Anne M Robertson

List of Publications by Year
in descending order

69	1,868	304368	288905
papers	citations	22 h-index	40 g-index

70	70	70	2178
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prediction of bleb formation in intracranial aneurysms using machine learning models based on aneurysm hemodynamics, geometry, location, and patient population. Journal of NeuroInterventional Surgery, 2022, 14, 1002-1007.	2.0	4
2	Identification of Small, Regularly Shaped Cerebral Aneurysms Prone to Rupture. American Journal of Neuroradiology, 2022, 43, 547-553.	1.2	6
3	A constrained mixture-micturition-growth (CMMG) model of the urinary bladder: Application to partial bladder outlet obstruction (BOO). Journal of the Mechanical Behavior of Biomedical Materials, 2022, 134, 105337.	1.5	2
4	Hemodynamics in aneurysm blebs with different wall characteristics. Journal of NeuroInterventional Surgery, 2021, 13, 642-646.	2.0	19
5	Blebs in intracranial aneurysms: prevalence and general characteristics. Journal of NeuroInterventional Surgery, 2021, 13, 226-230.	2.0	16
6	Hemodynamic conditions that favor bleb formation in cerebral aneurysms. Journal of NeuroInterventional Surgery, 2021, 13, 231-236.	2.0	15
7	Effect of Macro-calcification on the Failure Mechanics of Intracranial Aneurysmal Wall Tissue. Experimental Mechanics, 2021, 61, 5-18.	1.1	5
8	Analysis of hemodynamic changes from aneurysm inception to large sizes. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3415.	1.0	4
9	Adaptive Remodeling in the Elastase-Induced Rabbit Aneurysms. Experimental Mechanics, 2021, 61, 263-283.	1.1	1
10	Regional Aneurysm Wall Enhancement is Affected by Local Hemodynamics: A 7T MRI Study. American Journal of Neuroradiology, 2021, 42, 464-470.	1.2	20
11	Purine nucleoside phosphorylase inhibition ameliorates age-associated lower urinary tract dysfunctions. JCI Insight, 2020, 5, .	2.3	23
12	Calcification in Human Intracranial Aneurysms Is Highly Prevalent and Displays Both Atherosclerotic and Nonatherosclerotic Types. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 2157-2167.	1.1	24
13	Flow-induced, inflammation-mediated arterial wall remodeling in the formation and progression of intracranial aneurysms. Neurosurgical Focus, 2019, 47, E21.	1.0	157
14	Computational modeling reveals the relationship between intrinsic failure properties and uniaxial biomechanical behavior of arterial tissue. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1791-1807.	1.4	8
15	The unexplained success of stentplasty vasospasm treatment. Clinical Neuroradiology, 2019, 29, 763-774.	1.0	9
16	Multiphoton Imaging of Collagen, Elastin, and Calcification in Intact Softâ€Tissue Samples. Current Protocols in Cytometry, 2019, 87, e51.	3.7	11
17	Local Hemodynamic Conditions Associated with Focal Changes in the Intracranial Aneurysm Wall. American Journal of Neuroradiology, 2019, 40, 510-516.	1.2	55
18	A Uniaxial Testing Approach for Consistent Failure in Vascular Tissues. Journal of Biomechanical Engineering, 2018, 140, .	0.6	21

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19	Microwave-assisted facile fabrication of porous poly (glycerol sebacate) scaffolds. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 907-916.	1.9	13
20	Layer-dependent role of collagen recruitment during loading of the rat bladder wall. Biomechanics and Modeling in Mechanobiology, 2018, 17, 403-417.	1.4	41
21	A data-driven approach for addressing the lack of flow waveform data in studies of cerebral arterial flow in older adults. Physiological Measurement, 2018, 39, 015006.	1.2	18
22	Rabbit aneurysm models mimic histologic wall types identified in human intracranial aneurysms. Journal of NeuroInterventional Surgery, 2018, 10, 411-415.	2.0	19
23	Combining data from multiple sources to study mechanisms of aneurysm disease: Tools and techniques. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e3133.	1.0	20
24	A biodegradable synthetic graft for small arteries matches the performance of autologous vein in rat carotid arteries. Biomaterials, 2018, 181, 67-80.	5.7	35
25	Quantitative multiphoton microscopy of murine urinary bladder morphology during in situ uniaxial loading. Acta Biomaterialia, 2017, 64, 59-66.	4.1	11
26	Degradation and erosion mechanisms of bioresorbable porous acellular vascular grafts: an in vitro investigation. Journal of the Royal Society Interface, 2017, 14, 20170102.	1.5	12
27	Flow Conditions in the Intracranial Aneurysm Lumen Are Associated with Inflammation and Degenerative Changes of the Aneurysm Wall. American Journal of Neuroradiology, 2017, 38, 119-126.	1.2	127
28	Regional Mapping of Flow and Wall Characteristics of Intracranial Aneurysms. Annals of Biomedical Engineering, 2016, 44, 3553-3567.	1.3	33
29	Dynamic behaviour of buoyant high viscosity droplets rising in a quiescent liquid. Journal of Fluid Mechanics, 2015, 778, 485-533.	1.4	18
30	Smart Guidewires for Smooth Navigation in Neurovascular Intervention. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.4	2
31	Smart guidewires for smooth navigation in neurovascular intervention. , 2015, , .		0
32	Diversity in the Strength and Structure of Unruptured Cerebral Aneurysms. Annals of Biomedical Engineering, 2015, 43, 1502-1515.	1.3	75
33	Fluid-structure interaction simulations of cerebral arteries modeled by isotropic and anisotropic constitutive laws. Computational Mechanics, 2015, 55, 479-498.	2.2	15
34	Wall Mechanical Properties and Hemodynamics of Unruptured Intracranial Aneurysms. American Journal of Neuroradiology, 2015, 36, 1695-1703.	1.2	60
35	Theory and application of arterial tissue in-host remodelling. , 2015, 2015, 1869-72.		0
36	In vitroassessment of the trackability of neurovascular intermediate catheters: a comparative analysis. Journal of Medical Engineering and Technology, 2014, 38, 379-384.	0.8	4

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37	Mechanism of aortic medial matrix remodeling is distinct in patients with bicuspid aortic valve. Journal of Thoracic and Cardiovascular Surgery, 2014, 147, 1056-1064.	0.4	88
38	Nerve regeneration and elastin formation within poly(glycerol sebacate)-based synthetic arterial grafts one-year post-implantation in a rat model. Biomaterials, 2014, 35, 165-173.	5.7	94
39	Mechanobiology of the Arterial Wall. , 2013, , 275-347.		26
40	Computational Fluid Dynamics in Aneurysm Research: Critical Reflections, Future Directions. American Journal of Neuroradiology, 2012, 33, 992-995.	1.2	44
41	A theoretical and non-destructive experimental approach for direct inclusion of measured collagen orientation and recruitment into mechanical models of the artery wall. Journal of Biomechanics, 2012, 45, 762-771.	0.9	149
42	Structurally motivated damage models for arterial walls. Theory and application. Modeling, Simulation and Applications, 2012, , 143-185.	1.3	4
43	Finite element modeling of cerebral angioplasty using a structural multiâ€mechanism anisotropic damage model. International Journal for Numerical Methods in Engineering, 2012, 92, 457-474.	1.5	13
44	Can aspect ratio be used to categorize intra-aneurysmal hemodynamics?â€"A study of elastase induced aneurysms in rabbit. Journal of Biomechanics, 2011, 44, 2809-2816.	0.9	17
45	Abrupt Recruitment of Medial Collagen Fibers in the Rabbit Carotid Artery. , 2011, , .		0
46	Hemodynamics and Anatomy of Elastase-Induced Rabbit Aneurysm Models: Similarity to Human Cerebral Aneurysms?. American Journal of Neuroradiology, 2011, 32, 595-601.	1.2	39
47	Hemodynamics of Elastase-Induced Aneurysms in Rabbit: A New High Flow Bifurcation Model. , 2011, , .		1
48	Sensitivity of CFD Based Hemodynamic Results in Rabbit Aneurysm Models to Idealizations in Surrounding Vasculature. Journal of Biomechanical Engineering, 2010, 132, 091009.	0.6	17
49	An In Vitro Device for Evaluation of Cellular Response to Flows Found at the Apex of Arterial Bifurcations. , 2010, , 631-657.		2
50	A Structural Multi-Mechanism Damage Model for Cerebral Arterial Tissue. Journal of Biomechanical Engineering, 2009, 131, 101013.	0.6	39
51	A structural multi-mechanism constitutive equation for cerebral arterial tissue. International Journal of Solids and Structures, 2009, 46, 2920-2928.	1.3	37
52	Finite Element Modeling of Cerebral Angioplasty Using a Multi-Mechanism Structural Damage Model. , 2009, , .		2
53	A Parametric Model for Studies of Flow in Arterial Bifurcations. Annals of Biomedical Engineering, 2008, 36, 1515-1530.	1.3	34
54	Hemorheology. , 2008, , 63-120.		41

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55	A Structural Multi-Mechanism Damage Model for Cerebral Arterial Tissue and its Finite Element Implementation. , 2008, , .		3
56	Review of Relevant Continuum Mechanics. , 2008, , 1-62.		6
57	The influence of hemodynamic forces on biomarkers in the walls of elastase-induced aneurysms in rabbits. Neuroradiology, 2007, 49, 1041-1053.	1.1	66
58	The Relation Between Flow Rate and Axial Pressure Gradient for Time-Periodic Poiseuille Flow in a Pipe. Journal of Mathematical Fluid Mechanics, 2005, 7, S215-S223.	0.4	31
59	An inelastic multi-mechanism constitutive equation for cerebral arterial tissue. Biomechanics and Modeling in Mechanobiology, 2005, 4, 235-248.	1.4	46
60	A DIRECTOR THEORY APPROACH FOR MODELING BLOOD FLOW IN THE ARTERIAL SYSTEM: AN ALTERNATIVE TO CLASSICAL 1D MODELS. Mathematical Models and Methods in Applied Sciences, 2005, 15, 871-906.	1.7	21
61	The numerical design of a parallel plate flow chamber for investigation of endothelial cell response to shear stress. Computers and Structures, 2003, 81, 535-546.	2.4	36
62	EXISTENCE AND UNIQUENESS OF STEADY, FULLY DEVELOPED FLOWS OF SECOND ORDER FLUIDS IN CURVED PIPES. Mathematical Models and Methods in Applied Sciences, 2001, 11, 1055-1071.	1.7	2
63	ON THE EFFECT OF APEX GEOMETRY ON WALL SHEAR STRESS AND PRESSURE IN TWO-DIMENSIONAL MODELS OF ARTERIAL BIFURCATIONS. Mathematical Models and Methods in Applied Sciences, 2001, 11, 499-520.	1.7	5
64	Flow of second order fluids in curved pipes. Journal of Non-Newtonian Fluid Mechanics, 2000, 90, 91-116.	1.0	33
65	ON VISCOUS FLOW IN CURVED PIPES OF NON-UNIFORM CROSS-SECTION. International Journal for Numerical Methods in Fluids, 1996, 22, 771-798.	0.9	6
66	Flow of Oldroyd-B fluids in curved pipes of circular and annular cross-section. International Journal of Non-Linear Mechanics, 1996, 31, 1-20.	1.4	50
67	Flow of a non-Newtonian fluid between intersecting planes, one of which is moving. Rheologica Acta, 1996, 35, 520-522.	1.1	2
68	Traffic Flow Stabilization. , 0, , .		10
69	Differences Between Ruptured Aneurysms With and Without Blebs: Mechanistic Implications. Cardiovascular Engineering and Technology, 0, , .	0.7	0