

# Accepted Manuscript

Mussel-inspired catalytic selenocystamine-dopamine coatings for long-term generation of therapeutic gas on cardiovascular stents

Zhilu Yang, Ying Yang, Li Zhang, Kaiqin Xiong, Xiangyang Li, Feng Zhang, Jin Wang, Xin Zhao, Nan Huang



PII: S0142-9612(18)30429-0

DOI: [10.1016/j.biomaterials.2018.06.008](https://doi.org/10.1016/j.biomaterials.2018.06.008)

Reference: JBMT 18709

To appear in: *Biomaterials*

Received Date: 14 January 2018

Revised Date: 31 May 2018

Accepted Date: 6 June 2018

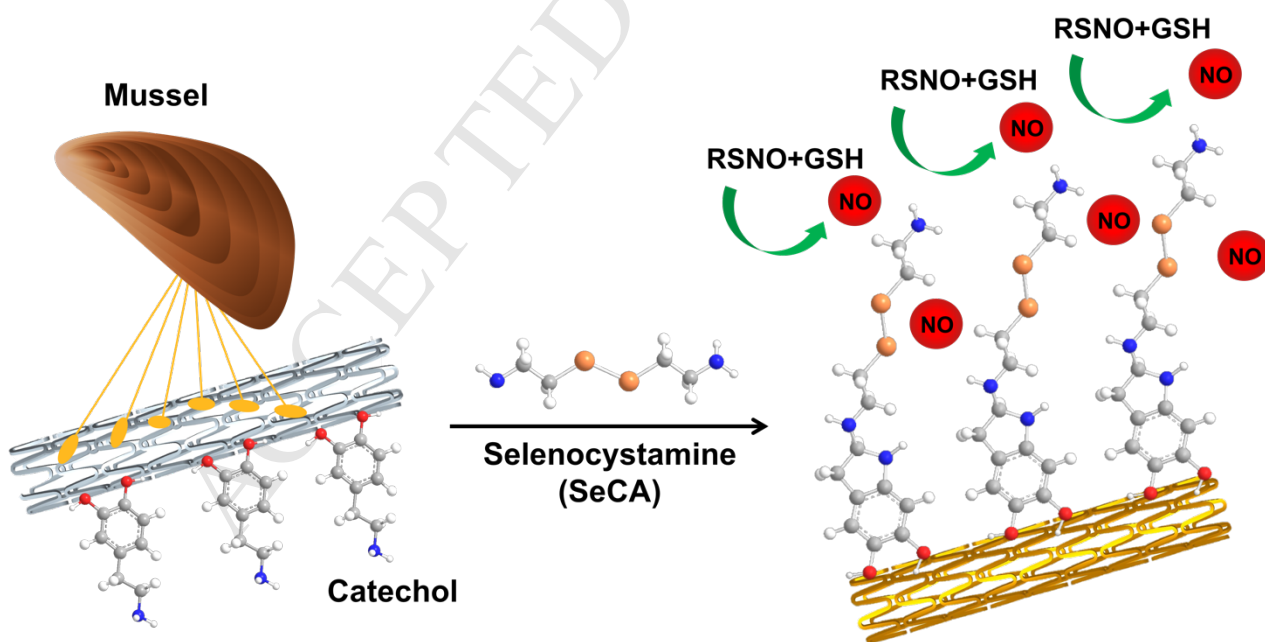
Please cite this article as: Yang Z, Yang Y, Zhang L, Xiong K, Li X, Zhang F, Wang J, Zhao X, Huang N, Mussel-inspired catalytic selenocystamine-dopamine coatings for long-term generation of therapeutic gas on cardiovascular stents, *Biomaterials* (2018), doi: 10.1016/j.biomaterials.2018.06.008.

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.

# Mussel-Inspired Catalytic Selenocystamine - Dopamine Surface Chemistry for Generating Therapeutic Gas on Cardiovascular Stents

Zhilu Yang<sup>a,\*\*\*</sup>, Ying Yang<sup>a</sup>, Li Zhang<sup>b</sup>, Kaiqin Xiong<sup>a</sup>, Xiangyang Li<sup>a</sup>, Feng Zhang<sup>a</sup>, Jin Wang<sup>a</sup>, Xin Zhao<sup>b,\*\*</sup> and Nan Huang<sup>a,\*</sup>

A mussel-inspired selenocystamine-dopamine nitric oxide (NO)-generating coating for surface engineering of cardiovascular stent is developed. Such a NO-generating coating exhibits long-term, steady and an adjustable range of NO release rates. Surface functionalization by this coating endows the cardiovascular stent with the abilities to significantly improve antithrombogenicity, promote regeneration of endothelium and inhibit restenosis.



TOC

Download English Version:

<https://daneshyari.com/en/article/6484364>

Download Persian Version:

<https://daneshyari.com/article/6484364>

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