

Enhanced Crystallization Rate of Poly(L-lactic acid) (PLLA) by Polyoxymethylene (POM) Fragment Crystals in the PLLA/POM Blends with Small Amount of POM

Jishan Qiu ^a, Jipeng Guan ^a, Hengti Wang ^a, Shanshan Zhu ^a, Xiaojun Cao ^a, Quan-lin Ye ^b and Yongjin Li ^{a*}

^a College of Material, Chemistry and Chemical Engineering, Hangzhou Normal University, Hangzhou 310036, China

^b Department of Physics, Hangzhou Normal University, Hangzhou 310036, China

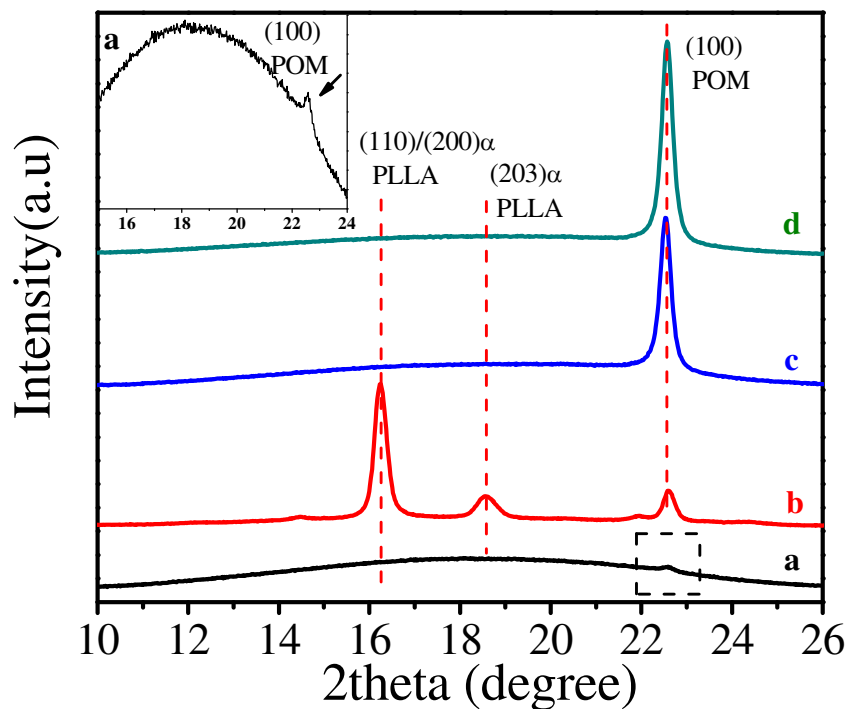


Figure S1. Wide-angle X-ray diffraction curves of samples: (a) PLLA/POM=93/7 (quenched), (b) PLLA/POM=93/7 (cooling at 10 °C/min), (c) PLLA/POM=80/20 (quenched) and (d) PLLA/POM=80/20 (cooling at 10 °C/min).

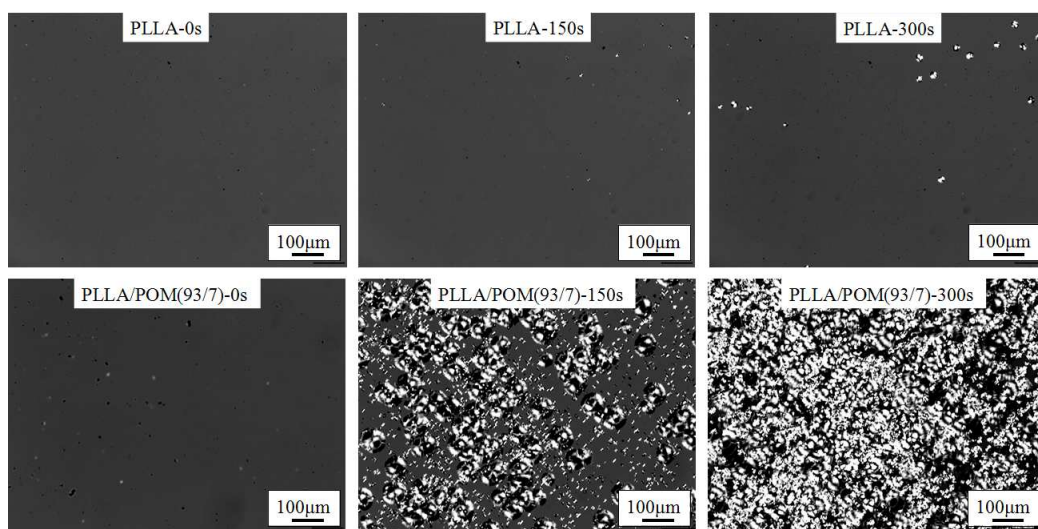


Figure S2. Polarized optical micrographs for PLLA and PLLA/POM(93/7). These samples were crystallized at 135 °C from the melt for various times as indicated in images.

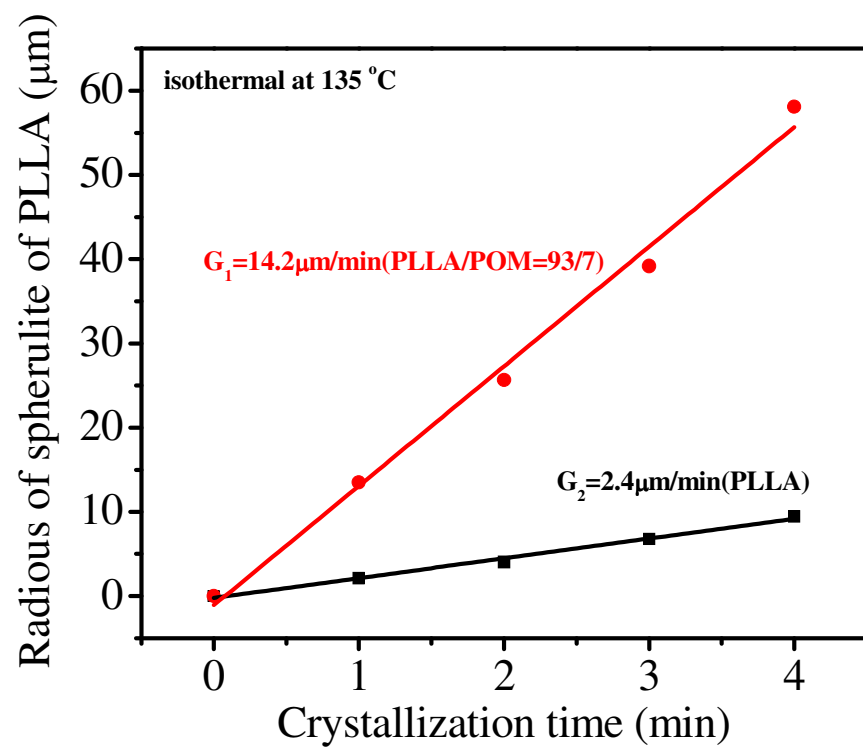


Figure S3. Change of radius of PLLA spherulite as function of crystallization time.

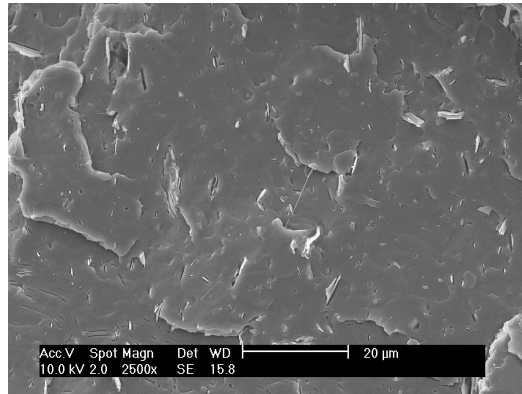


Figure S4. SEM image for the PLLA/5% talc.