

Supporting information

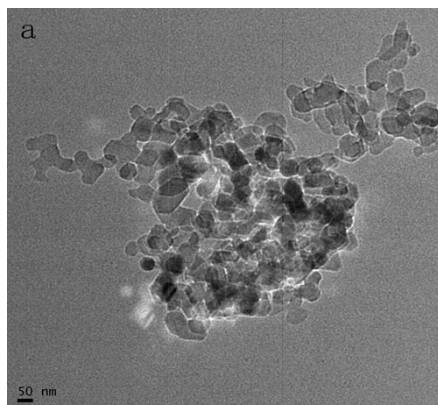


Fig. S1 TEM micrograph of the MgO-NPs.

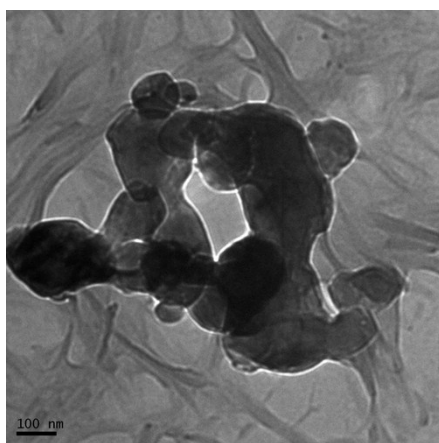


Fig. S2 TEM micrograph of the m-MgO-NPs.

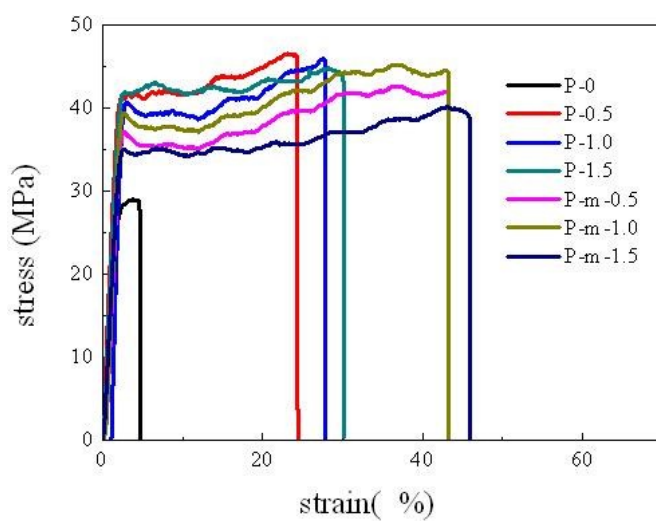


Fig. S3 The mechanical properties of neat PLLA and PLLA-based composites as a function of strain.

Table S1 Parameters of crystallization kinetics of neat PLLA melt-crystallized at various temperatures.

Sample	$T_c/^{\circ}\text{C}$	$X_t/100\%$	k/min^{-1}	n	$t_{1/2}/\text{min}$
PLLA	100	30.77	1.43×10^{-2}	2.73	8.3
	110	31.14	1.76×10^{-2}	2.80	8.1
	115	31.38	6.90×10^{-3}	2.94	9.8
	120	32.22	5.51×10^{-3}	3.04	11.3
	125	32.60	2.77×10^{-3}	2.98	14.2
	130	32.21	1.89×10^{-3}	3.15	19.8