Login Create account Athens/Institutional login

Science and Technology of Advanced Materials

Home Search Collections Journals About Contact us My IOPscience

Large-area fabrication of superhydrophobic surfaces for practical applications an overview

REVIEW ARTICLE

Author Chao-Hua Xue^{1,2}, Shun-Tian Jia¹, Jing Zhang¹ and Jian-Zhong Ma^{1,2}

Affiliations ¹ College of Resource and Environment, Shaanxi University of Science and Technology, Xi'an 710021, People

Republic of China

² Key Laboratory of Auxiliary Chemistry and Technology for Light Chemical Industry, Ministry of Education, Shaanxi University of Science and Technology, Xi'an Shaanxi, 710021, People's Republic of China

E-mail xuech@zju.edu.cn

Journal Science and Technology of Advanced Materials Create an alert RSS this journal

Issue Volume 11, Number 3

Citation Chao-Hua Xue et al 2010 Sci. Technol. Adv. Mater. 11 033002

doi: 10.1088/1468-6996/11/3/033002

Article References

TOPICAL REVIEW

Tag this article Full text PDF (2.28 MB)

Abstract This review summarizes the key topics in the field of large-area fabrication of superhydrophobic surfaces,

 $concentrating \ on \ substrates \ that \ have \ been \ used \ in \ commercial \ applications. \ Practical \ approaches \ to$

superhydrophobic surface construction and hydrophobization are discussed. Applications of

superhydrophobic surfaces are described and future trends in superhydrophobic surfaces are predicted.

PACS 68.35.B- Structure of clean surfaces (and surface reconstruction)

81.15.-z Methods of deposition of films and coatings; film growth and epitaxy

68.35.Md Surface thermodynamics, surface energies

68.55.-a Thin film structure and morphology

61.41.+e Polymers, elastomers, and plastics

Subjects Soft matter, liquids and polymers

Surfaces, interfaces and thin films

Dates Issue 3 (June 2010)

Received 19 一月 $\,$ 2010 , accepted for publication 20 $\,$ 五月 $\,$ 2010

Published 15 七月 2010

Your last 10 viewed