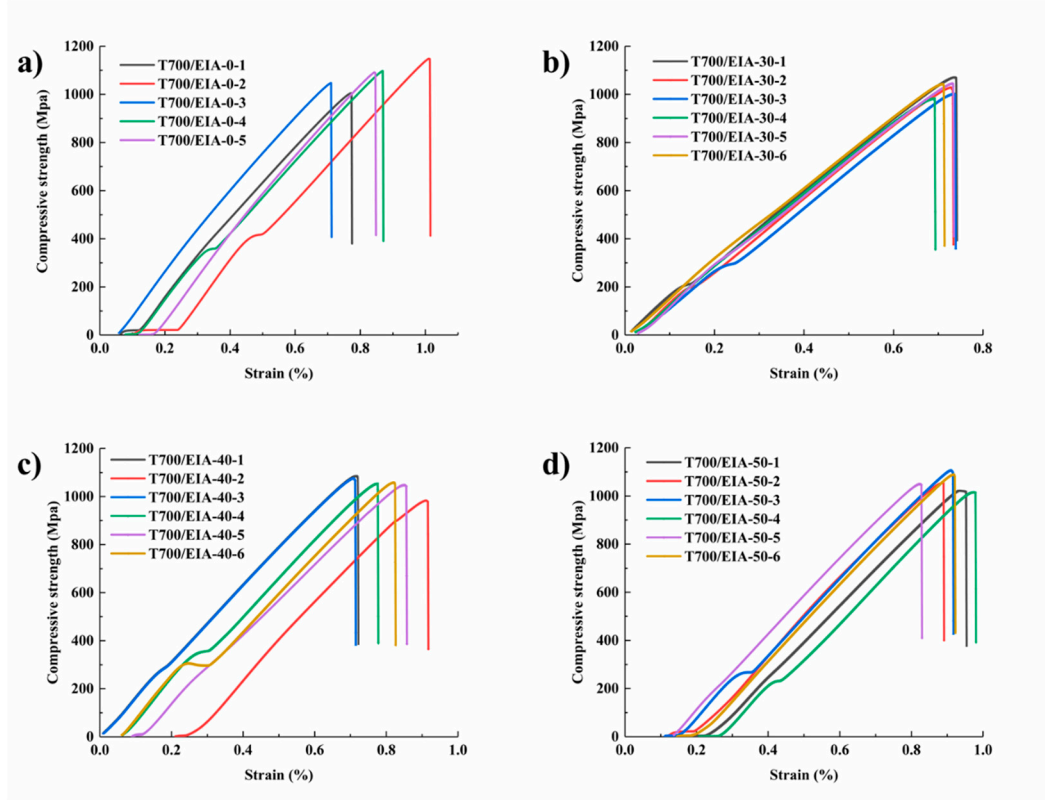


Figure. S5. Compressive stress-strain curves for CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.

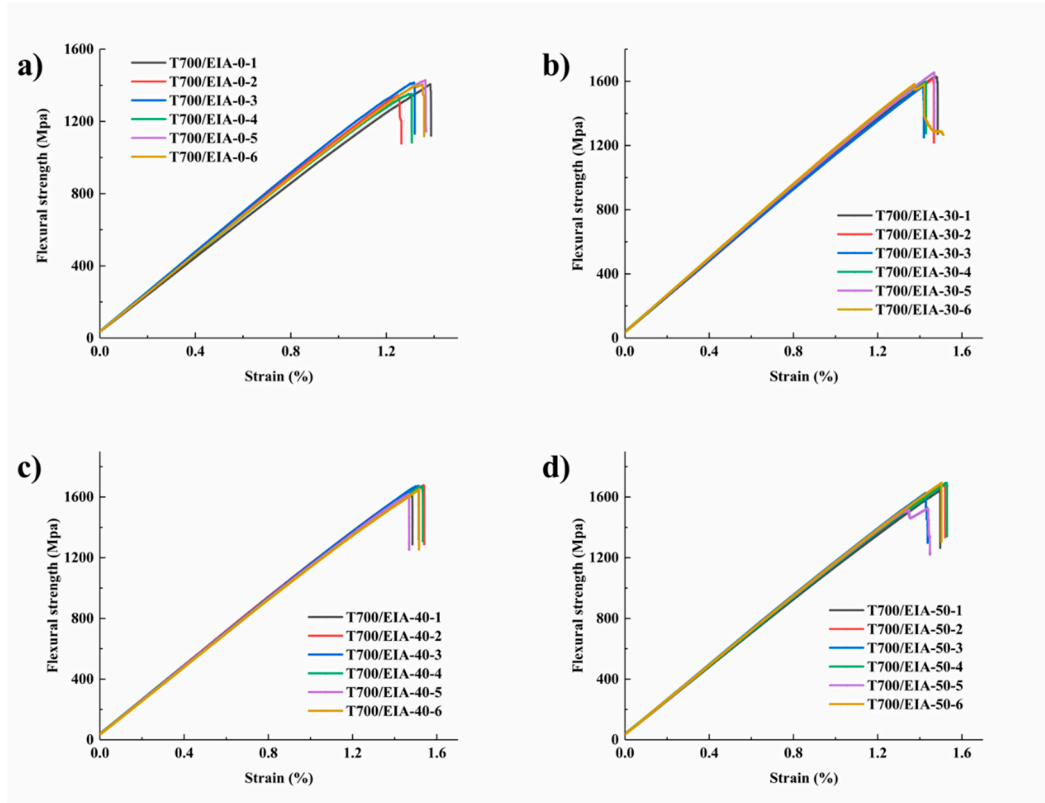


Figure. S6. Flexural stress-strain curves for CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.

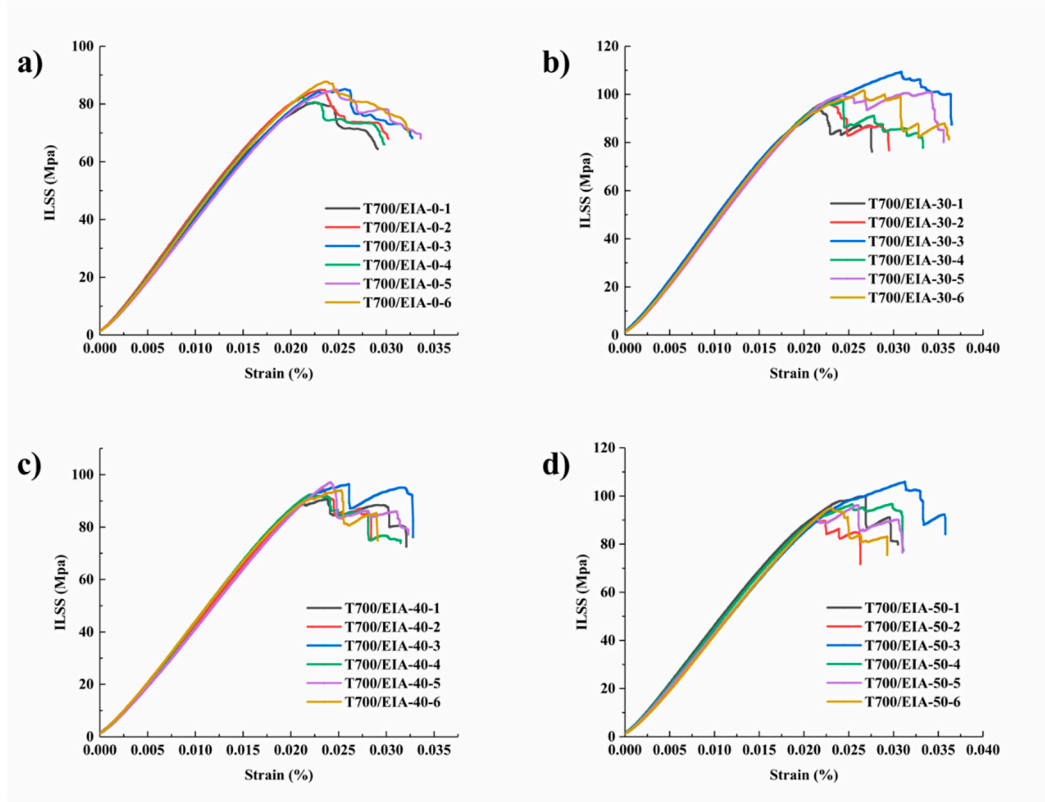


Figure. S7. ILSS stress-strain curves for CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.

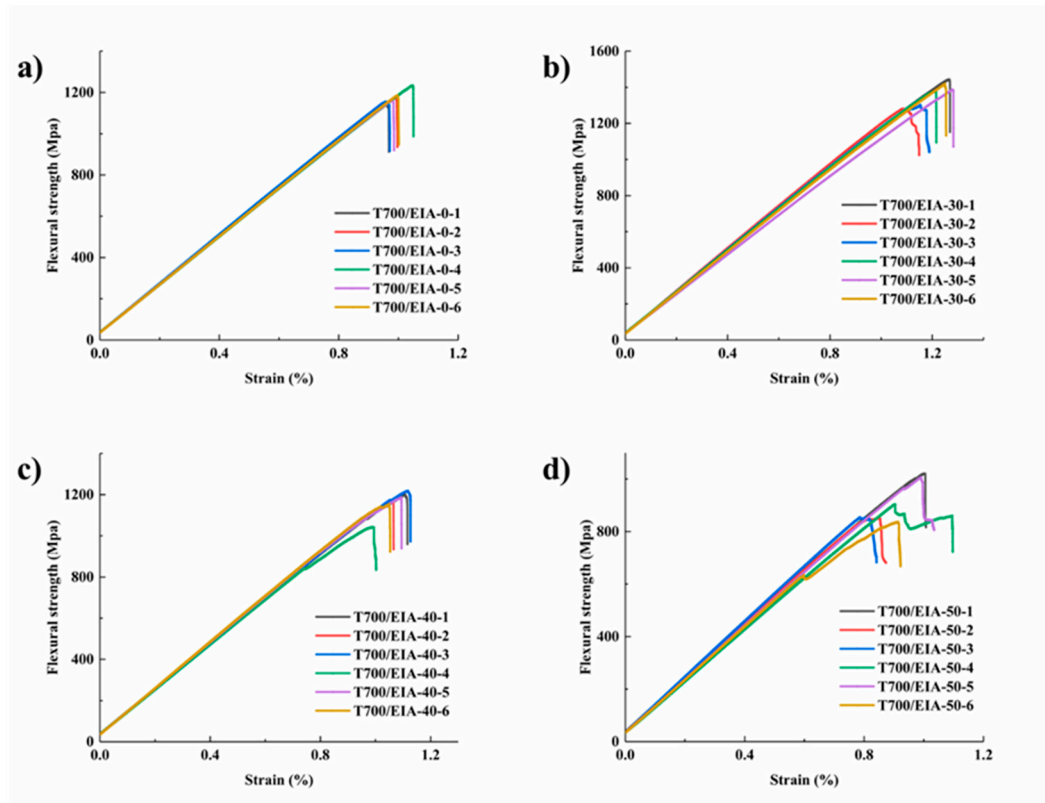


Figure. S8. Flexural stress-strain curves for aged CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.

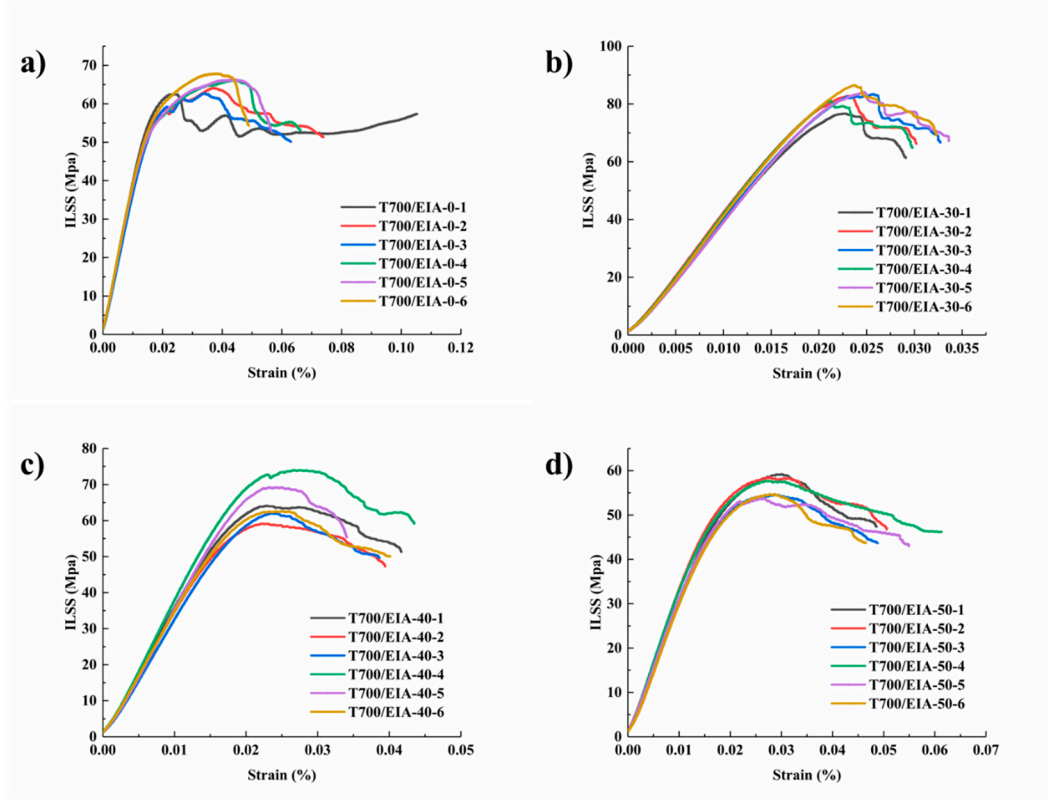


Figure. S9. ILSS stress-strain curves for aged CFRP composites. (a) specimens of T700/EIA-0, (b) specimens of T700/EIA-30, (c) specimens of T700/EIA-40, (d) specimens of T700/EIA-50.