Walter L Murfee

List of Publications by Year
in descending order

82 papers	1,769 citations	331538 21 h-index	330025 37 g-index
84 all docs	84 docs citations	84 times ranked	2340 citing authors

#	Article	IF	Citations
1	Macrophages: An Inflammatory Link Between Angiogenesis and Lymphangiogenesis. Microcirculation, 2016, 23, 95-121.	1.0	240
2	Lymphatic Vessel Network Structure and Physiology. , 2018, 9, 207-299.		214
3	Differential Arterial/Venous Expression of NG2 Proteoglycan in Perivascular Cells Along Microvessels: Identifying a Venuleâ€Specific Phenotype. Microcirculation, 2005, 12, 151-160.	1.0	119
4	Targeting Pericytes for Angiogenic Therapies. Microcirculation, 2014, 21, 345-357.	1.0	81
5	Perivascular Cells Along Venules Upregulate NG2 Expression During Microvascular Remodeling. Microcirculation, 2006, 13, 261-273.	1.0	70
6	Enhanced Smooth Muscle Cell Coverage of Microvessels Exposed to Increased Hemodynamic Stresses In Vivo. Circulation Research, 2003, 92, 929-936.	2.0	66
7	Printing cancer cells into intact microvascular networks: a model for investigating cancer cell dynamics during angiogenesis. Integrative Biology (United Kingdom), 2015, 7, 1068-1078.	0.6	58
8	A novel high-throughput assay for respiration in isolated brain microvessels reveals impaired mitochondrial function in the aged mice. GeroScience, 2018, 40, 365-375.	2.1	54
9	An angiogenesis model for investigating multicellular interactions across intact microvascular networks. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H235-H245.	1.5	53
10	Discontinuous Expression of Endothelial Cell Adhesion Molecules along Initial Lymphatic Vessels in Mesentery: The Primary Valve Structure. Lymphatic Research and Biology, 2007, 5, 81-90.	0.5	48
11	<scp>VEGF</scp>â€Œ Induces Lymphangiogenesis and Angiogenesis in the Rat Mesentery Culture Model. Microcirculation, 2014, 21, 532-540.	1.0	48
12	Relationships Between Lymphangiogenesis and Angiogenesis During Inflammation in Rat Mesentery Microvascular Networks. Lymphatic Research and Biology, 2012, 10, 198-207.	0.5	45
13	Identification of class III Î²-tubulin as a marker of angiogenic perivascular cells. Microvascular Research, 2012, 83, 257-262.	1.1	38
14	Laser Directâ€Write Onto Live Tissues: A Novel Model for Studying Cancer Cell Migration. Journal of Cellular Physiology, 2016, 231, 2333-2338.	2.0	34
15	Understanding angiogenesis during aging: opportunities for discoveries and new models. Journal of Applied Physiology, 2018, 125, 1843-1850.	1.2	29
16	EphB4 Expression Along Adult Rat Microvascular Networks: EphB4 Is More Than a Venous Specific Marker. Microcirculation, 2007, 14, 253-267.	1.0	28
17	The Distribution of Fluid Shear Stresses in Capillary Sprouts. Cardiovascular Engineering and Technology, 2011, 2, 124-136.	0.7	26
18	Chapter 12 Structure of Microvascular Networks in Genetic Hypertension. Methods in Enzymology, 2008, 444, 271-284.	0.4	25

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19	Lymphatic/Blood Endothelial Cell Connections at the Capillary Level in Adult Rat Mesentery. Anatomical Record, 2010, 293, 1629-1638.	0.8	25
20	Pericyte Bridges in Homeostasis and Hyperglycemia. Diabetes, 2020, 69, 1503-1517.	0.3	25
21	Computational Network Model Prediction of Hemodynamic Alterations Due to Arteriolar Remodeling in Interval Sprint Trained Skeletal Muscle. Microcirculation, 2007, 14, 181-192.	1.0	24
22	An Ex Vivo Model for Anti-Angiogenic Drug Testing on Intact Microvascular Networks. PLoS ONE, 2015, 10, e0119227.	1.1	23
23	Passive recruitment of circulating leukocytes into capillary sprouts from existing capillaries in a microfluidic system. Lab on A Chip, 2011, 11, 1924.	3.1	21
24	Matrix Metalloproteinase Activity Causes VEGFRâ€2 Cleavage and Microvascular Rarefaction in Rat Mesentery. Microcirculation, 2011, 18, 228-237.	1.0	20
25	Endothelial Cell Phenotypes are Maintained During Angiogenesis in Cultured Microvascular Networks. Scientific Reports, 2018, 8, 5887.	1.6	20
26	Microvascular dysfunction and kidney disease: Challenges and opportunities?. Microcirculation, 2021, 28, e12661.	1.0	20
27	Pericyte migration and proliferation are tightly synchronized to endothelial cell sprouting dynamics. Integrative Biology (United Kingdom), 2021, 13, 31-43.	0.6	19
28	Glycolytic and Oxidative Phosphorylation Defects Precede the Development of Senescence in Primary Human Brain Microvascular Endothelial Cells. GeroScience, 2022, 44, 1975-1994.	2.1	19
29	Aging related impairment of brain microvascular bioenergetics involves oxidative phosphorylation and glycolytic pathways. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1410-1424.	2.4	18
30	Estimation of the Pressure Drop Required for Lymph Flow through Initial Lymphatic Networks. Lymphatic Research and Biology, 2016, 14, 62-69.	0.5	16
31	Angiogenesis in Mesenteric Microvascular Networks from Spontaneously Hypertensive Versus Normotensive Rats. Microcirculation, 2011, 18, 574-582.	1.0	15
32	Vascular islands during microvascular regression and regrowth in adult networks. Frontiers in Physiology, 2013, 4, 108.	1.3	15
33	An Ex Vivo Method for Time-Lapse Imaging of Cultured Rat Mesenteric Microvascular Networks. Journal of Visualized Experiments, 2017, , .	0.2	15
34	Cell proliferation along vascular islands during microvascular network growth. BMC Physiology, 2012, 12, 7.	3.6	14
35	Evaluation of Arteriolar Smooth Muscle Cell Function in an Ex Vivo Microvascular Network Model. Scientific Reports, 2017, 7, 2195.	1.6	14
36	Aging is associated with impaired angiogenesis, but normal microvascular network structure, in the rat mesentery. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H275-H284.	1.5	13

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37	Lymphaticâ€toâ€blood vessel transition in adult microvascular networks: A discovery made possible by a topâ€down approach to biomimetic model development. Microcirculation, 2020, 27, e12595.	1.0	13
38	State of the field: cellular and exosomal therapeutic approaches in vascular regeneration. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H647-H680.	1.5	13
39	Applications of computational models to better understand microvascular remodelling: a focus on biomechanical integration across scales. Interface Focus, 2015, 5, 20140077.	1.5	12
40	Rat Mesentery Exteriorization: A Model for Investigating the Cellular Dynamics Involved in Angiogenesis. Journal of Visualized Experiments, 2012, , e3954.	0.2	11
41	The effect of microvascular pattern alterations on network resistance in spontaneously hypertensive rats. Medical and Biological Engineering and Computing, 2012, 50, 585-593.	1.6	11
42	Bioreactor System to Perfuse Mesentery Microvascular Networks and Study Flow Effects During Angiogenesis. Tissue Engineering - Part C: Methods, 2019, 25, 447-458.	1.1	11
43	Spatiotemporal Distribution of Neurovascular Alignment in Remodeling Adult Rat Mesentery Microvascular Networks. Journal of Vascular Research, 2012, 49, 299-308.	0.6	10
44	A clinical perspective on adiposeâ€derived cell therapy for enhancing microvascular health and function: Implications and applications for reconstructive surgery. Microcirculation, 2021, 28, e12672.	1.0	9
45	A Novel ex vivo Mouse Mesometrium Culture Model for Investigating Angiogenesis in Microvascular Networks. Journal of Vascular Research, 2018, 55, 125-135.	0.6	8
46	A novel tissue culture model for evaluating the effect of aging on stem cell fate in adult microvascular networks. GeroScience, 2020, 42, 515-526.	2.1	8
47	An Ex Vivo Tissue Culture Model for Anti-angiogenic Drug Testing. Methods in Molecular Biology, 2016, 1464, 85-95.	0.4	8
48	Induction of microvascular network growth in the mouse mesentery. Microcirculation, 2018, 25, e12502.	1.0	7
49	Cell Proliferation in Mesenteric Microvascular Network Remodeling in Response to Elevated Hemodynamic Stress. Annals of Biomedical Engineering, 2004, 32, 1662-1666.	1.3	6
50	Modelling microvascular pathology. Nature Biomedical Engineering, 2018, 2, 349-350.	11.6	4
51	Estimation of shear stress values along endothelial tip cells past the lumen of capillary sprouts. Microvascular Research, 2022, 142, 104360.	1.1	4
52	Microfluidics Technologies and Approaches for Studying the Microcirculation. Microcirculation, 2017, 24, e12377.	1.0	3
53	Linking lymphatic function to disease. Journal of Physiology, 2020, 598, 3065-3066.	1.3	3
54	A Challenge for Engineering Biomimetic Microvascular Models: How do we Incorporate the Physiology?. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	3

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55	Lysophosphatidic acid does not cause blood/lymphatic vessel plasticity in the rat mesentery culture model. Physiological Reports, 2016, 4, e12857.	0.7	2
56	Emerging topics in microvascular research: Advancing our understanding by interdisciplinary exploration. Microcirculation, 2019, 26, e12558.	1.0	2
57	The maintenance of adult peripheral adult nerve and microvascular networks in the rat mesentery culture model. Journal of Neuroscience Methods, 2020, 346, 108923.	1.3	2
58	Viewing Stromal Vascular Fraction de novo Vessel Formation and Association with Host Microvasculature Using the Rat Mesentery Culture Model. Microcirculation, 2022, , e12758.	1.0	2
59	When angiogenesis is not good enough. Journal of Physiology, 2017, 595, 1439-1439.	1.3	1
60	Microvascular Network Restructuring Associated with MMP Inhibition in Spontaneously Hypertensive Rats. FASEB Journal, 2008, 22, 732.8.	0.2	1
61	Tracking Human Adiposeâ€Derived Stem Cells (hASCs) in an Ex Vivo Microvascular Network Model. FASEB Journal, 2015, 29, 790.2.	0.2	1
62	An Tissue Culture Method for Discovering Cell Dynamics Involved in Stromal Vascular Fraction Using the Mouse Mesentery. Methods in Molecular Biology, 2022, 2441, 157-170.	0.4	1
63	Lymphatic/Blood Endothelial Cell Connections at the Capillary Level in Adult Rat Mesentery. Anatomical Record, 2010, 293, spc1-spc1.	0.8	0
64	A Microcontroller Operated Device for the Generation of Liquid Extracts from Conventional Cigarette Smoke and Electronic Cigarette Aerosol. Journal of Visualized Experiments, 2018, , .	0.2	0
65	Biomimetic Models of the Microcirculation for Scientific Discovery and Therapeutic Testing. , 2021, , 1-23.		0
66	Clinical perspectives on the microcirculation. Microcirculation, 2021, 28, e12688.	1.0	0
67	Computational Evaluation of Wall Shear Stress Experienced by Endothelial Tip Cells along Capillary Sprouts. FASEB Journal, 2021, 35, .	0.2	0
68	Biomimetic Models of the Microcirculation for Scientific Discovery and Therapeutic Testing. Reference Series in Biomedical Engineering, 2021, , 321-342.	0.1	0
69	NG2 proteoglycan expression is functionally involved in microvascular remodeling. FASEB Journal, 2006, 20, A712.	0.2	0
70	Analysis of primary valve structure along initial lymphatic networks in adult rat mesentery. FASEB Journal, 2007, 21, A490.	0.2	0
71	Microvascular NG2 expression patterns in response to aging, ischemic injury, and disease in mouse spinotrapezius muscle. FASEB Journal, 2009, 23, 592.20.	0.2	0
72	Estimation of Pressure Drop Required for Lymph Flow through Initial Collecting Lymphatics. FASEB Journal, 2015, 29, 633.2.	0.2	0

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73	Comparison of Network Resistances in Aged Versus Adult Microvascular Networks. FASEB Journal, 2015, 29, 786.7.	0.2	0
74	Lysophosphatidic Acid Stimulation Does Not Induce a Lymphatic Identity along Blood Vessels in Intact Microvascular Networks Ex Vivo. FASEB Journal, 2015, 29, 630.9.	0.2	0
75	An Ex Vivo Platform for Studying Angiogenesis in Perfused Microvascular Networks. FASEB Journal, 2018, 32, 577.1.	0.2	0
76	Angiogenesis is Not Impaired in Cultured Rat Mesenteric Microvascular Networks. FASEB Journal, 2018, 32, 578.8.	0.2	0
77	Stromal Vascular Fraction Vasculogenesis, Vessel Incorporation, and Integration with Intact Angiogenic Microvascular Networks in an Ex Vivo Cultured Tissue Model. FASEB Journal, 2019, 33, 517.5.	0.2	0
78	An Ex Vivo Model for Investigating Transplanted Pancreatic Islet Vascular Integration. FASEB Journal, 2019, 33, 685.10.	0.2	0
79	Linking arterial stiffness to microvascular remodeling. , 2022, , 195-209.		0
80	A Novel ex vivo Method for Investigating Vascularization of Transplanted Islets. Journal of Vascular Research, 2022, 59, 229-238.	0.6	0
81	Incorporation of Tumor Spheroids into an Exâ€vivo Tissue Culture Model for Investigating Cancer Cellâ€“Microvascular Interactions. FASEB Journal, 2022, 36, .	0.2	0
82	Estimation of Shear Stress Heterogeneity along Capillary Segments in Angiogenic Rat Mesenteric Microvascular Networks. FASEB Journal, 2022, 36, .	0.2	0