

**Название публикации:**

Nanofiber-bonded cloth materials based on poly-3-hydroxybutyrate with antibacterial properties for medical purposes

**Авторы:**

Тубаева, РМ [ 1,3 ] ; Olkhov, АА [ 1,2,3 ] ; Karpova, SG [ 2 ] ; Iordansky, AL [ 3 ] ; Popov, АА [ 1,3 ]

[ 1 ] Plekhanov Russian Univ Econ, Dept Chem & Phys, 36 Stremyanny Lane, Moscow 117997, Russia

[ 2 ] Russian Acad Sci, Emanuel Inst Biochem Phys, 4 Kosygina St, Moscow 119334, Russia

[ 3 ] Russian Acad Sci, Semenov Inst Chem Phys, 4 Kosygina St, Moscow 119334, Russia

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**Аннотация:**

Different transdermal systems based on solid polymer matrices or gels containing functional substances with antiseptic (antibacterial) properties have application to the therapy of many infectious diseases and cancer. Today the most promising type of matrices with antiseptic characteristics are the nano- and microfiber nonwoven materials. Fibers on the biopolymer (poly(3-hydroxybutyrate)) basis were obtained using the electrospinning method. In the present work, the effects of iron (III) complex with tetraphenylporphyrin and its influence on bactericidal and antibacterial properties of the ultrathin PHB fibers were investigated.