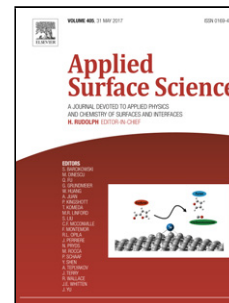


Accepted Manuscript

Title: Magnetic, core-shell structured and surface molecularly imprinted polymers for the rapid and selective recognition of salicylic acid from aqueous solutions

Authors: Zulei Zhang, Dechao Niu, Yongsheng Li, Jianlin Shi



PII: S0169-4332(17)33270-1
DOI: <https://doi.org/10.1016/j.apsusc.2017.11.033>
Reference: APSUSC 37615

To appear in: *APSUSC*

Received date: 23-5-2017
Revised date: 16-10-2017
Accepted date: 6-11-2017

Please cite this article as: Zhang Z, Niu D, Li Y, Shi J, Magnetic, core-shell structured and surface molecularly imprinted polymers for the rapid and selective recognition of salicylic acid from aqueous solutions, *Applied Surface Science* (2010), <https://doi.org/10.1016/j.apsusc.2017.11.033>

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.

Magnetic, core-shell structured and surface molecularly imprinted polymers for the rapid and selective recognition of salicylic acid from aqueous solutions

Zulei Zhang^{a,b}, Dechao Niu^a, Yongsheng Li^{a*} and Jianlin Shi^{a,c}

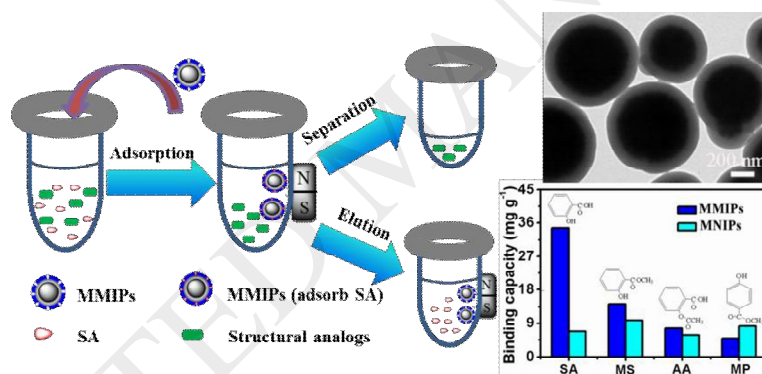
^a Lab of Low-Dimensional Materials Chemistry, Key Laboratory for Ultrafine Materials of Ministry of Education, School of Materials Science and Engineering, East China University of Science and Technology, Shanghai 200237, China

^b School of Biology and Chemical Engineering, Jiaying University, Jiaying 314001, China

^c State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai 200050, China

*Corresponding author at: School of Materials Science and Engineering, East China University of Science and Technology, Shanghai 200237, China, Email: yqli@ecust.edu.cn. Tel: +86-21-64250740.

Graphical Abstract



Highlights

- 1) Uniform core-shell structure and favorable magnetic properties;
- 2) A fast, stable and high adsorption capacity on salicylic acid;
- 3) High selectivity with relative selectivity coefficients all higher than 18;
- 4) High binding capacity and selectivity maintaining for at least eight runs.

Abstract

In this work, a novel kind of magnetic, core-shell structured and surface molecularly imprinted polymers (MMIPs)

Download English Version:

<https://daneshyari.com/en/article/7835874>

Download Persian Version:

<https://daneshyari.com/article/7835874>

[Daneshyari.com](https://daneshyari.com)