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Poly(L-lactide) nanocomposites containing poly(D-lactide) grafted nanohydroxyapatite with improved interfacial adhesion via stereocomplexation

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Abstract

Biodegradable organic-inorganic composites composed of polylactide (PLA) and hydroxyapatite (HA) are important bone repairing materials, while the dispersibility of nanoscaled HA in PLA and the interfacial adhesion between HA and PLA remained unsatisfactory. In this study, poly(D-lactide) (PDLA) oligomers with different molecular weights were grafted onto HA nanorods (HA-PDLA), and the HA-PDLA hybrids were

¹ These two authors contributed equal to the study.

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