

Название публикации:

Physical and mechanical properties of nonwoven materials for medical purposes based on polyhydroxybutyrate

Авторы:

Тубаева, Р.М.а,bEmail Author, Olkhov, A.A.а,b,c, Podmasteriev, V.V.b

- a) Plekhanov Russian University of Economics, 36 Stremyanny Lane, Moscow, 117997, Russian Federation
- b) Semenov Institute of Chemical Physics, Russian Academy of Sciences, 4 Kosygina St., Moscow, 119334, Russian Federation
- c) Emanuel Institute of Biochemical Physics, 4 Kosygina St., Moscow, 119334, Russian Federation

Наименование журнала:

Journal of Physics: Conference Series

Volume 1129, Issue 1, 12 December 2018, Номер статьи 012034

Conference of Young Scientists in Mechanics 2018; BurevestnikSochi; Russian Federation; 4 September 2018 до 14 September 2018; Код 143022

Аннотация:

Ultrathin fibers based on biopolymer poly-3-hydroxybutyrate were obtained by electrospinning method. Using the methods of scanning electron and optical microscopy, macrophysical characteristics of the fibrous layer were established and classified. Physical and mechanical properties of materials and their changes under the influence of the ozone gas as a sterilizing agent were also determined. The paper shows the principal features of nonwoven materials based on poly-3-hydroxybutyrate obtained by electrospinning method, which contribute to their use as effective medical materials. © Published under licence by IOP Publishing Ltd.

Ключевые слова:

Electrospinning, Materials properties, Nonwoven fabrics, Weaving