



Hanieh Niroomand-Oscuii

Professor

College: Faculty of Biomedical Engineering

Papers in Conferences

1. Investigating the Effect of the Cooling Cycle on the Death of Fat Cells in the Process of Cryolipolysis. ICBME 2023, 2023, تهران.
2. Numerical Simulation for Heat Transfer in Prostate Cancer Cryosurgery. ICBME 2023, 2023, تهران.
3. Simulation of Human Fetal Right Ventricular Contraction by Fluid-Structure Interaction Method. ICBME 2023, 2023, تهران.

Papers in Journals

1. Study of Leaflet Radial Curve Effect on Polymeric Valve Performance By Finite Element Method. Iranian Journal of Biomedical Engineering, 2022/4/10.
2. Reza Sahebi Kuzeh Kanan, Hanieh Niroomand , Oscuii, Kohyar Yazdanpanah , Ardakani. Design and simulation of the right ventricular mini assist centrifugal pump. Iranian Journal of Biomedical Engineering, 2019/12/22.
3. Gholamreza Mohammadi Khounsaraki, Mehdi Movahedi, Hanieh Niroomand Oscuii & Arkady Voloshin, Analysis of the Adherent Cell Response to the Substrate Stiffness Using Tensegrity, Annals of Biomedical Engineering, 2024/01/01.
4. Mohammad Salar Ghasemi Nasab , Hanieh Niroomand Oscuii , Hossein Bazmara , Majid Soltani, Multi-scale model of lumen formation via inverse membrane blebbing mechanism during sprouting angiogenesis process, Journal of Theoretical Biology, Journal of Theoretical Biology, 2023 10 1.
5. Nima Sarrafzadeh , Ghadimi, Farzan Ghalichi, Hanieh Niroomand , Oscuii, Nasser Fatouraee, Design of an aortic polymeric valve with asymmetric leaflets and evaluation of its performance by finite element method, Computers in Biology and Medicine, Vol. 145, 2022/6/1.
6. Mohammad Salar Ghasemi Nasab, Hanieh Niroomand ,& Oscuii, Hossein Bazmara, Majid Soltani, Morphogenetic Mechanisms of Endothelial Cells During Lumen Formation in Sprouting Angiogenesis 2022/4/10, نویسندهگان, نشریه بین المللی چند تخصصی سرطان.
7. Shila Alizadehghobadi, Hasan Biglari, Hanieh Niroomand ,& Oscuii, Meisam H Matin, Numerical study of hemodynamics in a complete coronary bypass with venous and arterial grafts and different degrees of stenosis, Computer Methods in Biomechanics and Biomedical Engineering, 2021/6/11.
8. Kohyar Yazdanpanh , Ardakani, Hanieh Niroomand , Oscuii, COMPUTATIONAL STUDY ON THE PERFORMANCE OF A CENTRIFUGAL LVAD WITH THE IMPELLER DESIGNED BY INDUSTRIAL METHOD: PROPOSING SIMPLE-TO-MANUFACTURE LVAD'S IMPELLERS, Journal of Mechanics in Medicine and Biology, 2021/3/18.

9. Reduction of Oxygen Saturation and Increase of Heart Rate in Hospital Workers Wearing Face Mask during Routine, *Journal of Research in Applied and Basic Medical Sciences*, 2021/3/10.
10. Ehsan Alizad Farokhi, Hanieh Niroomand ,& Oscuii, Kohyar Yazdanpanah, Investigation the effect of geometry and position of polymeric heart valves on hemodynamic with fluid-structure interaction numerical method, *Medical Engineering & Physics*, 2021/11/1.
11. Navid Moshtaghi , Kashanian, Hanieh Niroomand , Oscuii, Nargess Meghdadi, Simulating glioblastoma growth consisting both visible and invisible parts of the tumor using a diffusion–reaction model followed by resection and radiotherapy, *Acta Neurologica Belgica*, 2020/6.
12. Pejman Shojaee, Hanieh Niroomand ,& Oscuii, Mostafa Sefidgar, Lida Alinezhad, Effect of nanoparticle size, magnetic intensity, and tumor distance on the distribution of the magnetic nanoparticles in a heterogeneous tumor microenvironment, *Journal of Magnetism and Magnetic Materials*, 2020/3/15.
13. Seyed Hamidreza Attaran, Hanieh Niroomand ,& Oscuii, Farzan Ghalichi, Local hemodynamic analysis of the C-Pulse Device by 3D fluid-structure interaction simulation, *Future Cardiology*, 2020/2.
14. Nargess Meghdadi, M Soltani, Hanieh Niroomand ,& Oscuii, Nooshin Yamani, Personalized image-based tumor growth prediction in a convection–diffusion–reaction model, *Acta Neurologica Belgica*, 2020/2.
15. Gholamreza Mohammadi Khunsaraki, Hanieh Niroomand Oscuii, Arkady Voloshin, Study of the Mechanical Behavior of Subcellular Organelles Using a 3D Finite Element Model of the Tensegrity Structure, *Applied Sciences*, 2020/12/29.
16. Seyed Hamidreza Attaran, Hanieh Niroomand ,& Oscuii, Reflection behaviour of the porous tube boundary condition for FSI simulations of the truncated vascular network, *Progress in Computational Fluid Dynamics, an International Journal*, 2020.
17. Pejman Shojaee, Hanieh Niroomand ,& Oscuii, A comparative study of drug transport between the homogeneous and vasculature solid tumor, *Journal of Porous Media*, 2020.
18. Pejman Shojaee, Hanieh Niroomand ,& Oscuii, CFD analysis of drug uptake and elimination through vascularized cancerous tissue, *Biomedical Physics & Engineering Express*, 2019/4/17.
19. Nahid Jafarzadeh, Hanieh Niroomand Oscuii, Biomedical Physics & Engineering Express Institute of Physics and Engineering in Medicine PAPER Numerical simulation of mucous layer formation effects on oxygen transfer phenomena from the respiratory membrane in pulmonary diseases, *Biomedical Physics & Engineering Express*, 2019/10/3.
20. Behrouz Jafarzadeh, Hanieh Niroomand ,& Oscuii, Farzan Ghalichi, Design and onstruction of Mock Blood Circulatory System with Capability to Simulate Physiological Pulsatile Flow and Pressure in Aorta, *Iranian Journal of Biomedical Engineering*, 2019/1/1.
21. Seyed Hamidreza Attaran, Hanieh Niroomand ,& Oscuii, Farzan Ghalichi, A novel, simple 3D/2D outflow boundary model for blood flow simulations in compliant arteries, *Computers & Fluids*, 2018/9/30.