1. Results and discussion section

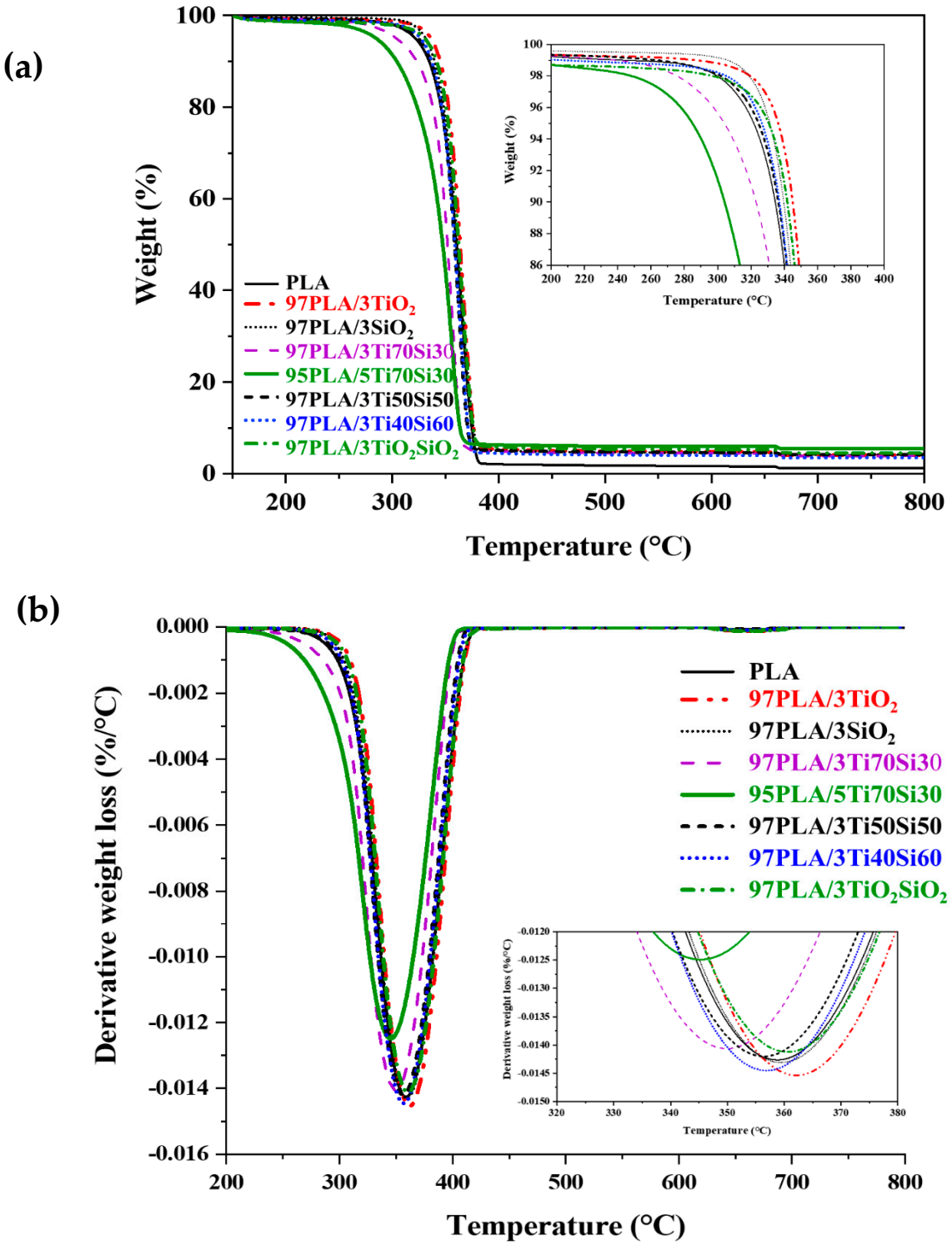


Figure s1. Curve of (a) TGA thermogram (b) DTG Thermogram of PLA, PLA/TiO_2, PLA/SiO_2, PLA/Ti_xSi_y, and PLA/TiO_2SiO_2 composites.

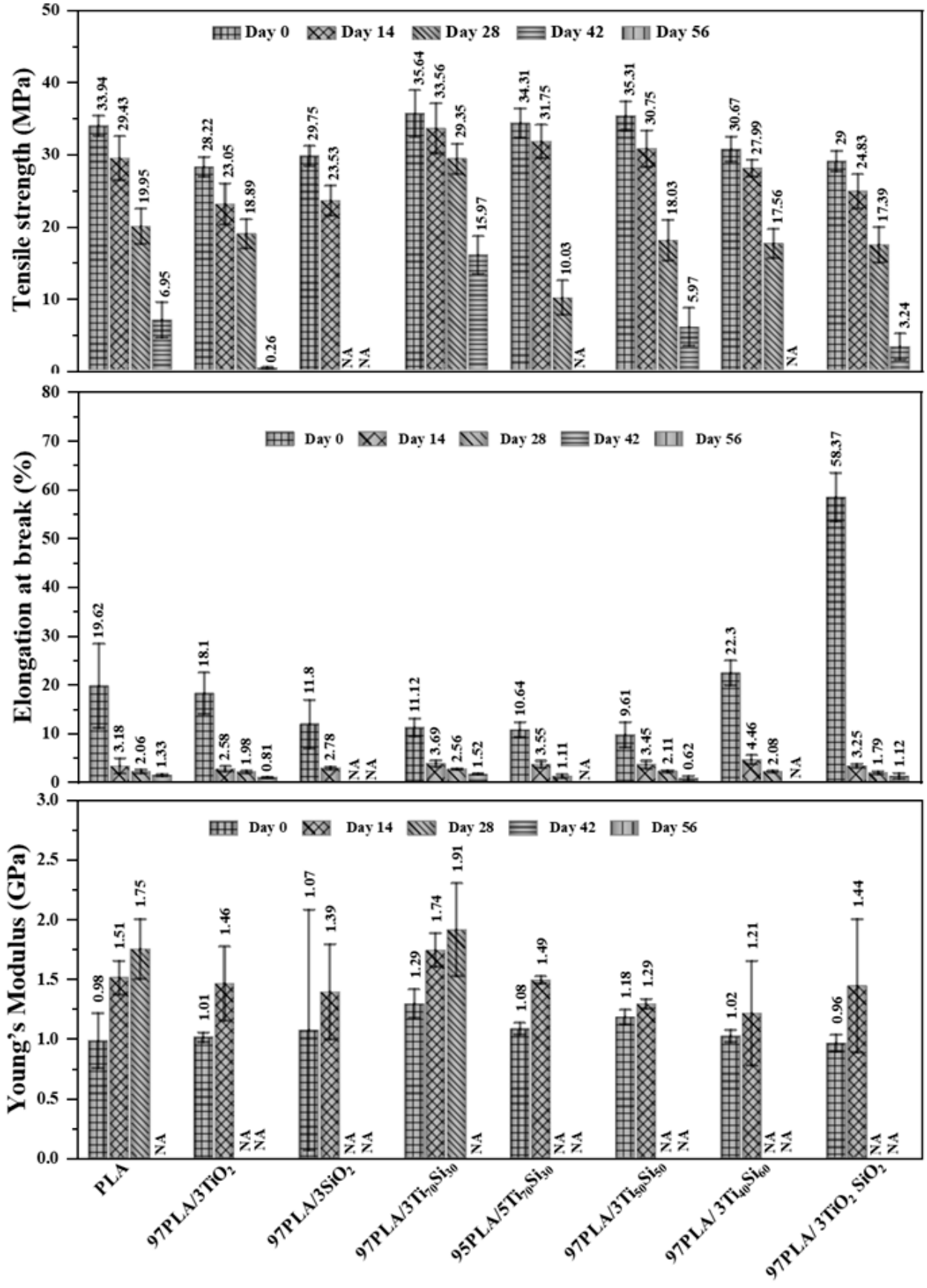


Figure s2. The changes in tensile properties of PLA, PLA/TiO_2, PLA/SiO_2 and PLA/Ti_xSi_y composite films after different period of *in vitro* degradation.