## **Accepted Manuscript**

Two-Layered analytical model of arterial wall with residual stress under physiological loading

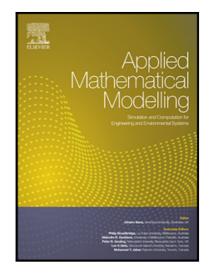
Krzysztof Cieslicki, Adam Piechna, Wiktor Gambin

PII: \$0307-904X(17)30754-0 DOI: 10.1016/j.apm.2017.12.023

Reference: APM 12104

To appear in: Applied Mathematical Modelling

Received date: 15 April 2016
Revised date: 4 December 2017
Accepted date: 12 December 2017



Please cite this article as: Krzysztof Cieslicki , Adam Piechna , Wiktor Gambin , Two-Layered analytical model of arterial wall with residual stress under physiological loading, *Applied Mathematical Modelling* (2017), doi: 10.1016/j.apm.2017.12.023

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

### Highlights

- Analytical dual-layer model of artery with two types of residual stresses was proposed.
- It allows to perform wide range of calculations in an efficient way.
- Impact of residual stresses is always significant and should be taken into account in modeling.
- Results were confronted with a numerical model with the nonlinear strain-stress response.

#### Download English Version:

# https://daneshyari.com/en/article/8051767

Download Persian Version:

https://daneshyari.com/article/8051767

<u>Daneshyari.com</u>