

ОСНОВНИ ПОДАЦИ

Име и презиме	Игор Савељић
Година и место рођења	1983, Крагујевац
Звање	Научни сарадник
E-mail	isaveljic@kg.ac.rs
Образовно-научно / образовно-уметничко поље	Техничко технолошке науке
Универзитет, факултет, организациона јединица	Универзитет у Крагујевцу, Факултет инжењерских наука у Крагујевцу
Област и ужа научна област	Биомеханика и информатика Примењена механика и примењена информатика и рачунарско инжењерство

ОБРАЗОВАЊЕ

ОСНОВНЕ СТУДИЈЕ

Година	2009
Место	Крагујевац
Институција	Машински факултет у Крагујевцу

МАСТЕР СТУДИЈЕ ИЛИ МАГИСТАРСКЕ

Година	
Место	
Институција	

ДОКТОРСКА ДИСЕРТАЦИЈА

Година	2016
Место	Крагујевац
Институција	Факултет инжењерских наука у Крагујевцу
Наслов докторске	Нумеричко решавање односа правог и лажног

дисертације	лумена акутне аортне дисекције
Научно звање	Научни сарадник
Област	Примењена механика и рачунарско инжењерство

СТРУЧНА БИОГРАФИЈА – ИЗБОРИ У ИСТРАЖИВАЧКА ОДНОСНО НАУЧНА ЗВАЊА

Датум избора	Институција	Звање
10.07.2015.	Факултет инжењерских наука Универзитета у Крагујевцу	Истраживач сарадник
31.01.2018.	Факултет инжењерских наука Универзитета у Крагујевцу	Научни сарадник

СТРУЧНА БИОГРАФИЈА - УСАВРШАВАЊЕ

Година	Институција	Трајање
2012	ARTreat Workshop, Атина, Грчка	5 дана
2014	SCOPE Workshop, Фрибург, Швајцарска	4 дана
2015	SCOPE Workshop, Фрибург, Швајцарска	4 дана

НАУЧНО-ИСТРАЖИВАЧКИ РАД¹

Списак резултата М11 Истакнута монографија међународног значаја	Број

¹ Публикације и други истраживачки доприноси према важећој класификацији Министарства (Правилник о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача, www.mpn.gov.rs/wp-content/uploads/2017/03/Pravilnik-2017-preciscen-tekst.pdf) **за последње четири године;**

Списак резултата M12 Монографија међународног значаја	Број
Списак резултата M13 Монографска студија/поглавље у књизи M11 или рад у тематском зборнику водећег међународног значаја	Број 1
1. Nenad Filipovic, Zarko Milosevic, Igor Saveljic, Dalibor Nikolic, Milos Radovic, Computer Modeling of Stent Deployment in the Coronary Artery Coupled with Plaque Progression. In: Zivic F., Affatato S., Trajanovic M., Schnabelrauch M., Grujovic N., Choy K. (eds) <i>Biomaterials in Clinical Practice</i> , Springer, Cham, (2018). doi.org/10.1007/978-3-319-68025-5_25.	
Списак резултата M14 Монографска студија/поглавље у књизи M12 или рад у тематском зборнику међународног значаја	Број
Списак резултата M21a Рад у међународном часопису изузетних вредности	Број
Списак резултата M21 Рад у врхунском међународном часопису	Број 12
1. Nenad Filipovic, Dalibor Nikolic, Igor Saveljic, Zarko Milosevic, Themis Exarchos, Gualtierio Pelosi and Oberdan Parodi, Computer simulation of three dimensional plaque formation and progression in the coronary artery, <i>Computers and Fluids</i> , Vol. 88, pp. 826-833. 2013, doi: http://dx.doi.org/10.1016/j.compfluid.2013.07.006 . 2. Nenad Filipovic, Tijana Djukic, Igor Saveljic, Petar Milenkovic, Gordana Jovicic, Marija Djuric, Modeling of liver metastatic disease with applied drug therapy, <i>Computer Methods and Programs in Biomedicine</i> , May 01, 2014, http://dx.doi.org/10.1016/j.cmpb.2014.04.013	

3. G Pelosi, D Panetta, F Vozzi, F Viglione, N Filipovic , I Saveljic, T Exharcos, MG Trivella and O Parodi, Site-specific shear stress-plaque severity relations by high axial resolution coronary profiling in an animal model of atherogenesis, *Cardiovascular Research*, July 15, 2014 103 (2), doi: 10.1093/cvr/cvu091.148
4. Aleksa Janovic, Petar Milovanovic, Igor Saveljic, Dalibor Nikolic, Michael Hahn, Zoran Rakocevic, Nenad Filipovic, Michael Amling, Bjoern Busse, Marija Djuric, Microstructural properties of the mid-facial bones in relation to the distribution of occlusal loading, *Bone*, August 2014, <http://dx.doi.org/10.1016/j.bone.2014.07.032>
5. Svetlana Antic, Arso M. Vukicevic, Marko Milasinovic, Igor Saveljic, Gordana Jovicic, Nenad Filipovic, Zoran Rakocevic, Marija Djuric, (2015) Impact of the lower third molar presence and position on the fragility of mandibular angle and condyle: A Three-dimensional finite element study, *Journal of Cranio-Maxillofacial Surgery*, Vol. 43, No. 6, pp 870-878, <http://dx.doi.org/10.1016/j.jcms.2015.03.025>
6. Brönnimann D, Djukic T, Triet R, Dellenbach C, Saveljic I, Rieger M, Rohr S, Filipovic N, Djonov V, (2016) Pharmacological Modulation of Hemodynamics in Adult Zebrafish In Vivo. *PLoS ONE* 11(3): e0150948. doi:10.1371/journal.pone.0150948
7. Djukic TR, Karthik S, Saveljic I, Djonov V and Filipovic N (2016) Modeling the Behavior of Red Blood Cells within the Caudal Vein Plexus of Zebrafish. *Front. Physiol.* 7:455. doi: 10.3389/fphys.2016.00455
8. Filipovic Nenad, Saveljic Igor, Rac Vladislav, Beatriz Olalde Graellsd, Bijelic Goran, Computational and experimental model of transdermal iontophoretic drug delivery system, *International Journal of Pharmaceutics*, 2017, DOI: <http://dx.doi.org/10.1016/j.ijpharm.2017.05.066>
9. Pajic SS, Antic S, Vukicevic AM, Djordjevic N, Jovicic G, Savic Z, Saveljic I, Janović A, Pesic Z, Djuric M and Filipovic N (2017) Trauma of the Frontal Region Is Influenced by the Volume of Frontal Sinuses. A Finite Element Study. *Front. Physiol.* 8:493. doi: 10.3389/fphys.2017.00493
10. Koullapis P Kassinos SC Muela J Perez-Segarra C Rigola J Lehmkuhl O Cui Y Sommerfeld M Elcner J Jicha M Saveljic Igor Filipovic Nenad D Lizal F Nicolaou L (2018) Regional aerosol deposition in the human airways: The SimInhale benchmark case

and a critical assessment of in silico methods, European journal of pharmaceutical sciences, vol. 113, pp. 77-94

11. Tijana Djukic, Igor Saveljic, Gualtiero Pelosi, Oberdan Parodi, Nenad Filipovic (2019) Numerical simulation of stent deployment within patient-specific artery and its validation against clinical data, Computer Methods and Programs in Biomedicine, Volume 175, pp. 121-127, <https://doi.org/10.1016/j.cmpb.2019.04.005>
12. Djukic, T., Saveljic, I. & Filipovic, Numerical modeling of the motion of otoconia particles in the patient-specific semicircular canal, Comp. Part. Mech. (2019) vol 6(4): 767-780, <https://doi.org/10.1007/s40571-019-00260-1>

Списак резултата М22

Рад у истакнутом међународном часопису

Број

4

1. Nenad Filipovic, Zhongzhao Teng, Milos Radovic, Igor Saveljic, Dimitris Fotiadis and Oberdan Parodi, Computer simulation of three dimensional plaque formation and progression in the carotid artery, Medical and Biological Engineering and Computing, Vol. 51, No.6, pp. 607-616, 2013, doi: 10.1007/s11517-012-1031-4.
2. Aleksa Janovic, Igor Saveljic, Arso Vukicevic, Dalibor Nikolic, Zoran Rakocovic, Gordana Jovicic, Nenad Filipovic, Marija Djuric, Occlusal load distribution through the cortical and trabecular bone of the human mid-facial skeleton in natural dentition: A three-dimensional finite element study, Annals of Anatomy, Vol. 139, pp. 16-23, 2014 (<http://dx.doi.org/10.1016/j.aanat.2014.09.002>)
3. Svetlana Antic, Igor Saveljic, Dalibor Nikolic, Gordana Jovicic, Nenad Filipovic, Zoran Rakocovic, Marija Djuric, Does the presence of an unerupted lower third molar influence the risk of mandibular angle and condylar fractures? International Journal of Oral and Maxillofacial Surgery, Vol. 14, No. 00352-x-eprint, ISSN: 0901-5027, DOI: <http://dx.doi.org/10.1016/j.ijom.2014.09.018>
4. Nenad Filipovic, Kedar Ghimire, Igor Saveljic, Zarko Milosevic, Curzio Ruegg, Computational modeling of shear forces and experimental validation of endothelial cell responses in an orbital well shaker system, Computer Methods in Biomechanics and Biomedical Engineering, 2015, DOI:10.1080/10255842.2015.1051973

Списак резултата М23

Број

Рад у међународном часопису	5
1. Aleksandar Peulić, Emil Jovanov, Miloš Radović, Igor Saveljić, Nebojša Zdravković, Nenad Filipović, Modeling of Arterial Stiffness using Variations of Pulse Transit Time, Computer Science and Information Systems / ComSIS, Vol. 10, No. 1, pp. 547-565, 2013, doi:10.2298/CSIS120531015P 2. Filipovic N, Nikolic D, Saveljic I, Djukic T, Adjic O, Kovacevic P, Cemerlic-Adjic N, Velicki L, Computer simulation of thromboexclusion of the complete aorta in the treatment of chronic type B aneurysm, Computer Aided Surgery, Vol. 18, No.1-2, pp. 1-9, 2013, doi: 10.3109/10929088.2012.741145. 3. Nenad Filipovic, Igor Saveljic, Dalibor Nikolic, Zarko Milosevic, Pavle Kovacevic, Lazar Velicki, Numerical simulation of blood flow and plaque progression in carotid-carotid bypass patient specific case, Computer Aided Surgery, Vol 20, No. 1, pp-1-6, 2015, DOI: 10.3109/10929088.2015.1076036 4. Filipovic Nenad D Saveljic Igor Jovicic Nemanja U Tanaskovic Irena Zdravkovic Nebojsa D (2016) Computational and experimental model of electroporation for human aorta, Acta of bioengineering and biomechanics, (2016), vol. 18 br. 4, str. 15-20 5. Zdravkovic Nebojsa, Milosevic Zarko, Saveljic Igor, Nikolic Dalibor, Miloradovic Vladimir, Filipovic Nenad (2017) Three-Dimensional Biomechanical Model of Benign Paroxysmal Positional Vertigo in the Semi-Circular Canal, Tehnicki vjesnik-technical gazette, vol. 24, no. 6, pp. 1769-1775	
Списак резултата М24 Рад у националном часопису међународног значаја	Број
Списак резултата М33 Саопштење са међународног скупа штампано у целини	Број 47
1. A. Peulic, E. Jovanov, M. Radovic, I. Saveljic, N. Zdravkovic, N. Filipovic: Arterial Stiffness modeling using variations of Pulse Transit Time, 10thBioEng, 5-7 October 2011, Kos, Greece. 2. Filipovic N, Teng Z, Milosevic Z, Nikolic D, Radovic M, Saveljic I,	

- Exarchos T, Fotiadis DI, Gillard J, Parodi O, Computer simulation of three-dimensional plaque formation and progression in the carotid artery. EAS 2012, the 80th European Atherosclerosis Society Congress, May 25-28, 2012, Milan, Italy.
3. Filipovic N, Nikolic D, Milosevic Z, Saveljic I, Tanaskovic I, Colic M, Rosic M: Experimental and computational LDL transport model through arterial wall. COST Action MP1005; 2nd Joint Meeting, September 4-5, 2012, Vienna, Austria.
 4. Koncar I., Krsmanovic D., Saveljic I., Isailovic V., Davidovic L., Filipovic N., Computer Simulation of Endoluminal Stent-Graft Migration, European Society for Artificial Organs, XXXIX ESAO 2012, September 26-29, 2012, Rostock, Germany.
 5. Filipovic N., Kojic M., Teng Z., Radovic M., Saveljic I., Themis E., Parodi O., Computer Simulation of Three-Dimensional Plaque Formation and Progression in the Carotid Artery, Parallel CFD, 24th International Conference on Parallel Computational Fluid Dynamics, May 21– 25, 2012, Atlanta, USA.
 6. Igor Saveljic, Aleksa Janovic, Dalibor Nikolic, Zoran Rakocevic, Marija Djuric and Nenad Filipovic, Finite element analysis of the facial skeleton on simulated occlusal loading, Fourth Serbian (29th Yu) Congress on Theoretical and Applied Mechanics, 4-7 June 2013, Vrnjačka Banja, Serbia, ISSN 978-86-909973-5-0, COBISS.SR-ID 198308876.
 7. L. Velicki, N. Čemerlić-Ađić, R. Jung, N. Tomić, O. Ađić, D. Nikolić, I. Saveljić, D. Milašinović, N. Filipović, Evaluation of borderline coronary lesions using noninvasive computed fractional flow reserve, 4th International Congress of Serbian Society of Mechanics, June 4-7, 2013, Vrnjačka Banja, Serbia, ISSN 978-86-909973-5-0, COBISS.SR-ID 198308876.
 8. Z. Milošević, D. Nikolić, I. Saveljić, M. Radović, T. Exarchos, O. Parodi, N. Filipović, Three-dimensional computer modeling of plaque formation and ldl transport within artery and through the vessel wall, 4th International Congress of Serbian Society of Mechanics, June 4-7, 2013, Vrnjačka Banja, Serbia, ISSN 978-86-909973-5-0, COBISS.SR-ID 198308876.
 9. Aleksa Janovic, Petar Milovanovic, Igor Saveljic, Dalibor Nikolic, Michael Hahn, Bjoern Busse, Zoran Rakocevic, Nenad Filipovic, Michael Amling & Marija Djuric, Microstructural adaptation of bone

tissue of the facial skeleton to the distribution of occlusal load under physiological conditions, European Calcified Tissue Society Conference ECTS, 18-21 May 2013 , Lisbon, Portugal. Bone Abstracts Vol , doi: 10.1530/boneabs.1.PP51

10. Z. Milosevic, M. Radovic, D. Nikolic, I. Saveljic, V. Isailovic, M. Obradovic, D. Petrovic, E. Themis, D. Fotiadis, W. Pelosi, O. Parodi, M. Kojic and N. Filipovic, Plaque Formation Modeling – from Animal to Human Studies. SEECM III, 3rd South-East European Conference on Computational Mechanics - an ECCOMAS and IACM Special Interest Conference, M. Papadrakakis, M. Kojic, I. Tuncer (eds.), 12–14 June 2013, Kos Island, Greece.
11. Nenad Filipovic, Dalibor Nikolic, Zarko Milosevic, Milos Radovic, Igor Saveljic, Themis Exarcous, Dimitris Fotiadis, Walter Pelosi and Oberdan Parodi, Plaque progression modeling by using computer simulation and imaging data, Biomedical Engineering, February 13-15, 2013, Innsbruck, Austria.
12. Velibor Isailovic, Milica Obradovic, Dalibor Nikolic, Igor Saveljic, and Nenad D. Filipovic, SIFEM project: Finite element modeling of the cochlea, Bioinformatics and Bioengineering (BIBE), 2013 IEEE 13th International Conference on, 10-13 Nov. 2013, Chania, Greece.
13. Velibor Isailovic, Milica Nikolic, Zarko Milosevic, Igor Saveljic, Dalibor Nikolic, Milos Radovic and Nenad Filipovic, Finite Element Coiled Cochlea Model, 12th Mechanics of Hearing, 23-28 June 2014, Greece
14. Nenad Filipovic, Igor Saveljic, Zarko Milosevic and Nebojsa Zdravkovic, Caloric Test Simulation in the Three Semicircular Canal, "REDEOR", 25-27 March 2015, Venice, Italy
15. N. Filipovic, I. Saveljic, Modeling of hot caloric test and cupula deformation in the semicircular canal, 21st Congress of the european society of biomechanics, 5-8 July 2015, Prague, Czech Republic
16. V. Isailovic, M. Nikolic, Z. Milosevic, I. Saveljic, D. Nikolic, M. Radovic, and N. Filipović, Modeling of the coiled cochlea and organ of corti - using for the cochlear implants, ESAO 2015, Leuven, Belgium, on September 2nd – 5th 2015.
17. N. Filipovic, I. Saveljic, and I. Tanaskovic, "Computer simulation of electroporation and drug transport through membranes", The 14th International Symposium, Computer Methods in Biomechanics and Biomedical Engineering, Tel Aviv, Israel, September 20 – 22, 2016

- 18.D. Nikolic, I. Saveljic, M. Radovic, S. Aleksandric, M.Tomasevic, N. Filipovic, Prediction of coronary plaque position on the arteries with myocardial bridge-neural network, 65th International Congress of the European Society of Cardiovascular and Endovascular Surgery, Belgrade, Serbia, April 21-24, 2016
- 19.Filipovic, A. Peulic, N. Mijailovic, I. Saveljic, Z. Milosevic, A. Vulovic, T. Sustercic, I. Koncar, L. Davidovic, "Simulation of abdominal aortic aneurysms growth with mechanical-chemical model", 2016 EMI International Conference, Metz, France, October 25-27, 2016
- 20.Igor Saveljic, Lazar Velicki Nenad Filipovic, Numerička analiza preoperativnog i postoperativnog modela akutne aortne disekcije, INFOTEH-JAHORINA Vol. 16, March 2017.
- 21.Nenad Filipovic, Zarko Milosevic, Igor Saveljic, Themis Exarchos and Oberdan Parodi, Coupled discrete and continuum methods for modelling of atherosclerotic disease in the coronary arteries, Coupled problems, 12-14 june, 2017, Rhodes Island, Greece
- 22.Igor Saveljic, Nenad Filipovic, Lazar Velicki, Virtual surgery and numerical analysis of dissected aorta, 4th South-East European Conference on Computational Mechanics - SEECCM 2017, 3-5 july, 2017, Kragujevac, Serbia
- 23.Tijana Đukić, Igor Saveljić, Nenad Filipović, Interactive Software for Tracking Motion of Otoconia Particles in the Semicircular Canals of the Inner Ear, 4th South-East European Conference on Computational Mechanics - SEECCM 2017, 3-5 july, 2017, Kragujevac, Serbia
- 24.Žarko Milošević, Velibor Isailović, Igor Saveljić, Dalibor Nikolić, Vladislava Stojić, Nebojša Zdravković, Dušan Pavlović, Nenad Filipović, Finite Element Modeling of Benign Paroxysmal Positional Vertigo Disease, 4th South-East European Conference on Computational Mechanics - SEECCM 2017, 3-5 july, 2017, Kragujevac, Serbia
- 25.V. Isailovic, Z. Milosevic, D. Nikolic, I. Saveljic, M. Nikolic, M. Gacic, B. Cirkovic-Andjelkovic, T. Exarchos, D. I. Fotiadis, G. Pelosi, O. Parodi, N. Filipovic, "Coupled computer modeling of atherosclerosis development in the coronary arteries", BIBE 2017, 17th IEEE International Conference on BioInformatics and BioEngineering, Washington D.C., USA, October 23-25, 2017
- 26.Cirkovic, V. Isailovic, D. Nikolic, I. Saveljic, O. Parodi, N. Filipovic,

“Prediction of Coronary Plaque Progression Using Data Driven Approach”, 3rd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures, Fabulous 2017, Bucharest, Romania, October 12-14, 2017

27. Nenad Filipovic, Velibor Isailovic, Zarko Milosevic, Dalibor Nikolic, Igor Saveljic, Milica Nikolic, Bojana Cirkovic-Andjelkovic, Exarchos Themis, Dimitris Fotiadis, Gualtiero Pelosi, Oberdan Parodi, Computer Modeling of Atherosclerosis in the Human Arteries, International Conference on Innovative Technologies, IN-TECH 2017, Ljubljana, Slovenia, September 13-15, 2017
28. Nenad Filipovic, Velibor Isailovic, Zarko Milosevic, Dalibor Nikolic, Igor Saveljic, Milos Radovic, Milica Nikolic, Bojana Cirkovic-Andjelkovic, Exarchos Themis, Dimitris Fotiadis, Gualtiero Pelosi, Oberdan Parodi, "Computational modeling of plaque development in the coronary arteries", Proceedings of the International Conference on Medical and Biological Engineering CMBEBIH, Sarajevo, Bosnia and Herzegovina, March 16-18, 2017
29. Filipovic, I. Saveljic, D. Nikolic, Z. Milosevic, V. Isailovic, O. Parodi, N. Zdravkovic, "Continuum-discrete modelling of plaque development in the coronary arteries", 23rd Congress of the European Society of Biomechanics ESB, Seville, Spain, July 02-05, 2017
30. Nenad Filipovic, Arso Vukicevic, Velibor Isailovic, Dalibor Nikolic, Zarko Milosevic, Igor Saveljic, Nikola Jagic, Oberdan Parodi, Simulation of fractional flow reserve and plaque development in the coronary arteries, 7th International Conference on Computational Bioengineering, Compiègne, France, 6-8 September, 2017
31. N. Filipovic, V. Isailovic, Z. Milosevic, D. Nikolic, I. Saveljic, M. Nikolic, B. Cirkovic-Andjelkovic, M. Radovic, T. Exarchos, D. Fotiadis, G. Pelosi, O. Parodi, "Modeling of plaque development in the coronary arteries", Computer Assisted Radiology and Surgery - CARS 2017, Barcelona, Spain, June 20-24, 2017
32. Nenad Filipovic, Velibor Isailovic, Dalibor Nikolic, Igor Saveljic, Zarko Milosevic, Antonis Sakellarios and Themis Exarchos, In silico stent deployment in the coronary artery with plaque progression, VPH2018: VIRTUAL PHYSIOLOGICAL HUMAN 2018, Zaragoza, Spain, September 05-07, 2018
33. Dan Krsmanovich, Igor Saveljic, Dalibor Nikolic, Velibor Isailovic,

Milica Nikolic, Zarko Milosevic, Gordana Jovicic, Dobrica Milovanovic, Antonis Salellarios, Themis Exarchos, Nenad Filipovic, Numerical model of stent deployment in the stenosed artery and modeling of atherosclerosis growing, 8th World Congress of Biomechanics (WCB2018), Dublin, Ireland, July 08-12, 2018

- 34.I. Saveljic, D. Nikolic, Z. Milosevic, V. Isailovic, M. Nikolic, O. Parodi, N. Filipovic, "3D Modeling of Plaque Progression in the Human Coronary Artery", 18th International Conference on Experimental Mechanics (ICEM 2018), Brussels, Belgium, July 01-05, 2018
- 35.I. Saveljic, T. Exarchos, O. Parodi and N. Filipovic, 3D Simulation of Inflammatory Process in Coronary Arteries, Belgrade Bioinformatics Conference (BELBI 2018), Belgrade, Serbia, June 18-22, 2018
- 36.T. Djukic, I. Saveljic and N. Filipovic, Parallelization of software for stent deployment inside artery, Belgrade Bioinformatics Conference (BELBI 2018), Belgrade, Serbia, June 18-22, 2018
- 37.A. Milovanović, I. Saveljic, T. Exarchos, O. Parodi and N. Filipović, Numerical approach for determination of virtual functional assessment index in coronary arteries, Belgrade Bioinformatics Conference (BELBI 2018), Belgrade, Serbia, June 18-22, 2018
- 38.V. Isailovic, I. Saveljic, T. Exarchos, O. Parodi and N. Filipovic, Numerical simulation of stent deployment procedure in patient specific coronary artery, Belgrade Bioinformatics Conference (BELBI 2018), Belgrade, Serbia, June 18-22, 2018
- 39.I. Saveljic, V. Isailovic, Z. Milosevic, D. Nikolic, M. Nikolic, B. Cirkovic-Andjelkovic, E. Themis, D. Fotiadis, G. Pelosi, O. Parodi and N. Filipovic, Numerical simulation of atherosclerotic plaque growth in right coronary arteries, International Congress on Computational Mechanics (9th GRACM), Chania, Greece, June 04-06, 2018
- 40.Milos Kojic, Arso Vukicevic, Miljan Milosevic, Vladimir Simic, Igor Saveljic, Nenad Filipovic, Distribution of drug in tissue of heart as a function of concentration in coronary arteries, 2018 IEEE International Conference on Biomedical and Health Informatics, Las Vegas, NV, USA, March 4-7, 2018
- 41.Nenad Filipovic, Igor Saveljic, Dalibor Nikolic, Zarko Milosevic, Milica Nikolic, Antonis, Sakellarios, Themis Exarchos and Oberdan Parodi, Computational Modeling for Plaque Progression in the Coronary Artery, Stent Deployment Modeling Using Contact

- Algorithm, 2018 IEEE International Conference on Biomedical and Health Informatics, Las Vegas, NV, USA, March 4-7, 2018
42. Velibor Isailovic, Dalibor Nikolic, Igor Saveljic, Antonis Sakellarios, Themis Exarchos, Nenad Filipovic, Stent Deployment Modeling Using Contact Algorithm, 2018 IEEE International Conference on Biomedical and Health Informatics, Las Vegas, NV, USA, March 4-7, 2018
43. Igor Saveljic, Dalibor Nikolic, Zarko Milosevic, Milica Nikolic, Antonis Sakellarios, Themis Exarchos and Nenad Filipovic, Numerical simulation of blood flow and plaque progression in the right coronary artery, 2018 IEEE International Conference on Biomedical and Health Informatics, Las Vegas, NV, USA, March 4-7, 2018
44. Aleksandar Milovanović, Igor Saveljić, Nenad Filipović, Slobodan Savić, 3D reconstruction and numerical calculation of fractional flow reserve in atherosclerotic coronary arteries, 7th international congress of Serbian Society of Mechanics 24-26 June 2019, Sremski Karlovci, Serbia
45. Igor Saveljić, Dalibor Nikolić, Tijana Djukić, Nenad Filipović, Numerical model of the bio molecular parameters transfer through the coronary artery wall, 7th international congress of Serbian Society of Mechanics 24-26 June 2019, Sremski Karlovci, Serbia
46. Dalibor Nikolić, Igor Saveljić, Nenad Filipović, Combining numerical methods and parametric optimization of stent design, 7th international congress of Serbian Society of Mechanics 24-26 June 2019, Sremski Karlovci, Serbia
47. Smiljana M. Djorović, Igor B. Saveljić, Nenad D. Filipović, Computational modelling of carotid artery and simulation of plaque progression, 7th international congress of Serbian Society of Mechanics 24-26 June 2019, Sremski Karlovci, Serbia

Списак резултата М34

Саопштење са међународног скупа штампано у изводу

Број

Списак резултата М41

Истакнута монографија националног значаја

Број

Списак резултата M42 Монографија националног значаја	Број
Списак резултата M43 Монографска библиографска публикација или монографска студија	Број
Списак резултата M44 Поглавље у књизи M41 или рад у истакнутом тематском зборнику водећег националног значаја	Број
Списак резултата M45 Поглавље у књизи M42 или рад у тематском зборнику националног значаја	Број
Списак резултата M51 Рад у врхунском часопису националног значаја	Број
Списак резултата M52 Истакнути национални часопис	6
1. I.Saveljic, M.Milosevic, Upravljanje nelinearnih procesa putem modifikovanog PID zakona upravljanja, Tehnika - Masinstvo, 2008, vol. 57, br. 2, str. 7- 13. ISSN: 0461-2531. 2. N. Filipovic, M.Rosic, V. Isailovic, Z. Milosevic, D. Nikolic, D. Milasinovic, M. Radovic, B. Stojanovic, M. Ivanovic, I. Tanaskovic, I. Saveljic, M. Milosevic, D. Petrovic, M. Obradovic, E. Themis, A. Sakellarios, P. Siogkas, P. Marraccini, F. Vozzi, N. Meunier, Z. Teng, D. Fotiadis, O. Parodi, M. Kojic: ARTREAT project: computer, experimental and clinical analysis of threedimensional plaque formation and progression in arteries; Journal of the Serbian Society for Computational Mechanics, Vol. 5 No. 2, 129-146, UDC: 616.13-004:004.925.84., ISSN 1820-6530, COBISS.SR-ID 145567756, 2011.	

3. N. Filipovic, M. Radovic, V. Isailovic, Z. Milosevic, D. Nikolic, I. Saveljic, M. Milosevic, D. Petrovic, M. Obradovic, D. Krsmanovic, E. Themis, A. Sakellarios, P. Siogkas, P. Marraccini, F. Vozzi, N. Meunier, Z. Teng, D. Fotiadis, O. Parodi, M. Kojic, Plaque formation and stent deployment with heating thermal effects in arteries, Journal of the Serbian Society for Computational Mechanics, Vol. 6, No. 1, pp 11-28, 2012.
4. Z. Milosevic, M. Radovic, Z. Teng, J. Bird, M. Obradovic, I. Saveljic, S. Savic, N. Filipovic, Plaque Progression Modeling by Using Hemodynamic Simulation and Histological Data, 2012, Journal of the Serbian Society for Computational Mechanics, Vol. 6, No. 2, pp. 122-132, 2012.
5. M. Nikolic, V. Isailovic, D. Nikolic, I. Saveljic, Z. Milosevic, M. Radovic, S. Semmelbauer, F. Bohnke and N. Filipovic, Mechanical and electro-mechanical box cochlea model, Journal of the Serbian Society for Computational Mechanics, Vol. 8 No. 2, UDC: 532.542:519.71, 2014.
6. D. Bubanja, A. Djukic, A. Jurisic-Skevin, V. Grbovic, I. Saveljic, T. Exarchos and N. Filipovic, Static and dynamic measurement and computer simulation of diabetic mellitus foot biomechanics, Journal of the Serbian Society for Computational Mechanics, Vol. 8 No. 2, UDC: 617.586:612.76, 2014

Списак резултата M53 Национални часопис	Број
Списак резултата M54 Домаћи новопокренути научни часопис	
Списак резултата M60 Предавања по позиву на скуповима националног значаја- обавезно навести категорију	Број
Списак резултата M80 Техничка решења – обавезно навести категорију	Број
Списак резултата M90	Број

УЧЕШЋЕ НА ПРОЈЕКТИМА РЕСОРНОГ МИНИСТАРСТВА

1. ON-174028: Multiscale Methods and Their Application in Nanomedicine, financed by Ministry of Science and Technology of Republic of Serbia, 2011-2014. Principal investigator - prof. dr Miloš Kojić

УЧЕШЋЕ НА МЕЂУНАРОДНИМ ПРОЈЕКТИМА

1. FP7- ICT IP-224297-ARTreat (09/01/08-08/31/11), Multi-level patient-specific artery and atherogenesis model for outcome prediction, decision support treatment, and virtual hand-on training.
2. SIFEM, Semantic Infostructure interlinking an open source Finite Element tool and libraries with a model repository for the multi-scale Modeling and 3d visualization of the inner-ear, 01.02.2013 – 31.01.2016. <http://www.sifem-project.eu/7>
3. EMBalance, A Decision Support System incorporating a validated patient-specific, multi scale Balance Hypermodel towards early diagnostic Evaluation and efficient Management plan formulation of Balance Disorders, FP7-ICT-2013-5-2-610454, Bioengineering research and development center BIOIRC, Kragujevac, Serbia 2013 – 2016
4. SMARTool: Simulation Modeling of coronary ARtery disease: a tool for clinical decision support, (01/01/16-30/06/19), H2020-PHC-2015-single-stage. Role: Researcher

УЧЕШЋЕ НА ПРОЈЕКТИМА СА ПРИВРЕДОМ

КРАТАК ОПИС ИСТРЖИВАЊА У ПРЕТХОДНОМ ПЕРИОДУ (задње четири године)

Развој тродимензионалних модела за решавање бројних проблема струјања крви кроз мале и велике крвне судове као и развој софтвера у биомедицинске сврхе.

КРАТАК ОПИС ПЛАНИРАНИХ ИСТРАЖИВАЊА У НАРЕДНОМ ПЕРИОДУ

Даљи развој софтвера за нумеричко решавања струјања крви кроз крвне судове и истраживачки рад у области биоинжењеринга.