

Accepted Manuscript

Title: A rapid approach to prepare poly(2-methyl-2-oxazoline)-based antifouling coating by UV irradiation

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PII: S0169-4332(17)32260-2
DOI: <http://dx.doi.org/doi:10.1016/j.apsusc.2017.07.260>
Reference: APSUSC 36794

To appear in: *APSUSC*

Received date: 31-3-2017
Revised date: 25-7-2017
Accepted date: 27-7-2017

Please cite this article as: Haikun Zhu, Fatima Mumtaz, Chong Zhang, Lin Tan, Songtao Liu, Yalin Zhang, Chao Pan, Yanmei Wang, A rapid approach to prepare poly(2-methyl-2-oxazoline)-based antifouling coating by UV irradiation, *Applied Surface Science* <http://dx.doi.org/10.1016/j.apsusc.2017.07.260>

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A rapid approach to prepare poly(2-methyl-2-oxazoline)-based antifouling coating by UV irradiation

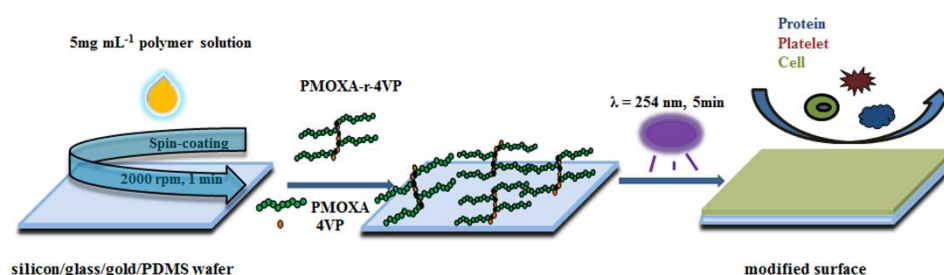
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Graphical Abstract



Highlights

- PMOXA-r-4VP was synthesized by CROP and RAFT polymerization.
- PMOXA based coating was formed rapidly on various substrates by UV irradiation.
- The PMOXA based coating had excellent stability and antifouling properties.
- The antifouling properties of coating could be controlled through UV irradiation.

Abstract

A series of brush copolymers, poly[(2-methyl-2-oxazoline)-random-4-vinylpyridine] (PMOXA-r-4VP), with a variety of compositions was synthesized by reversible addition-fragmentation chain transfer (RAFT) polymerization of the poly(2-methyl-2-oxazoline) methacrylate macromonomer (PMOXA-MA) and 4-vinylpyridine (4VP),

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