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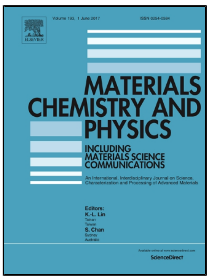

Design and manufacture of degradable polymers: Biocomposites of micro-lamellar talc and polylactic acid (PLA)

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Highlights

- High performant bio-composite of Poly Lactic Acid (PLA) reinforced with micro-lamellar talc;
- Talc modified by surface reaction with organic and hybrid organic-inorganic compatibilizers;
- Custom-built formulations by the dispersion of the pre-treated micro-lamellar talc in PLA;
- Differential Scanning Calorimetry (DSC) and Attenuated Total Reflection Fourier Transform - Infrared Spectrophotometry (ATR FT-IR);
- Chemical and physical interaction among the functional groups of pre-treated talc and PLA chains.