

# Virginia H Huxley

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/624131/publications.pdf>

Version: 2024-02-01

102  
papers

2,905  
citations

159358

30  
h-index

189595

50  
g-index

111  
all docs

111  
docs citations

111  
times ranked

3029  
citing authors

#	ARTICLE	IF	CITATIONS
1	Intravascular metastatic cancer cell homotypic aggregation at the sites of primary attachment to the endothelium. <i>Cancer Research</i> , 2003, 63, 3805-11.	0.4	209
2	Mechanical Entrapment Is Insufficient and Intercellular Adhesion Is Essential for Metastatic Cell Arrest in Distant Organs. <i>Neoplasia</i> , 2005, 7, 522-527.	2.3	160
3	Increased capillary hydraulic conductivity induced by atrial natriuretic peptide.. <i>Circulation Research</i> , 1987, 60, 304-307.	2.0	154
4	Sex and the cardiovascular system: the intriguing tale of how women and men regulate cardiovascular function differently. <i>American Journal of Physiology - Advances in Physiology Education</i> , 2007, 31, 17-22.	0.8	126
5	Role of a glycocalyx on coronary arteriole permeability to proteins: evidence from enzyme treatments. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 278, H1177-H1185.	1.5	121
6	Quantitative fluorescence microscopy on single capillaries: alpha-lactalbumin transport. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1987, 252, H188-H197.	1.5	113
7	Galectin-3 as a Potential Therapeutic Target in Tumors Arising from Malignant Endothelia. <i>Neoplasia</i> , 2007, 9, 662-670.	2.3	89
8	Capillary hydraulic conductivity is elevated by cGMP-dependent vasodilators.. <i>Circulation Research</i> , 1992, 70, 382-391.	2.0	88
9	Inhibition of Spontaneous Breast Cancer Metastasis by Anti- $\alpha$ Thomsen-Friedenreich Antigen Monoclonal Antibody JAA-F11. <i>Neoplasia</i> , 2006, 8, 939-948.	2.3	84
10	<i>In vivo</i> determination of collecting lymphatic vessel permeability to albumin: a role for lymphatics in exchange. <i>Journal of Physiology</i> , 2010, 588, 243-254.	1.3	76
11	Capillary Fluid Exchange: Regulation, Functions, and Pathology. <i>Colloquium Series on Integrated Systems Physiology From Molecule To Function</i> , 2010, 2, 1-94.	0.3	75
12	The effect of the red cell membrane and a diffusion boundary layer on the rate of oxygen uptake by human erythrocytes. <i>Journal of Physiology</i> , 1981, 316, 75-83.	1.3	70
13	Intrinsic sex-specific differences in microvascular endothelial cell phosphodiesterases. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2010, 298, H1146-H1154.	1.5	61
14	Lymphatic fluid: exchange mechanisms and regulation. <i>Journal of Physiology</i> , 2011, 589, 2935-2943.	1.3	56
15	Sex-Specific Characteristics of the Microcirculation. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1065, 307-328.	0.8	54
16	Synthetic Galectin-3 Inhibitor Increases Metastatic Cancer Cell Sensitivity to Taxol-Induced Apoptosis In Vitro and In Vivo. <i>Neoplasia</i> , 2009, 11, 901-909.	2.3	49
17	Albumin modulation of capillary permeability: test of an adsorption mechanism. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1985, 248, H264-H273.	1.5	46
18	Single capillary permeability to proteins having similar size but different charge. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1988, 254, H304-H312.	1.5	42

#	ARTICLE	IF	CITATIONS
19	Evidence of porcine and human endothelium activation by cancer-associated carbohydrates expressed on glycoproteins and tumour cells. <i>Journal of Physiology</i> , 2004, 554, 89-99.	1.3	42
20	Cardiovascular Function and Ballistocardiogram: A Relationship Interpreted via Mathematical Modeling. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2906-2917.	2.5	41
21	Effect of diffusion boundary layers on the initial uptake of O <sub>2</sub> by red cells. Theory versus experiment. <i>Microvascular Research</i> , 1983, 26, 89-107.	1.1	40
22	Differential actions of albumin and plasma on capillary solute permeability. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1991, 260, H1645-H1654.	1.5	40
23	Macromolecule permeability of in situ and excised rodent skeletal muscle arterioles and venules. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 290, H474-H480.	1.5	40
24	Permeability and contractile responses of collecting lymphatic vessels elicited by atrial and brain natriuretic peptides. <i>Journal of Physiology</i> , 2013, 591, 5071-5081.	1.3	40
25	Differential effects of L-NAME on rat venular hydraulic conductivity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 279, H2017-H2023.	1.5	38
26	Capillary hydraulic conductivity is decreased by nitric oxide synthase inhibition. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1995, 268, H1856-H1861.	1.5	37
27	Permeability of single capillaries to intermediate-sized colored solutes. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1983, 245, H495-H505.	1.5	35
28	The Microvasculature As A Dynamic Regulator Of Volume And Solute Exchange. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2000, 27, 847-854.	0.9	35
29	Attenuation of endothelial dysfunction by exercise training in STZ-induced diabetic rats. <i>Clinical Hemorheology and Microcirculation</i> , 2005, 32, 217-26.	0.9	33
30	Similar Permeability Responses to Nitric Oxide Synthase Inhibitors of Venules from Three Animal Species. <i>Microvascular Research</i> , 2002, 64, 21-31.	1.1	31
31	Sex differences influencing micro€and macrovascular endothelial phenotype <i>in vitro</i>. <i>Journal of Physiology</i> , 2018, 596, 3929-3949.	1.3	31
32	Leakage responses to L-NAME differ with the fluorescent dye used to label albumin. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999, 276, H333-H339.	1.5	29
33	Reverse Engineering of Oxygen Transport in the Lung: Adaptation to Changing Demands and Resources through Space-Filling Networks. <i>PLoS Computational Biology</i> , 2010, 6, e1000902.	1.5	29
34	Differential action of plasma and albumin on transcapillary exchange of anionic solute. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1993, 264, H1428-H1437.	1.5	27
35	Continuous real time ex vivo epifluorescent video microscopy for the study of metastatic cancer cell interactions with microvascular endothelium. <i>Clinical and Experimental Metastasis</i> , 2003, 20, 451-458.	1.7	27
36	Differential Coronary Microvascular Exchange Responses to Adenosine: Roles of Receptor and Microvessel Subtypes. <i>Microcirculation</i> , 2005, 12, 313-326.	1.0	26

#	ARTICLE	IF	CITATIONS
37	Cardiovascular sex differences influencing microvascular exchange. <i>Cardiovascular Research</i> , 2010, 87, 230-242.	1.8	25
38	Altered basal and adenosine-mediated protein flux from coronary arterioles isolated from exercise-trained pigs. <i>Acta Physiologica Scandinavica</i> , 1997, 160, 315-325.	2.3	24
39	Sexual dimorphism in the permeability response of coronary microvessels to adenosine. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005, 288, H2006-H2013.	1.5	23
40	Fluorescent dyes modify properties of proteins used in microvascular research. <i>Microcirculation</i> , 2003, 10, 221-31.	1.0	23
41	ANP increases capillary permeability to protein independent of perfusate protein composition. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1995, 268, H1139-H1148.	1.5	22
42	Microvascular network remodeling in dura mater of ovariectomized pigs: role for angiotensin-1 in estrogen-dependent control of vascular stability. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H1131-H1137.	1.5	22
43	Adaptation of coronary microvascular exchange in arterioles and venules to exercise training and a role for sex in determining permeability responses. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2007, 293, H1196-H1205.	1.5	21
44	Measurement of hydraulic conductivity in isolated arterioles of rat brain cortex. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1993, 264, H1788-H1797.	1.5	19
45	Endothelium-Mediated Control of the Coronary Circulation. <i>Sports Medicine</i> , 1996, 22, 228-250.	3.1	19
46	Determination of Fluorescence Polarization of Membrane Probes in Intact Erythrocytes. <i>Biophysical Journal</i> , 1982, 39, 229-232.	0.2	18
47	Acid-induced increase in duodenal mucosal permeability is augmented by nitric oxide inhibition and vasopressin. <i>Acta Physiologica Scandinavica</i> , 1997, 160, 363-370.	2.3	18
48	Pulsed Estrogen Therapy Prevents Post-OVX Porcine Dura Mater Microvascular Network Weakening via a PDGF-BB-Dependent Mechanism. <i>PLoS ONE</i> , 2013, 8, e82900.	1.1	18
49	Differential sensitivity of exchange vessel hydraulic conductivity to atrial natriuretic peptide. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1990, 258, H521-H528.	1.5	17
50	Adenosine A2A receptor modulation of juvenile female rat skeletal muscle microvessel permeability. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006, 291, H3094-H3105.	1.5	17
51	Random forests for dura mater microvasculature segmentation using epifluorescence images. , 2016, 2016, 2901-2904.		17
52	Effect of superfusate albumin on single capillary hydraulic conductivity. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1987, 252, H395-H401.	1.5	16
53	Basal and adenosine-mediated protein flux from isolated coronary arterioles. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1996, 271, H1099-H1108.	1.5	15
54	Microvasculature segmentation of arterioles using deep CNN. , 2017, , .		13

#	ARTICLE	IF	CITATIONS
55	Deep U-Net Regression and Hand-Crafted Feature Fusion for Accurate Blood Vessel Segmentation. , 2019, , .		13
56	The P2Y <sub>2</sub> Receptor Interacts with VE-Cadherin and VEGF Receptor-2 to Regulate Rac1 Activity in Endothelial Cells. Journal of Biomedical Science and Engineering, 2014, 07, 1105-1121.	0.2	13
57	Evidence for cholinergic regulation of microvessel hydraulic conductance during tissue hypoxia.. Circulation Research, 1990, 66, 517-524.	2.0	12
58	Volume status influences atrial peptide-induced water conductivity changes in leopard frog mesenteric capillaries.. Journal of Physiology, 1992, 447, 33-47.	1.3	11
59	Bradykinin-induced elevations of hydraulic conductivity display spatial and temporal variations in frog capillaries. American Journal of Physiology - Heart and Circulatory Physiology, 1993, 264, H1575-H1581.	1.5	11
60	In Vivo Visualization of Cerebral Microcirculation in Systemic Thermal Injury. Journal of Burn Care and Research, 2000, 21, 20-25.	1.7	11
61	Multi-focus image fusion using epifluorescence microscopy for robust vascular segmentation. , 2014, 2014, 4735-8.		11
62	Atrial Natriuretic Peptide (ANP)-Induced Increase in Capillary Albumin and Water Flux. Advances in Experimental Medicine and Biology, 1988, 242, 23-31.	0.8	11
63	Vasoactive hormones and autocrine activation of capillary exchange barrier function. Nouvelle Revue Française D'histomatologie, 1993, 19, 309-20; discussion 320-4.	0.7	11
64	O <sub>2</sub> modulation of single-vessel hydraulic conductance. American Journal of Physiology - Heart and Circulatory Physiology, 1988, 254, H317-H323.	1.5	10
65	Multiscale tensor anisotropic filtering of fluorescence microscopy for denoising microvasculature. , 2015, 2015, 540-543.		10
66	Permeability response of the rat mesenteric microvasculature to insulin. Clinical Hemorheology and Microcirculation, 2006, 34, 259-63.	0.9	10
67	A direct effect of atrial peptide on arterioles of the terminal microvasculature. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1990, 258, R1224-R1229.	0.9	9
68	Seasonal variations of capillary hydraulic conductivity and volume status. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1995, 268, R468-R474.	0.9	9
69	Complex Non-sinus-associated Pachymeningeal Lymphatic Structures: Interrelationship With Blood Microvasculature. Frontiers in Physiology, 2019, 10, 1364.	1.3	9
70	Capillary permeability: an albumin component attenuates active changes in Lp. American Journal of Physiology - Heart and Circulatory Physiology, 1990, 259, H1357-H1364.	1.5	8
71	What Do Measures of Flux Tell Us About Vascular Wall Biology?. Microcirculation, 1998, 5, 109-116.	1.0	7
72	PDGF/VEGF system activation and angiogenesis following initial post ovariectomy meningeal microvessel loss. Cell Cycle, 2008, 7, 1385-1390.	1.3	7

#	ARTICLE	IF	CITATIONS
73	Endothelial barrier dysfunction in diabetic conduit arteries: a novel method to quantify filtration. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H398-H405.	1.5	7
74	Estrogen-Dependent Changes in Dura Mater Microvasculature Add New Insights to the Pathogenesis of Headache. Frontiers in Neurology, 2017, 8, 549.	1.1	7
75	Cerebral Vascular Response to Hypertonic Fluid Resuscitation in Thermal Injury. , 1997, 70, 265-266.		7
76	Morphologic Analysis of the Cerebral Microcirculation After Thermal Injury and the Response to Fluid Resuscitation. , 1997, 70, 267-268.		7
77	Control of capillary hydraulic conductivity via membrane potential-dependent changes in Ca <sup>2+</sup> influx. American Journal of Physiology - Heart and Circulatory Physiology, 1992, 262, H144-H148.	1.5	6
78	Confocal vessel structure segmentation with optimized feature bank and random forests. , 2016, 2016, .		6
79	Comparison of the capillary membrane properties determining fluid exchange in single capillaries and whole organs. International Journal of Microcirculation, Clinical and Experimental, 1982, 1, 381-91.	0.6	6
80	Physiologic Regulation of Capillary Permeability. Journal of Reconstructive Microsurgery, 1988, 4, 341-346.	1.0	5
81	Multiquadric spline-based interactive segmentation of vascular networks. , 2016, 2016, 5913-5916.		5
82	What do measures of flux tell us about vascular wall biology?. Microcirculation, 1998, 5, 109-16.	1.0	5
83	Multi-focus Image Fusion for Confocal Microscopy Using U-Net Regression Map. , 2021, 2020, 4317-4323.		4
84	Capillary permeability: atrial peptide action is independent of "protein effect". American Journal of Physiology - Heart and Circulatory Physiology, 1990, 259, H1351-H1356.	1.5	3
85	Mosaicing of Dynamic Mesentery Video with Gradient Blending. , 2020, , .		3
86	Microvascular Sex- and Age- Dependent Phosphodiesterase Expression. Frontiers in Aging, 2021, 2, .	1.2	3
87	Deep Learning Segmentation for Epifluorescence Microscopy Images. Microscopy and Microanalysis, 2017, 23, 140-141.	0.2	2
88	Patch-Based Semantic Segmentation for Detecting Arterioles and Venules in Epifluorescence Imagery. , 2018, 2018, .		2
89	What Do Measures of Flux Tell Us About Vascular Wall Biology?. Microcirculation, 0, 5, 109-116.	1.0	1
90	Microvascular Permeability in Inflammation. , 2001, , 65-79.		1

#	ARTICLE	IF	CITATIONS
91	Open and shut case for Rho A? The questions of when, where and how the small GTPase mediates the permeability of endothelial junctions. <i>Cardiovascular Research</i> , 2013, 99, 378-379.	1.8	0
92	Quantitative Study of the Coupling Among Cardiovascular System, Lymphatic System and Interstitial Space. <i>Springer Proceedings in Mathematics and Statistics</i> , 2021, , 579-589.	0.1	0
93	Fluid and protein exchange in microvascular networks: Importance of modelling heterogeneity in geometrical and biophysical properties. <i>Journal of Physiology</i> , 2021, 599, 4597-4624.	1.3	0
94	Ovarian hormone dependent changes in PDGF/VEGF system in microvascular remodeling. <i>FASEB Journal</i> , 2006, 20, .	0.2	0
95	Protective Effect of Exercise Training plus Vitamin C supplementation on Endothelial Dysfunction in Diabetic Rats. <i>Medicine and Science in Sports and Exercise</i> , 2006, 38, S535.	0.2	0
96	Acute change in plasma estradiol by insulin in male rats. <i>FASEB Journal</i> , 2007, 21, A488.	0.2	0
97	Liposomal preparation for the in vivo monitoring of osmolality. <i>FASEB Journal</i> , 2008, 22, 927.4.	0.2	0
98	Modification of a calcein-based assay for monitoring proteolytic activity in tissue suffusate. <i>FASEB Journal</i> , 2008, 22, 927.5.	0.2	0
99	Sexual and Maturational Difference in Phosphodiesterase mRNA Expression in Rat Skeletal Muscle Microvascular Endothelial Cells. <i>FASEB Journal</i> , 2008, 22, 1145.4.	0.2	0
100	The Lymphatic Vasculature as a Participant in Microvascular Exchange. <i>Annual Update in Intensive Care and Emergency Medicine</i> , 2011, , 287-296.	0.1	0
101	Estrogen-dependent regulation of endothelial connexin 43. <i>FASEB Journal</i> , 2012, 26, lb606.	0.2	0
102	Sex-specific endothelial cell response to insulin. <i>FASEB Journal</i> , 2013, 27, 678.4.	0.2	0