

## ОСНОВНИ ПОДАЦИ

|  |   |
|--|---|
| Име и презиме                                    | Милица Николић  |
| Година и место рођења                            | 26.09.1985., Крагујевац   |
| Звање  | Научни сарадник   |
| Е-mail   | obradovicm@kg.ac.rs   |
| Образовно-научно /<br>образовно-уметничко поље   | Департман за техничко-технолошке<br>науке                         |
| Универзитет, факултет,<br>организациона јединица | Институт за информационе<br>технологије, Универзитет у Крагујевцу |
| Област и ужа научна област                       | Биоинжењеринг   |

## ОБРАЗОВАЊЕ

### ОСНОВНЕ СТУДИЈЕ

|             |  |
|-------------|--|
| Година      |  |
| Место       |  |
| Институција |  |

### МАСТЕР СТУДИЈЕ

|             |                              |
|-------------|------------------------------|
| Година      | 2010                         |
| Место       | Крагујевац                   |
| Институција | Машински факултет Крагујевац |

### ДОКТОРСКА ДИСЕРТАЦИЈА

|                                 |   |
|---------------------------------|---|
| Година                          | 2017  |
| Место                           | Крагујевац  |
| Институција                     | Факултет инжењерских наука Универзитета у<br>Крагујевцу   |
| Наслов докторске<br>дисертације | Електро-механички модел кохлее и анализа<br>одзива модела |
| Област                          | Биоинжењеринг   |

## СТРУЧНА БИОГРАФИЈА – ИЗБОРИ У ИСТРАЖИВАЧКА ОДНОСНО НАУЧНА ЗВАЊА

| Датум избора | Институција  | Звање               |
|--------------|--|---------------------|
| 2011         | Машински факултет Крагујевац                         | Истраживач сарадник |
| 2014         | Факултет инжењерских наука Универзитета у Крагујевцу | Истраживач сарадник |
| 2018         | Факултет инжењерских наука Универзитета у Крагујевцу | Научни сарадник     |

## СТРУЧНА БИОГРАФИЈА - УСАВРШАВАЊЕ

| Година    | Институција                               | Трајање  |
|-----------|---|----------|
| 2009      | ФЕРИ, Марибор, Словенија                  | 2 месеца |
| 2014      | SCOPES радионица, Фрибур, Швајцарска      | 4 дана   |
| 2021-2022 | Технички универзитет Ајндховен, Холандија | 2 године |

## АНГАЖОВАНОСТ У ФОРМИРАЊУ НАУЧНИХ КАДРОВА

Менторство студентима основних и мастер студија на Техничком универзитету Ајндховен, Холандија

## УЧЕШЋЕ НА ПРОЈЕКТИМА РЕСОРНОГ МИНИСТАРСТВА

„Primena biomedicinskog inženjeringa u pretkliničkoj i kliničkoj praksi“, III41007, финансиран од стране Министарства образовања, науке и технолошког развоја Републике Србије, 2011-2014 (2019). Координатор пројекта – Проф. др Ненад Филиповић, Факултет инжењерских наука Универзитета у Крагујевцу.

## УЧЕШЋЕ НА МЕЂУНАРОДНИМ ПРОЈЕКТИМА

ARTreat, Multi-level patient-specific artery and atherogenesis model for outcome prediction, decision support treatment, and virtual hand-on training, ICT-FP7 – Grant agreement ID: 224297, Coordinated by: Consiglio

Nazionale Delle Ricerche, 01.09.2008. – 31.08.2013.

- MUST, Multi-Level Protection of Materials for Vehicles by “Smart” Nanocontainers, FP7 NMP – Grant agreement ID: 214261, Coordinated by: Airbus Defence and Space GMBH, 01.06.2008. – 30.09.2012.
- SIFEM, Semantic Infostructure interlinking an open source Finite Element tool and libraries with a model repository for the multi-scale Modelling and 3D visualization of the inner-ear, FP7-ICT – Grant agreement ID: 600933, Coordinated by: dr Ratnesh Sahay, National University of Ireland, Galway, NUIG, 01.02.2013 – 31.01.2016.
- EMBalance, A decision support system incorporating a validated patient-specific, multiscale balance hypermodel towards early diagnostic Evaluation and efficient Management plan formulation of Balance disorders, FP7-ICT – Grant agreement ID: 610454, Coordinated by: University College London, UCL, 01.12.2013 – 31.01.2017.
- SMARTool, Simulation Modeling of coronary ARtery disease: a tool for clinical decision support, H2020-EU.3.1.5. – Grant agreement ID: 689068, Coordinated by: Consiglio Nazionale Delle Ricerche, 01.01.2016 – 30.06.2019.
- PANBioRA, Personalized And/Or Generalized Integrated Biomaterial Risk Assessment, H2020-EU.2.1.3. – Grant agreement ID: 760921, Coordinated by: Steinbeis 2i GMBH, 01.01.2018 – 31.12.2021.
- MDR, The Gravitation Program “Materials Driven Regeneration”, funded by the Netherlands Organization for Scientific Research (024.003.013).

## **ЧЛАНСТВО У НАУЧНИМ И СТРУЧНИМ АСОЦИЈАЦИЈАМА**

Српско друштво за рачунску механику Крагујевац

## **ОРГАНИЗАЦИЈА СКУПОВА**

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## НАУЧНО-ИСТРАЖИВАЧКИ РАД\*

| Списак резултата М10<br>Монографије, Монографске студије, Тематски зборници- обавезно навести категорију  | Број<br>5 |
|---|-----------|
| 1. Ignasi Jorba, Milica Nikolic, Carlijn VC Bouten, Chapter 8. Mechanical Considerations of Myocardial Tissue and Cardiac Regeneration, in book Cardiac and Vascular Biology Springer, accepted for publication.  | M13       |
| 2. Milica Nikolic, Chapter 7: Lab-on-a-chip for lung tissue from in silico perspective, in book Cardiovascular and Respiratory Bioengineering, Elsevier, pISBN: 978012823956807, eISBN: 9780128242292, Published: May 12, 2022 <a href="https://www.elsevier.com/books/cardiovascular-and-respiratory-bioengineering/filipovic/978-0-12-823956-8">https://www.elsevier.com/books/cardiovascular-and-respiratory-bioengineering/filipovic/978-0-12-823956-8</a>  | M13       |
| 3. Filipovic N., Nikolic M. and Sustersic T., 2020, Chapter 28, "Simulation of organ-on-a-chip systems", in book Biomaterials for Organ and Tissue Regeneration, New Technologies and Future Prospects, ISBN 978-0-08-102906-0, pp. 753-790, <a href="https://doi.org/10.1016/B978-0-08-102906-0.00028-3">https://doi.org/10.1016/B978-0-08-102906-0.00028-3</a> .<br><a href="https://www.sciencedirect.com/science/article/pii/B9780081029060000283?via%3Dihub">https://www.sciencedirect.com/science/article/pii/B9780081029060000283?via%3Dihub</a> | M13       |
| 4. Nikolic M. and Filipovic N., 2019 (2020), Chapter 4 - Lung on a chip and epithelial lung cells modelling in book Computational Modeling in Bioengineering and Bioinformatics, pp. 105-135, <a href="https://doi.org/10.1016/B978-0-12-819583-3.00004-7">https://doi.org/10.1016/B978-0-12-819583-3.00004-7</a> , ISBN 978-0-12-819583-3.<br><a href="https://www.sciencedirect.com/science/article/pii/B9780128195833000047">https://www.sciencedirect.com/science/article/pii/B9780128195833000047</a>  | M13       |
| 5. Filipovic N., Petrovic D., Nikolic M., Jovanovic S., Jovanovic A. and Zdravkovic N., 2017,(2018), "Modeling of Self-Healing Materials with Nanocontainers Using Discrete and Continuum Methods", Chapter 8 in book Commercialization of Nanotechnologies-A Case Study Approach, D. Brabazon et al. (eds.), pp. 177-204, doi: 10.1007/978-3-319-56979-6_8, eISBN 978-3-319-56979-6, hardcover ISBN: 978-3-319-  | M13       |

56978-9, Publisher: Springer International Publishing, first online 2017, copyright 2018.  
<https://www.springerprofessional.de/en/modeling-of-self-healing-materials-with-nanocontainers-using-dis/15032332>

M13

**Списак резултата M20**

Радови објављени у научним часописима међународног научног значаја- обавезно навести категорију

**Број**

5

1. Tijana Šušteršič, Gorkem Muttalip Simsek, Guney Guven Yapici, Milica Nikolić, Radun Vulović, Nenad Filipovic and Nihal Engin Vrana, An In-Silico Corrosion Model for Biomedical Applications for Coupling With In-Vitro Biocompatibility Tests for Estimation of Long-Term Effects, *Front. Bioeng. Biotechnol.*, 07 September 2021, <https://doi.org/10.3389/fbioe.2021.718026>, IF 6.064

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2. Vulovic R., Nikolic M., Filipovic N., 2018, (2019), "Smart Platform for the Analysis of Cupula Deformation caused by Otoconia Presence within SCCs", *Computer Methods in Biomechanics and Biomedical Engineering*, Vol. 22, No. 2, pp. 130-138, DOI 10.1080/10255842.2018.1539166, Published online: 24 Dec 2018, ISSN 1476-8259.  
<https://www.tandfonline.com/doi/abs/10.1080/10255842.2018.1539166?journalCode=gcmb20>

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3. Nikolic M., Sustersic T. and Filipovic N., (2018), "In vitro models and on-chip systems: Biomaterial interaction studies with tissues generated using lung epithelial and liver metabolic cell lines", *Frontiers in Bioengineering and Biotechnology*, Vol. 6, Article 120, pp. 1-13, doi: 10.3389/fbioe.2018.00120, received: 31 May 2018; accepted: 13 August 2018; published: 3 September 2018, eISSN: 2296-4185, IF 5.122.  
<https://www.frontiersin.org/articles/10.3389/fbioe.2018.00120/full>

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4. Filipovic N., Zivic M., Obradovic M., Djukic T., Markovic Z., Rosic M., 2013(2014), "Numerical and Experimental LDL Transport Through Arterial Wall", *Microfluidics and Nanofluidics*, Vol. 16, No.

3, pp. 455-464, Print ISSN 1613-4982, printed on March 2014, online ISSN 1613-4990, available online from 28 July 2013, DOI: <https://doi.org/10.1007/s10404-013-1238-1>.

<https://link.springer.com/article/10.1007/s10404-013-1238-1>

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5. Filipovic F., Jovanovic A., Petrovic D., Obradovic M., Jovanovic S., Balos D., Kojic M., 2012, "Modelling of self-healing materials using discrete and continuum methods", Surface Coatings International, Vol. 95, No. 2, pp. 74-79, ISSN 1754-0925. [https://www.researchgate.net/publication/274389121\\_Modelling\\_of\\_self-healing\\_materials\\_using\\_discrete\\_and\\_continuum\\_methods](https://www.researchgate.net/publication/274389121_Modelling_of_self-healing_materials_using_discrete_and_continuum_methods)

M23

### Списак резултата М30

Зборници међународних научних скупова- обавезно навести категорију

Број

50

1. Milica Nikolic, Dylan Mostert, Carlijn C.V. Bouten, Sandra Loerakker, Interplay between microtissue structure and function in regeneration of cardiac fibrosis – an in silico approach, 9th World Congress on Biomechanics, 10-14th of July 2022, Taipei.

M34

2. Ignasi Jorba, Sil Gussenhoven, Atze van der Pol, Dylan Mostert, Milica Nikolic, Nicholas A. Kurniawan, Carlijn V.C. Bouten, Modulating local mechanics to control cell and ECM organization in a 3D in vitro cardiac model, 9th World Congress on Biomechanics, 10-14th of July 2022, Taipei.

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3. Sustersic, T., Nikolic, M., Tanase C. E., Ghaemmaghami, A., Vrana N.E., Filipovic, N., In-silico modelling of hepatocyte cell aggregation as a step towards improved biomaterial risk assessment, TERMIS 2021, TERMIS EU Virtual Conference, 15 - 19 November 2021, Maastricht, Netherlands, <https://insight.klinkhamergroup.com/termis2021/book/abstract/616>

M34

4. Nikolic, M., Sustersic, T., Filipovic, N., Numerical Simulation of Sedimentation Process using Mason-Weaver Equation, 21st IEEE International Conference on BioInformatics and BioEngineering (BIBE), Kragujevac, Serbia (hybrid event), 25-27 October 2021,

<https://www.computer.org/csdl/proceedings-article/bibe/2021/09635216/1zmvvASs1bi>.

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5. Sustersic T., Nikolic M., Barthes J., Vrana N. E. and Filipovic N., In silico modelling of epithelial barrier formation with A549 cancerous cell line, 11th World Biomaterials Congress, 11-15. December 2020., Glasgow, UK, <https://wbc2020.org/>

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6. Sustersic T., Nikolic M., Vulovic R., Vrana N. E. and Filipovic N., Use of Lung and Liver Computer Modeling in Preclinical Practice, Virtual Physiological Human (VPH), 26-28. August 2020., Paris, France, <https://vph2020.sciencesconf.org/>

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7. Šušteršič T., Nikolić M., Barthes J., Vrana N. E., Filipović N., 2019, "Coupling Experimental Data and Numerical Simulation in Modelling Epithelial Barrier Formation with A549 Cancerous Cell Line", 8th International Conference on Computational Bioengineering, ICCB2019, Belgrade, Serbia, 4-6 September, 2019, ICCB 2019 Proceedings, pp. 47-48, ISBN 978-86-81037-75-1 <http://www.iccb2019.kg.ac.rs/index.php/proceedings>

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8. Nikolic M., Sustersic T., Muller C. B., Zhang Y. S, Vrana N. E., Filipovic N., 2019, Monocyte Behaviour under Perfusion Conditions for Development of Granuloma on-a-chip, Tissue Engineering Therapies: From Concept to Clinical Translation & Commercialisation, TERMIS European Chapter Meeting 2019, Rhodes, Greece, 27-31 May, 2019, Termis EU 2019 Conference Book, pp. 1356. <https://termis.org/eu2019/>

M34

9. Sustersic T., Nikolic M., Vrana N. E., Filipovic N., 2019 (2020), "Discrete modelling of liver cell aggregation using partial differential equations", International Conference on Medical and Biological Engineering, CMBEBIH 2019, Banja Luka, Bosnia and Herzegovina, 16-18 May, 2019, IFMBE Proceedings, Springer, Cham, Vol. 73, pp. 379-384, [https://doi.org/10.1007/978-3-030-17971-7\\_57](https://doi.org/10.1007/978-3-030-17971-7_57), eISBN 978-3-030-17971-7, pISBN 978-3-030-17970-0, [https://link.springer.com/chapter/10.1007/978-3-030-17971-7\\_57](https://link.springer.com/chapter/10.1007/978-3-030-17971-7_57)

M33

10. Krsmanovich D., Saveljic I., Nikolic D., Isailovic V., Nikolic M., Milosevic Z., Jovicic G., Milovanovic D., Sakellarios A., Exarchos T., Filipovic N., 2018, "Numerical model of stent deployment in the stenosed artery and modeling of atherosclerosis growing", 8th World Congress of Biomechanics, Dublin, Ireland, 8-12 July, 2018. <https://app.oxfordabstracts.com/stages/123/programme-builder/submission/22379?backHref=/events/123/programme-builder/view/sort/topic>

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11. Nikolic M., Sustersic T., Saveljic I., Vrana N. E. and Filipovic N., 2018, "Modelling of Monocytes Behaviour inside the Bioreactor", Belgrade BioInformatics Conference, BelBi 2018, Belgrade, Serbia, 18-22 June, 2018, Book of Abstracts, Biologia Serbica, Vol. 40, No. 1 (Special Edition), pp. 123, ISSN 2334-6590, UDK 57 (051). <http://belbi.bg.ac.rs/wp-content/uploads/2018/07/Book-of-abstracts-Belbi2018.pdf>

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12. Saveljic I., Nikolic D., Milosevic Z., Isailovic V., Nikolic M., Parodi O. and Filipovic N., 2018, "3D Modeling of Plaque Progression in the Human Coronary Artery", The 18th International Conference on Experimental Mechanics, ICEM 2018, Brussels, Belgium, 1-5 July, 2018, Published by MDPI AG, Basel, Switzerland, Vol. 2, No 8, 388, pp.1-6, doi:10.3390/ICEM18-05213, eISSN 2504-3900. <https://www.mdpi.com/2504-3900/2/8/388>

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13. Saveljic I., Isailovic V., Milosevic Z., Nikolic D., Nikolic M., Cirkovic-Andjelkovic B., Exarchos T., Fotiadis D., Pelosi G., Parodi O. and Filipovic N., 2018, "Numerical Simulation of Atherosclerotic Plaque Growth in Right Coronary Arteries", 9th GRACM International Congress on Computational Mechanics, Chania, Greece, 4-6 June, 2018, Proceedings: Book of Full-length Papers, pp. 346-351, ISBN 978-618-81537-5-2 (e-book). <https://dias.library.tuc.gr/view/78634>

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14. Filipovic N., Saveljic I., Nikolic D., Milosevic Z., Nikolic M., Sakellarios A., Exarchos T. and Parodi O., 2018, "Computational Modeling for Plaque Progression in the Coronary Artery", 2018 IEEE International Conference on Biomedical and Health Informatics, BHI 2018, Las Vegas, NV, USA, 4-7 March, 2018, ISBN 978-1-5386-2405-0.



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15. Saveljic I., Nikolic D., Milosevic Z., Nikolic M., Sakellarios A, Exarchos T. and Filipovic N., 2018, "Numerical simulation of blood flow and plaque progression in the right coronary artery", 2018 IEEE International Conference on Biomedical and Health Informatics, BHI 2018, Las Vegas, NV, USA, 4-7 March, 2018, ISBN 978-1-5386-2405-0. <https://bhi-bsn.embs.org/2018/proceedings/>

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16. Filipovic N., Isailovic V., Milosevic Z., Nikolic D., Saveljic I., Nikolic M., Gacic M., Cirkovic-Andjelkovic B., Exarchos T., Fotiadis D., Pelosi G., Parodi O., 2017, "Coupled computer modeling of atherosclerosis development in the coronary arteries", 2017 IEEE 17th International Conference on BioInformatics and BioEngineering, BIBE 2017, Washington D.C., USA, 23-25 October, 2017, IEEE Xplore, pp. 1-4, <https://doi.org/10.1109/BIBE.2017.00-19>, available online from 11 January 2018, , eISBN 978-1-5386-1324-5, eISSN: 2471-7819. <http://ieeexplore.ieee.org/document/8251325/>

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17. Filipovic N., Isailovic V., Milosevic Z., Nikolic D., Saveljic I., Nikolic M., Cirkovic-Andjelkovic B., Exarchos T., Fotiadis D., Pelosi G., Parodi O., 2017, "Computer Modeling of Atherosclerosis in the Human Arteries", International Conference on Innovative Technologies, IN-TECH 2017, Ljubljana, Slovenia, 11-13 September, 2017, ISBN 978-953-6326-88-4, Proceedings of International Conference on Innovative Technologies, pp. 229-232, ISSN 0184-9069. <http://www.in-tech.info/2017/committees/index.html>  
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18. Nikolic M. and Filipovic N., 2017, "Modeling Semicircular Canal Using DPD Method", 4th South-East European Conference on Computational Mechanics - SEECCM 2017, Kragujevac, Serbia, 3-4 July, 2017, Book of Abstract, pp. 18-19, Book of Proceedings, pp. 73-80, ISBN: 978-86-921243-0-3. [https://www.researchgate.net/conference-event/SEECCM\\_South-East-European-Conference-on-Computational-Mechanics\\_2017/89817](https://www.researchgate.net/conference-event/SEECCM_South-East-European-Conference-on-Computational-Mechanics_2017/89817)

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19. Vulovic R., Nikolic M., Filipovic N., 2017, "Software Solution of

Cupula's Membrane Deformation Shew for Use in Clinical Praxis", 4th South-East European Conference on Computational Mechanics – SEECCM 2017, Serbian Society for Computational Mechanics, Kragujevac, Serbia, 3-4 July, 2017, Book of Abstract, pp. 28 - 29, Book of Proceedings pp. 173-180, ISBN: 978-86-921243-0-3. [https://www.researchgate.net/conference-event/SEECCM\\_South-East-European-Conference-on-Computational-Mechanics\\_2017/89817](https://www.researchgate.net/conference-event/SEECCM_South-East-European-Conference-on-Computational-Mechanics_2017/89817)

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20. Filipovic N., Isailovic V., Milosevic Z., Nikolic D., Saveljic I., Nikolic M., Cirkovic-Andjelkovic B., Radovic M., Exarchos T., Fotiadis D., Pelosi G., Parodi O., 2017, "Modeling of plaque development in the coronary arteries", CARS 2017 - Computer Assisted Radiology and Surgery, Proceedings of the 31st International Congress and Exhibition, Barcelona, Spain, 20-24 June, 2017, International Journal of Computer Assisted Radiology and Surgery, Vol. 12, No. 1, pp. 62-63, DOI 10.1007/s11548-017-1588-3. <https://www.ncbi.nlm.nih.gov/pubmed/28527024>

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21. Filipovic N., Isailovic V., Milosevic Z., Nikolic D., Saveljic I., Nikolic M., Cirkovic-Andjelkovic B., Jagic N, Exarchos T., Fotiadis D., Pelosi G., Parodi O., 2017, "Computational Modeling for Plaque Progression and Fractional Flow Reserve in the Coronary Arteries", 6th International Congress of Serbian Society of Mechanics, Tara, Serbia, 19-21 June, 2017, Proceedings, pp. 164, abstract, USB paper M3g, ISBN 978-86-909973-6-7. [http://ssm.org.rs/archive/congress\\_2017/index.html](http://ssm.org.rs/archive/congress_2017/index.html)

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22. Nikolic M. and Filipovic N., 2017, "Application of DPD Method on Modelling Semicircular Canals", 6th International Congress of Serbian Society of Mechanics, Tara, Serbia, 19-21 June, 2017, Proceedings, pp. 163, abstract, USB paper M3e, ISBN 978-86-909973-6-7. [http://ssm.org.rs/archive/congress\\_2017/index.html](http://ssm.org.rs/archive/congress_2017/index.html)

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CMBEBIH 2017, Sarajevo, Bosnia and Herzegovina, 16-18 March, 2017, Vol. 62, pp. 269-274, DOI:10.1007/978-981-10-4166-2\_40, eISBN 978-981-10-4166-2, pISBN 978-981-10-4165-5. [https://link.springer.com/chapter/10.1007/978-981-10-4166-2\\_40](https://link.springer.com/chapter/10.1007/978-981-10-4166-2_40)

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24. Isailovic V., Nikolic M., Bibas T., Sakellarios A., Tachos N., Milosevic M., Filipovic N., 2016, (2018), Numerical simulation of human hearing system, 2nd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures (FABULOUS 2016), Belgrade, Serbia, 24-25 October, 2016, Published in EAI Endorsed Transactions on Pervasive Health and Technology, Vol. 4, No. 13, e3, pp. 1-4, doi: 10.4108/eai.28-2-2018.154144, received on 06 June 2017, accepted on 14 November 2017, published on 28 February 2018, ISSN: 2411-7145. <http://eudl.eu/doi/10.4108/eai.28-2-2018.154144>

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25. Isailovic V., Bibas T., Sakellarios A., Tachos N., Nikolic M., Nikolic D., Saveljic I., Filipovic N., 2016, "The realistic three-dimensional model of the middle and inner ear", European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2016, Crete, Greece, 5-10 June, 2016, ISBN: 978-618-82844-0-1. <https://www.eccomas2016.org/proceedings/pdf/8959.pdf>

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26. Nikolic M., Isailovic M., Filipovic N., 2016, "Electro-mechanical cochlea model", European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2016, Crete, Greece, 5-10 June, 2016, ISBN: 978-618-82844-0-1. <https://www.eccomas2016.org/proceedings/pdf/9007.pdf>

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28. Isailovic V., Nikolic M., Filipovic N., 2015, "Tapered Box Model of the Cochlea: Air and Bone Conduction", Fifth Serbian (30th YU)

Congress on Theoretical and Applied Mechanics, Arandjelovac, Serbia, 15-17 June, 2015, Proceedings, USB paper B2b, pp. 1-6, ISBN 978-86-7892-715-7. <http://ssm.org.rs/kongresi/>

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M33

| <b>Списак резултата М40</b>  | <b>Број</b> |
|--|-------------|
| Монографије националног значаја- обавезно навести категорију   | <b>1</b>    |
| 1. Milica Obradovic, 2012, chapter Radiofrekventna ablacija na srcu, in book Osnovi bioinženjeringa, Faculty of Engineering, University of Kragujevac, publisher Koraci d.o.o, Kragujevac, ISBN: 978-86-86685-66-7, pp. 407 - 426. |             |



| M44   |             |
|---|-------------|
| <b>Списак резултата M50</b>   | <b>Број</b> |
| Рад у часописима националног значаја- обавезно навести категорију   | 9           |
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|   |                  |
|---|------------------|
| <b>Списак резултата М60</b><br>Предавања по позиву на скуповима националног значаја- обавезно навести категорију<br>/ | <b>Број</b><br>0 |
| <b>Списак резултата М80</b><br>Техничка решења- обавезно навести категорију<br>/                                      | <b>Број</b><br>0 |
| <b>Списак резултата М90</b><br>Патенти- обавезно навести категорију<br>/  | <b>Број</b><br>0 |

\*Разврставање резултата према ПРАВИЛНИКУ о стицању истраживачких и научних звања "Службени гласник РС", број 159 од 30. децембра 2020, Прилог 3 - Врста и квантификација индивидуалних научноистраживачких резултата.

## ЦИТИРАНОСТ НАУЧНИХ РАДОВА

11 (Scopus)

### **КРАТАК ОПИС ИСТРЖИВАЊА У ПРЕТХОДНОМ ПЕРИОДУ**

Компјутерско моделирање у области биоинжењеринга, са фокусом на поље регенеративне медицине. Развој модела срчаног фиброзног микроткива. Симулација одзива модела под различитим граничним и спољашњим оптерећењима, укључујући повезаност са моделом на макро нивоу. Развој модела бубрега и анализа процеса поларизације код бубрежних епителних ћелија.

### **КРАТАК ОПИС ПЛАНИРАНИХ ИСТРЖИВАЊА У НАРЕДНОМ ПЕРИОДУ**

Наставак истраживања у кардиоваскуларној области укључивањем детаљније шеме електричне проводљивости у тренутни модел срчаног микроткива са циљем разоткривања утицаја структуре микроткива на његову функционалност. Приближавање нових регенеративних стратегија претклиничким и клиничким испитивањима.