

Название публикации:

The supramolecular structure of polyhydroxybutyrate fibers modified with the iron (III) - Tetraphenylporphyrin complex

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Аннотация:

Ultrathin fibers based on poly-3-hydroxybutyrate were obtained by electrospinning with weak concentrations of the iron (III) - tetraphenylporphyrin complex. By the SEM, DSC and EPR methods, it is shown that the addition of the complex to the polymer solution leads to the disappearance of fiber defects in the form of thickenings; moreover, this adding leads to a sharp increase in crystallinity and a slowdown in molecular mobility in the amorphous regions of ultrathin fibers. The obtained fibrous materials have bactericidal properties, and they must find direct application in the creation of therapeutic systems of antibacterial and antitumor action. © 2018 Author(s).

Ключевые слова:

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