Accepted Manuscript

Full Length Article

Fabrication of Superhydrophobic Cotton Fabrics Using Crosslinking Polymerization Method

Bin Jiang, Zhenxing Chen, Yongli Sun, Huawei Yang, Hongjie Zhang, Haozhen Dou, Luhong Zhang

PII: DOI: Reference:	S0169-4332(18)30303-9 https://doi.org/10.1016/j.apsusc.2018.01.285 APSUSC 38424
To appear in:	Applied Surface Science
Design 1 Deter	10.0-4-12017

Received Date:10 October 2017Revised Date:22 January 2018Accepted Date:29 January 2018



Please cite this article as: B. Jiang, Z. Chen, Y. Sun, H. Yang, H. Zhang, H. Dou, L. Zhang, Fabrication of Superhydrophobic Cotton Fabrics Using Crosslinking Polymerization Method, *Applied Surface Science* (2018), doi: https://doi.org/10.1016/j.apsusc.2018.01.285

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

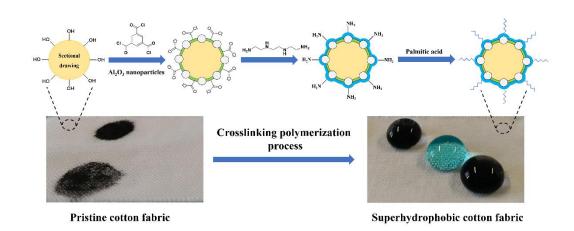
Fabrication of Superhydrophobic Cotton Fabrics Using Crosslinking Polymerization Method

Bin Jiang ^a, Zhenxing Chen ^a, Yongli Sun ^a, Huawei Yang ^a, Hongjie Zhang ^a, Haozhen Dou ^a, Luhong Zhang ^{a,*}

^a School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, People's Republic of China

*Author for all correspondence Luhong Zhang, *Email: <u>zhanglvh@tju.edu.cn;</u> Tel/Fax: 022 27400199

Graphical Abstract



Highlights:

A crosslinking polymerization method was first applied to fabric surface modification.

The coating can repel water with contact angle $> 152^{\circ}$.

The fabric shows excellent self-cleaning property and oil-water separation efficiency.

Attributed to covalent bond interaction, the fabric shows excellent durability.

Download English Version:

https://daneshyari.com/en/article/7835022

Download Persian Version:

https://daneshyari.com/article/7835022

Daneshyari.com