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	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 ETQq1 1 0.784314 rgBT /Ov Local Hemodynamics. Journal of Biomechanical Engineering, 2016, 138, .	0.6	0
2	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
3	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
4	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
5	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
6	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
7	Flow Interactions with Cells and Tissues: Cardiovascular Flows and Fluidâ€"Structure Interactions. Annals of Biomedical Engineering, 2010, 38, 1178-1187.	1.3	25
8	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
9	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
10	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
11	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
12	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
13	Integrative biomechanics: A paradigm for clinical applications of fundamental mechanics. Journal of Biomechanics, 2009, 42, 1444-1451.	0.9	18
14	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
15	Computerized image analysis as a tool to investigate the relationship between endothelial morphology and permeability. , 2009, , .		0
16	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
17	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
18	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

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19	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
20	ESTIMATION OF CORONARY ARTERIAL WALL STRAIN IN CLINICAL IVUS IMAGES. , 2007, , .		0
21	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
22	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
23	Effect of hypercholesterolemia on transendothelial EBDâ€“albumin permeability and lipid accumulation in porcine iliac arteries. Atherosclerosis, 2006, 184, 255-263.	0.4	11
24	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
25	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
26	Estimation of Arterial Wall Strain Based on IVUS Image Registration. , 2006, 2006, 3218-21.		3
27	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
28	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
29	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
30	Blood Flow in Major Blood Vesselsâ€"Modeling and Experiments. Annals of Biomedical Engineering, 2005, 33, 1710-1713.	1.3	29
31	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
32	Influence of curvature dynamics on pulsatile coronary artery flow in a realistic bifurcation model. Journal of Biomechanics, 2004, 37, 1767-1775.	0.9	126
33	Effects of Cardiac Motion on Right Coronary Artery Hemodynamics. Annals of Biomedical Engineering, 2003, 31, 420-429.	1.3	160
34	Comparison of coronary artery dynamics pre- and post-stenting. Journal of Biomechanics, 2003, 36, 689-697.	0.9	27
35	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
36	Coronary Artery Dynamics In Vivo. Annals of Biomedical Engineering, 2002, 30, 419-429.	1.3	56

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37	Editorial: Biomechanical Approaches to Atherosclerosis. Annals of Biomedical Engineering, 2002, 30, 417-418.	1.3	0
38	Variability of 3D arterial geometry and dynamics, and its pathologic implications. Biorheology, 2002, 39, 513-7.	1.2	10
39	Dynamics of Human Coronary Arterial Motion and Its Potential Role in Coronary Atherogenesis. Journal of Biomechanical Engineering, 2000, 122, 488-492.	0.6	61
40	Quantification of 3-D coronary arterial motion using clinical biplane cineangiograms. International Journal of Cardiovascular Imaging, 2000, 16, 331-346.	0.2	42
41	Dynamics of coronary artery curvature obtained from biplane cineangiograms. Journal of Biomechanics, 1998, 31, 479-484.	0.9	41
42	Variability of the planarity of the human aortic bifurcation. Medical Engineering and Physics, 1998, 20, 469-472.	0.8	16
43	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
44	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
45	Relationship between the geometry and quantitative morphology of the left anterior descending coronary artery. Atherosclerosis, 1996, 125, 183-192.	0.4	68
46	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
47	Measurement of the geometric parameters of the aortic bifurcation from magnetic resonance images. Annals of Biomedical Engineering, 1994, 22, 229-239.	1.3	26
48	Relation between coronary artery geometry and the distribution of early sudanophilic lesions. Atherosclerosis, 1993, 98, 193-199.	0.4	74
49	Arteriosclerosis Research Using Vascular Flow Models: From 2-D Branches to Compliant Replicas. Journal of Biomechanical Engineering, 1993, 115, 595-601.	0.6	60
50	Hemodynamics and the Arterial Wall. Journal of Biomechanical Engineering, 1992, 114, 273-273.	0.6	20
51	Some atherosclerosis may be a consequence of the normal adaptive vascular response to shear. Atherosclerosis, 1990, 82, 193-196.	0.4	20
52	How Hemodynamic Forces in the Human Affect the Topography and Development of Atherosclerosis. , 1990, , 303-315.		1
53	Shear Stress in Atherogenesis. , 1989, , 197-201.		1
54	Correlation Among Shear Rate Measures in Vascular Flows. Journal of Biomechanical Engineering, 1987, 109, 25-26.	0.6	34

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55	Shear-Dependent Thickening of the Human Arterial Intima. Atherosclerosis, 1986, 60, 161-171.	0.4	154
56	Computational aspects of aortic bifurcation flows. Computers and Fluids, 1985, 13, 177-183.	1.3	5
57	Numerical simulation of aortic bifurcation flows: The effect of flow divider curvature. Journal of Biomechanics, 1984, 17, 881-888.	0.9	36
58	Correlation between intimal thickness and fluid shear in human arteries. Atherosclerosis, 1981, 39, 425-436.	0.4	333
59	Particle paths and stasis in unsteady flow through a bifurcation. Journal of Biomechanics, 1977, 10, 561-568.	0.9	15
60	Steady Convective Diffusion in a Bifurcation. IEEE Transactions on Biomedical Engineering, 1977, BME-24, 12-18.	2.5	8
61	Approximate closed solutions for detonation parameters in condensed explosives.. AIAA Journal, 1966, 4, 1182-1187.	1.5	3