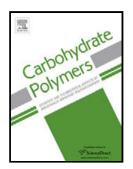
Accepted Manuscript

Title: Improved Antifungal Activity and Stability of Chitosan Nanofibers using Cellulose Nanocrystal on Banknote Papers

Authors: Leila Mohammadi Amirabad, Mehdi Jonoobi, Narges Sharif Mousavi, Kristiina Oksman, Alireza Kaboorani, Hossein Yousefi



PII:S0144-8617(18)30189-9DOI:https://doi.org/10.1016/j.carbpol.2018.02.041Reference:CARP 13303

To appear in:

Received date:	28-12-2017
Revised date:	3-2-2018
Accepted date:	14-2-2018

Please cite this article as: Mohammadi Amirabad, Leila., Jonoobi, Mehdi., Mousavi, Narges Sharif., Oksman, Kristiina., Kaboorani, Alireza., & Yousefi, Hossein., Improved Antifungal Activity and Stability of Chitosan Nanofibers using Cellulose Nanocrystal on Banknote Papers. *Carbohydrate Polymers* https://doi.org/10.1016/j.carbpol.2018.02.041

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Improved Antifungal Activity and Stability of Chitosan Nanofibers using Cellulose Nanocrystal on Banknote Papers

Leila Mohammadi Amirabad^a, Mehdi Jonoobi^{b*}, Narges Sharif Mousavi^b, Kristiina Oksman^c, Alireza Kaboorani^d, Hossein Yousefi^e

^a School of Advanced Technologies in Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

^b Department of Wood and Paper Sciences and Technology, Faculty of Natural Resources, University of Tehran, Karaj, Iran

^c Division of Materials Science, Luleå University of Technology, 97187, Luleå, Sweden

^d Département des sciences du bois et de la forêt, Faculté de foresterie, de géographie et de géomatique, Université Laval, 2425, rue de la Terrasse, Québec, QC, G1V 0A6, Canada.

^eLaboratory of Sustainable Nanomaterials, Department of Wood Engineering and Technology, Gorgan University of Agricultural Sciences and Natural Resources, 4913815739 Gorgan, Iran

Corresponding author: Mehdi Jonoobi, Department of Wood and Paper Sciences and Technology, Faculty of Natural Resources, University of Tehran, Email: mehdi.jonoobi@ut.ac.ir, Tel.: +98 263 224 9311; fax: +98 263 224 9311.

Highlights

- Using new combination of nanomaterials as anti-fungal
- Obtaining good results by using both nanomaterials as anti-fungal
- Investigation of the effect of CNC and CNF as anti-fungal agents on the banknote paper alone
- The results could open up the new windows to use as anti-fungal bio-nanomaterials in paper making or banknotes applications

Download English Version:

https://daneshyari.com/en/article/7783253

Download Persian Version:

https://daneshyari.com/article/7783253

Daneshyari.com