

Название публикации:

Biodegradable materials containing recycled polymers

Авторы:

Podzorova, M.V.a, Tertyshnaya, Y.V.b, Popov, A.A.a,b

- a. Plekhanov Russian University of Economics, 36 Stremyanny per., Moscow, Russian Federation
- b. Emanuel Institute of Biochemical Physics, Russian Academy of Sciences, 4 Kosygina str., Moscow, Russian Federation

Сведения об издании:

IOP Conference Series: Materials Science and Engineering

Volume 347, Issue 1, 27 April 2018, Номер статьи 012015

3rd International Youth Scientific Forum with International Participation on New Materials; Moscow; Russian Federation; 21 November 2017 до 24 November 2017; Код 136606

Аннотация:

The work is devoted to study the effects of different environmental factors such as water, oxygen and, light composition based on polylactide and polyethylene of low density with the addition of oxidized polyethylene, as an analog of recycled materials. Established that in the composition polylactide - polyethylene at the first stage the significant impact of moisture and UV light. The influence of UV radiation on polylactide destruction was proved by differential scanning calorimetry (DSC). It is found that polylactic acid is oxidized slower than polyethylene.

Ключевые слова:

Biodegradable polymers, Differential scanning calorimetry, Plastic recycling, Polyesters, Biodegradable materials, Environmental factors, Low density, Poly lactic acid, Poly lactide, Recycled materials, Recycled polymer