

### Isothermal Crystallization Behavior of PLA Film with Varying Annealing Temperature and Adding Inorganic Filler of Talc

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Poly(lactic acid)(PLA) was received an increasing attention in the last decade for packing films and textile materials due to its high biodegradability, excellent material properties, and availability from renewable resource. Due to that characteristic, PLA has been extensively applied to extrusion and injection plastic products. However, the commercial applications of PLA greatly have been limited because crystallization rate of PLA is very slow comparing to polyethylene (PE) and polyethyleneterephthate (PET).

In this paper, it was investigated optimal annealing temperature and the effect of adding talc from 1~10 wt% to increase crystallization rate of PLA film surface. Talc. They were expressed at k, crystallization rate constant, by Avrami equation.