Unsteady magnetohydrodynamic blood flow through irregular multi-stenosed arteries

DOI: 10.1016/j.compbiomed.2009.07.004
Computers in Biology and Medicine, 2009, 39, 896-906.

#	Paper	IF	Citations
52	UNSTEADY RESPONSE OF BLOOD FLOW THROUGH A COUPLE OF IRREGULAR ARTERIAL CONSTRICTIONS TO BODY ACCELERATION. *Journal of Mechanics in Medicine and Biology*, **2008**, 08, 395-420	0.7	15
51	Magnetohydrodynamic biorheological transport phenomena in a porous medium: A simulation of magnetic blood flow control and filtration. *International Journal for Numerical Methods in Biomedical Engineering*, **2011**, 27, 805-821	2.6	60
50	FINITE ELEMENT STUDY OF TRANSIENT PULSATILE MAGNETO-HEMODYNAMIC NON-NEWTONIAN FLOW AND DRUG DIFFUSION IN A POROUS MEDIUM CHANNEL. *Journal of Mechanics in Medicine and Biology*, **2012**, 12, 1250081	0.7	27
49	Numerical study of flow and heat transfer during oscillatory blood flow in diseased arteries in presence of magnetic fields. *Applied Mathematics and Mechanics (English Edition)*, **2012**, 33, 649-662	3.2	16
48	Numerical simulation of Dean number and curvature effects on magneto-biofluid flow through a curved conduit. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2013**, 227, 1155-70	1.7	26
47	Modulation of the shape and speed of a chemical wave in an unstirred Belousov-Zhabotinsky reaction by a rotating magnet. *Bioelectromagnetics*, **2013**, 34, 220-30	1.6	3
46	Numerical Modeling of Blood Flow in Irregular Stenosed Artery with the Effects of Gravity. *Jurnal Teknologi (Sciences and Engineering)*, **2013**, 62,	1.2	2
45	Pulsatile Non-Newtonian Laminar Blood Flows through Arterial Double Stenoses. *Journal of Fluids*, **2014**, 2014, 1-13		19
44	Parametric Analysis of Entropy Generation in Magneto-Hemodynamic Flow in a Semi-Porous Channel with OHAM and DTM. *Applied Bionics and Biomechanics*, **2014**, 11, 47-60	1.6	16
43	SPECTRAL NUMERICAL SIMULATION OF MAGNETO-PHYSIOLOGICAL LAMINAR DEAN FLOW. *Journal of Mechanics in Medicine and Biology*, **2014**, 14, 1450047	0.7	12
42	Blood flow through a stenosed artery bifurcation under the effects of gravity. **2014**,		3
41	Finite element analysis of magnetohydrodynamic effects on blood flow in an aneurysmal geometry. *Physics of Fluids*, **2014**, 26, 101901	4.4	7
40	Unsteady blood flow through severe stenosis in an artery under the effects of gravitational forces. **2015**,		1
39	Effects of magnetic field and Hall current to the blood velocity and LDL transfer. *Journal of Physics: Conference Series*, **2015**, 633, 012133	0.3	0
38	Modeling of Blood Flow in a Constricted Porous Vessel Under Magnetic Environment: An Analytical Approach. *International Journal of Applied and Computational Mathematics*, **2015**, 1, 219-234	1.3	2
37	Mathematical modeling of micropolar fluid flow through an overlapping arterial stenosis. *International Journal of Biomathematics*, **2015**, 08, 1550056	1.8	19
36	Mathematical modeling of unsteady blood flow through elastic tapered artery with overlapping stenosis. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2015**, 37, 571-578	2	19

35	Numerical and Analytical Study of Two-Layered Unsteady Blood Flow through Catheterized Artery. *PLoS ONE*, **2016**, 11, e0161377	3.7	8
34	Transient electro-magneto-hydrodynamic two-phase blood flow and thermal transport through a capillary vessel. *Computer Methods and Programs in Biomedicine*, **2016**, 137, 149-166	6.9	22
33	Numerical simulation of unsteady micropolar hemodynamics in a tapered catheterized artery with a combination of stenosis and aneurysm. *Medical and Biological Engineering and Computing*, **2016**, 54, 1423-36	3.1	25
32	Effect of non-uniform magnetic field on biomagnetic fluid flow in a 3D channel. *Applied Mathematical Modelling*, **2016**, 40, 7336-7348	4.5	16
31	MAGNETOHYDRODYNAMIC EFFECTS ON THE GRANULAR TEMPERATURE OF RED BLOOD CELLS IN MICROVASCULATURE. *Journal of Mechanics in Medicine and Biology*, **2017**, 17, 1750003	0.7	
30	Applications of magnetohydrodynamics in biological systems-a review on the numerical studies. *Journal of Magnetism and Magnetic Materials*, **2017**, 439, 358-372	2.8	72
29	Magnetohydrodynamic approach of non-Newtonian blood flow with magnetic particles in stenosed artery. *Applied Mathematics and Mechanics (English Edition)*, **2017**, 38, 379-392	3.2	21
28	Computational model on pulsatile flow of blood through a tapered arterial stenosis with radially variable viscosity and magnetic field. *Sadhana - Academy Proceedings in Engineering Sciences*, **2017**, 42, 1901-1913	1	12
27	Unsteady MHD blood flow through porous medium in a parallel plate channel. *IOP Conference Series: Materials Science and Engineering*, **2017**, 263, 062020	0.4	
26	Effect of magnetic field on haemodynamic perturbations in atherosclerotic coronary arteries. *Journal of Medical Engineering and Technology*, **2018**, 42, 148-156	1.8	2
25	Effects of nanoparticles (Cu (Copper), Silver (Ag)) and slip on unsteady blood flow through a curved stenosed channel with aneurysm. *Thermal Science and Engineering Progress*, **2018**, 5, 482-491	3.6	16
24	Numerical study of magnetohydrodynamic pulsatile flow of Sutterby fluid through an inclined overlapping arterial stenosis in the presence of periodic body acceleration. *Results in Physics*, **2018**, 9, 753-762	3.7	14
23	Numerical investigation on two-fluid model (micropolar-Newtonian) for pulsatile flow of blood in a tapered arterial stenosis with radially variable magnetic field and core fluid viscosity. *Computational and Applied Mathematics*, **2018**, 37, 719-743		13
22	A computational study of biomagnetic fluid flow in a channel in the presence of obstacles under the influence of the magnetic field generated by a wire carrying electric current. *European Journal of Computational Mechanics*, **2018**, 27, 302-321	0.5	3
21	Magnetohydrodynamic blood flow in patients with coronary artery disease. *Computer Methods and Programs in Biomedicine*, **2018**, 163, 111-122	6.9	15
20	FDM analysis on pulsatile two-phase MHD rheology of blood in tapered stenotic blood vessels. *Journal of Physics: Conference Series*, **2019**, 1170, 012002	0.3	
19	Analysis of Entropy Generation Due to MHD Natural Convective Flow in an Inclined Channel in the Presence of Magnetic Field and Heat Source Effects. *BioNanoScience*, **2019**, 9, 660-671	3.4	2
18	Exploring magnetohydrodynamic voltage distributions in the human body: Preliminary results. *PLoS ONE*, **2019**, 14, e0213235	3.7	1

17	MHD micropolar blood flow model through a multiple stenosed artery. **2019**,		
16	Effects of nanoparticles (Cu, TiO2, Al2O3) on unsteady blood flow through a curved overlapping stenosed channel. *Mathematics and Computers in Simulation*, **2019**, 156, 279-293	3.3	12
15	Adomian decomposition solution for propulsion of dissipative magnetic Jeffrey biofluid in a ciliated channel containing a porous medium with forced convection heat transfer. *Heat Transfer - Asian Research*, **2019**, 48, 556-581	2.8	17
14	Numerical study of biomagnetic fluid flow in a duct with a constriction affected by a magnetic field. *Journal of Magnetism and Magnetic Materials*, **2019**, 473, 42-50	2.8	23
13	Influence of Distal Stenosis on Blood Flow Through Coronary Serial Stenoses: A Numerical Study. *International Journal of Computational Methods*, **2019**, 16, 1842003	1.1	4
12	An implicit approach to the micropolar fluid model of blood flow under the effect of body acceleration. *Mathematical Sciences*, **2020**, 14, 269-277	1.6	5
11	Numerical Study of Magnetohydrodynamic Blood Flow through an Artery with Multiple Stenosis. *IOP Conference Series: Materials Science and Engineering*, **2020**, 864, 012199	0.4	
10	Particle-fluid two phase modeling of electro-magneto hydrodynamic pulsatile flow of Jeffrey fluid in a constricted tube under periodic body acceleration. *European Journal of Mechanics, B/Fluids*, **2020**, 81, 76-92	2.4	9
9	Numerical investigation of thermally developed MHD flow with pulsation in a channel with multiple constrictions. *AIP Advances*, **2021**, 11, 055320	1.5	3
8	Investigation of the plaque morphology effect on changes of pulsatile blood flow in a stenosed curved artery induced by an external magnetic field. *Computers in Biology and Medicine*, **2021**, 135, 104600	7	2
7	Spatio-temporal evolution of magnetohydrodynamic blood flow and heat dynamics through a porous medium in a wavy-walled artery. *Computers in Biology and Medicine*, **2021**, 135, 104595	7	1
6	Effect of magnetic field in power-law fluid with mass transfer. **2017**,		1
5	Computational simulation of rheological blood flow containing hybrid nanoparticles in an inclined catheterized artery with stenotic, aneurysmal and slip effects. *Computers in Biology and Medicine*, **2021**, 139, 105009	7	2
4	Simulation of blood flow coronary artery with consecutive stenosis and coronary-coronary bypass. *BioImpacts*, **2011**, 1, 99-104	3.5	3
3	Pulsatile flow of blood with shear-dependent viscosity through a flexible stenosed artery in the presence of body acceleration. **2022**, 34, 17-33		
2	Numerical study of magnetic field interaction with fully developed flow in a vertical duct. *AEJ - Alexandria Engineering Journal*, **2022**, 61, 11351-11363	6.1	4
1	Chemical reaction and viscous dissipation effect on MHD oscillatory blood flow in tapered asymmetric channel. **2022**, 9, 999-1010		0