

**Fig. S1:** The mechanical testing of unfilled and filled composites before and after aging in terms of (a) stress at 100% elongation (b) tensile strength.

Sample Code	Wt.% of O	At. % of O	Wt.% of Zr	At.% of Zr
In-Zr-20	42.59	80.88	57.41	19.12
In-Zr-20T	31.15	72.06	68.85	27.94
In-Zr-20A	38.1	77.82	61.9	22.18
Ex-Zr-20T	36.76	76.82	63.24	23.18

 Table S1: The concentration of Oxygen and Zirconium (Zr) calculated from EDX study.