Morton H Friedman

List of Publications by Year
in descending order

61 papers	2,625 citations	218381 26 h-index	182168 51 g-index
61 all docs	61 docs citations	61 times ranked	2197 citing authors

#	Article	IF	Citations
1	Spatial comparison between wall shear stress measures and porcine arterial endothelial permeability. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H1916-H1922.	1.5	394
2	Correlation between intimal thickness and fluid shear in human arteries. Atherosclerosis, 1981, 39, 425-436.	0.4	333
3	Effects of Cardiac Motion on Right Coronary Artery Hemodynamics. Annals of Biomedical Engineering, 2003, 31, 420-429.	1.3	160
4	Shear-Dependent Thickening of the Human Arterial Intima. Atherosclerosis, 1986, 60, 161-171.	0.4	154
5	Influence of curvature dynamics on pulsatile coronary artery flow in a realistic bifurcation model. Journal of Biomechanics, 2004, 37, 1767-1775.	0.9	126
6	Frequency-dependent response of the vascular endothelium to pulsatile shear stress. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H645-H653.	1.5	112
7	Relation between coronary artery geometry and the distribution of early sudanophilic lesions. Atherosclerosis, 1993, 98, 193-199.	0.4	74
8	Relationship between the geometry and quantitative morphology of the left anterior descending coronary artery. Atherosclerosis, 1996, 125, 183-192.	0.4	68
9	Dynamics of Human Coronary Arterial Motion and Its Potential Role in Coronary Atherogenesis. Journal of Biomechanical Engineering, 2000, 122, 488-492.	0.6	61
10	Arteriosclerosis Research Using Vascular Flow Models: From 2-D Branches to Compliant Replicas. Journal of Biomechanical Engineering, 1993, 115, 595-601.	0.6	60
11	Coronary Artery Dynamics In Vivo. Annals of Biomedical Engineering, 2002, 30, 419-429.	1.3	56
12	Individual and combined effects of shear stress magnitude and spatial gradient on endothelial cell gene expression. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2853-H2859.	1.5	55
13	Adaptive response of vascular endothelial cells to an acute increase in shear stress magnitude. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H983-H991.	1.5	51
14	Environment and vascular bed origin influence differences in endothelial transcriptional profiles of coronary and iliac arteries. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H837-H846.	1.5	50
15	Relationship Between the Dynamic Geometry and Wall Thickness of a Human Coronary Artery. Arteriosclerosis, Thrombosis, and Vascular Biology, 2003, 23, 2260-2265.	1.1	47
16	In vivo differences between endothelial transcriptional profiles of coronary and iliac arteries revealed by microarray analysis. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H1556-H1561.	1.5	43
17	Quantification of 3-D coronary arterial motion using clinical biplane cineangiograms. International Journal of Cardiovascular Imaging, 2000, 16, 331-346.	0.2	42
18	Cataloguing the geometry of the human coronary arteries: A potential tool for predicting risk of coronary artery disease. International Journal of Cardiology, 2009, 135, 43-52.	0.8	42

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19	Dynamics of coronary artery curvature obtained from biplane cineangiograms. Journal of Biomechanics, 1998, 31, 479-484.	0.9	41
20	Influence of the Geometry of the Left Main Coronary Artery Bifurcation on the Distribution of Sudanophilia in the Daughter Vessels. Arteriosclerosis, Thrombosis, and Vascular Biology, 1997, 17, 1356-1360.	1.1	40
21	Interaction of Wall Shear Stress Magnitude and Gradient in the Prediction of Arterial Macromolecular Permeability. Annals of Biomedical Engineering, 2005, 33, 457-464.	1.3	39
22	Numerical simulation of aortic bifurcation flows: The effect of flow divider curvature. Journal of Biomechanics, 1984, 17, 881-888.	0.9	36
23	Estimation of the Transverse Strain Tensor in the Arterial Wall Using IVUS Image Registration. Ultrasound in Medicine and Biology, 2008, 34, 1832-1845.	0.7	35
24	Correlation Among Shear Rate Measures in Vascular Flows. Journal of Biomechanical Engineering, 1987, 109, 25-26.	0.6	34
25	Correspondence of Low Mean Shear and High Harmonic Content in the Porcine Iliac Arteries. Journal of Biomechanical Engineering, 2006, 128, 852-856.	0.6	32
26	Blood Flow in Major Blood Vesselsâ€"Modeling and Experiments. Annals of Biomedical Engineering, 2005, 33, 1710-1713.	1.3	29
27	Comparison of coronary artery dynamics pre- and post-stenting. Journal of Biomechanics, 2003, 36, 689-697.	0.9	27
28	Measurement of the geometric parameters of the aortic bifurcation from magnetic resonance images. Annals of Biomedical Engineering, 1994, 22, 229-239.	1.3	26
29	Relationship between hemodynamics and atherosclerosis in aortic arches of apolipoprotein E-null mice on 129S6/SvEvTac and C57BL/6J genetic backgrounds. Atherosclerosis, 2012, 220, 78-85.	0.4	26
30	Differences in Aortic Arch Geometry, Hemodynamics, and Plaque Patterns Between C57BL/6 and 129/SvEv Mice. Journal of Biomechanical Engineering, 2009, 131, 121005.	0.6	25
31	Flow Interactions with Cells and Tissues: Cardiovascular Flows and Fluidâ€"Structure Interactions. Annals of Biomedical Engineering, 2010, 38, 1178-1187.	1.3	25
32	Relation between the structural asymmetry of coronary branch vessels and the angle at their origin. Journal of Biomechanics, 1997, 31, 273-278.	0.9	22
33	Some atherosclerosis may be a consequence of the normal adaptive vascular response to shear. Atherosclerosis, 1990, 82, 193-196.	0.4	20
34	Hemodynamics and the Arterial Wall. Journal of Biomechanical Engineering, 1992, 114, 273-273.	0.6	20
35	Use of Factor Analysis to Characterize Arterial Geometry and Predict Hemodynamic Risk: Application to the Human Carotid Bifurcation. Journal of Biomechanical Engineering, 2010, 132, 114505.	0.6	20
36	Adaptive response of vascular endothelial cells to an acute increase in shear stress frequency. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H894-H902.	1.5	20

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37	The Effect of Pulsatile Frequency on Wall Shear in a Compliant Cast of a Human Aortic Bifurcation. Journal of Biomechanical Engineering, 1995, 117, 219-223.	0.6	19
38	Measurement of the transverse strain tensor in the coronary arterial wall from clinical intravascular ultrasound images. Journal of Biomechanics, 2008, 41, 2906-2911.	0.9	19
39	Integrative biomechanics: A paradigm for clinical applications of fundamental mechanics. Journal of Biomechanics, 2009, 42, 1444-1451.	0.9	18
40	Variability of the planarity of the human aortic bifurcation. Medical Engineering and Physics, 1998, 20, 469-472.	0.8	16
41	Particle paths and stasis in unsteady flow through a bifurcation. Journal of Biomechanics, 1977, 10, 561-568.	0.9	15
42	Measurement of the 3D arterial wall strain tensor using intravascular B-mode ultrasound images: a feasibility study. Physics in Medicine and Biology, 2010, 55, 6377-6394.	1.6	13
43	The correspondence between coronary arterial wall strain and histology in a porcine model of atherosclerosis. Physics in Medicine and Biology, 2009, 54, 5625-5641.	1.6	12
44	Effect of hypercholesterolemia on transendothelial EBDâ€“albumin permeability and lipid accumulation in porcine iliac arteries. Atherosclerosis, 2006, 184, 255-263.	0.4	11
45	Distinct profiles of endothelial gene expression in hyperpermeable regions of the porcine aortic arch and thoracic aorta. Atherosclerosis, 2007, 195, e35-e41.	0.4	11
46	Variability of 3D arterial geometry and dynamics, and its pathologic implications. Biorheology, 2002, 39, 513-7.	1.2	10
47	Steady Convective Diffusion in a Bifurcation. IEEE Transactions on Biomedical Engineering, 1977, BME-24, 12-18.	2.5	8
48	Endothelial Gene Expression in Regions of Defined Shear Exposure in the Porcine Iliac Arteries. Annals of Biomedical Engineering, 2010, 38, 2252-2262.	1.3	8
49	Statistical Hemodynamics: A Tool for Evaluating the Effect of Fluid Dynamic Forces on Vascular Biology In Vivo. Journal of Biomechanical Engineering, 2006, 128, 965-968.	0.6	6
50	Computational aspects of aortic bifurcation flows. Computers and Fluids, 1985, 13, 177-183.	1.3	5
51	Approximate closed solutions for detonation parameters in condensed explosives.. AIAA Journal, 1966, 4, 1182-1187.	1.5	3
52	Estimation of Arterial Wall Strain Based on IVUS Image Registration. , 2006, 2006, 3218-21.		3
53	How Hemodynamic Forces in the Human Affect the Topography and Development of Atherosclerosis. , 1990, , 303-315.		1
54	Estimation of Arterial Wall Strain Based on IVUS Image Registration. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1

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55	Shear Stress in Atherogenesis. , 1989, , 197-201.		1
56	Editorial: Biomechanical Approaches to Atherosclerosis. Annals of Biomedical Engineering, 2002, 30, 417-418.	1.3	0
57	ESTIMATION OF CORONARY ARTERIAL WALL STRAIN IN CLINICAL IVUS IMAGES. , 2007, , .		0
58	Computerized image analysis as a tool to investigate the relationship between endothelial morphology and permeability. , 2009, , .		0
59	Microscope-based near-infrared stereo-imaging system for quantifying the motion of the murine epicardial coronary arteriesin vivo. Journal of Biomedical Optics, 2013, 18, 096013.	1.4	0
60	Discussion: â€œComparison of Statistical Methods for Assessing Spatial Correlations Between Maps of Different Arterial Propertiesâ€•(Rowland, E. M., Mohamied, Y., Chooi, K. Y., Bailey, E. L., and Weinberg, P.) Tj ETQq0 0 0 rgBT /Overlock 10 Local Hemodynamics. Journal of Biomechanical Engineering, 2016, 138, .	0.6	0
61	Characterizing 3-D Geometry of Mouse Aortic Arch Using Light Stereo-Microscopic Imaging. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0