Victoria L Bautch

List of Publications by Year
in descending order

95 papers	5,157 citations	71102 41 h-index	91884 69 g-index
99 all docs	99 docs citations	99 times ranked	6427 citing authors

#	Article	IF	Citations
1	A sonic hedgehog signaling domain in the arterial adventitia supports resident Sca1 ⁺ smooth muscle progenitor cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9349-9354.	7.1	262
2	Local Guidance of Emerging Vessel Sprouts Requires Soluble Flt-1. Developmental Cell, 2009, 17, 377-386.	7.0	213
3	BMPER, a Novel Endothelial Cell Precursor-Derived Protein, Antagonizes Bone Morphogenetic Protein Signaling and Endothelial Cell Differentiation. Molecular and Cellular Biology, 2003, 23, 5664-5679.	2.3	202
4	The VEGF receptor flt-1 (VEGFR-1) is a positive modulator of vascular sprout formation and branching morphogenesis. Blood, 2004, 103, 4527-4535.	1.4	190
5	The Vascular Endothelial Growth Factor (VEGF) Receptor Flt-1 (VEGFR-1) Modulates Flk-1 (VEGFR-2) Signaling During Blood Vessel Formation. American Journal of Pathology, 2004, 164, 1531-1535.	3.8	177
6	Distinct signalling pathways regulate sprouting angiogenesis from the dorsal aorta and the axial vein. Nature Cell Biology, 2011, 13, 686-692.	10.3	175
7	Vascular endothelial growth factor receptor Flt-1 negatively regulates developmental blood vessel formation by modulating endothelial cell division. Blood, 2002, 99, 2397-2407.	1.4	165
8	The VEGF receptor Flt-1 spatially modulates Flk-1 signaling and blood vessel branching. Journal of Cell Biology, 2008, 181, 847-858.	5.2	161
9	A Role for Fractalkine and Its Receptor (CX3CR1) in Cardiac Allograft Rejection. Journal of Immunology, 2000, 165, 6067-6072.	0.8	158
10	Endothelial cell tumors develop in transgenic mice carrying polyoma virus middle T oncogene. Cell, 1987, 51, 529-537.	28.9	150
11	Stem cells and the vasculature. Nature Medicine, 2011, 17, 1437-1443.	30.7	150
12	The neural tube patterns vessels developmentally using the VEGF signaling pathway. Development (Cambridge), 2004, 131, 1503-1513.	2.5	138
13	Orientation of endothelial cell division is regulated by VEGF signaling during blood vessel formation. Blood, 2007, 109, 1345-1352.	1.4	125
14	Assembly of Trunk and Limb Blood Vessels Involves Extensive Migration and Vasculogenesis of Somite-Derived Angioblasts. Developmental Biology, 2001, 234, 352-364.	2.0	110
15	Endocardial cells are a distinct endothelial lineage derived from Flk1+ multipotent cardiovascular progenitors. Developmental Biology, 2009, 333, 78-89.	2.0	106
16	Notch regulates BMP responsiveness and lateral branching in vessel networks via SMAD6. Nature Communications, 2016, 7, 13247.	12.8	99
17	Neurovascular development uses VEGF-A signaling to regulate blood vessel ingression into the neural tube. Development (Cambridge), 2009, 136, 833-841.	2.5	88
18	Neurovascular development and links to disease. Cellular and Molecular Life Sciences, 2013, 70, 1675-1684.	5.4	87

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19	Regulation of blood vessel sprouting. Seminars in Cell and Developmental Biology, 2011, 22, 1005-1011.	5.0	82
20	Neurovascular development. Cell Adhesion and Migration, 2009, 3, 199-204.	2.7	78
21	Decoy Receptor CXCR7 Modulates Adrenomedullin-Mediated Cardiac and Lymphatic Vascular Development. Developmental Cell, 2014, 30, 528-540.	7.0	77
22	Blood island formation in attached cultures of murine embryonic stem cells. Developmental Dynamics, 1996, 205, 1-12.	1.8	76
23	VEGF-Directed Blood Vessel Patterning: From Cells to Organism. Cold Spring Harbor Perspectives in Medicine, 2012, 2, a006452-a006452.	6.2	76
24	HoxB5 Is an Upstream Transcriptional Switch for Differentiation of the Vascular Endothelium from Precursor Cells. Molecular and Cellular Biology, 2003, 23, 5680-5691.	2.3	73
25	Gene Expression Profile Signatures Indicate a Role for Wnt Signaling in Endothelial Commitment From Embryonic Stem Cells. Circulation Research, 2006, 98, 1331-1339.	4.5	71
26	Wnt2 Coordinates the Commitment of Mesoderm to Hematopoietic, Endothelial, and Cardiac Lineages in Embryoid Bodies. Journal of Biological Chemistry, 2007, 282, 782-791.	3.4	68
27	Isolation and characterization of an established endothelial cell line from transgenic mouse hemangiomas. Experimental Cell Research, 1991, 196, 302-313.	2.6	65
28	CASZ1 Promotes Vascular Assembly and Morphogenesis through the Direct Regulation of an EGFL7/RhoA-Mediated Pathway. Developmental Cell, 2013, 25, 132-143.	7.0	63
29	Angiogenic factor signaling regulates centrosome duplication in endothelial cells of developing blood vessels. Blood, 2010, 116, 3108-3117.	1.4	58
30	Flt-1 (VEGFR-1) coordinates discrete stages of blood vessel formation. Cardiovascular Research, 2016, 111, 84-93.	3.8	56
31	Vascular Development. Current Topics in Developmental Biology, 2010, 90, 43-72.	2.2	55
32	Blood and Lymphatic Vessel Formation. Cold Spring Harbor Perspectives in Biology, 2015, 7, a008268.	5.5	52
33	Characterization of the vasculogenic block in the absence of vascular endothelial growth factor-A. Blood, 2000, 95, 1979-1987.	1.4	51
34	Building blood vessels in development and disease. Current Opinion in Hematology, 2013, 20, 1.	2.5	51
35	Excess centrosomes disrupt endothelial cell migration via centrosome scattering. Journal of Cell Biology, 2014, 206, 257-272.	5.2	51
36	Dynamic alterations in decoy VEGF receptor-1 stability regulate angiogenesis. Nature Communications, 2017, 8, 15699.	12.8	50

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37	A Vascular Gene Trap Screen Defines RasGRP3 as an Angiogenesis-Regulated Gene Required for the Endothelial Response to Phorbol Esters. Molecular and Cellular Biology, 2004, 24, 10515-10528.	2.3	49
38	How Blood Vessel Networks Are Made and Measured. Cells Tissues Organs, 2012, 195, 94-107.	2.3	47
39	Organization and expression of Drosophila tropomyosin genes. Journal of Molecular Biology, 1982, 162, 231-250.	4.2	46
40	In Vitro Differentiation of Mouse ES Cells: Hematopoietic and Vascular Development. Methods in Enzymology, 2003, 365, 83-98.	1.0	46
41	Computational Modeling of Interacting VEGF and Soluble VEGF Receptor Concentration Gradients. Frontiers in Physiology, 2011, 2, 62.	2.8	46
42	Blood vessel anastomosis is spatially regulated by Flt1 during angiogenesis. Development (Cambridge), 2017, 144, 889-896.	2.5	46
43	Developmental Platelet Endothelial Cell Adhesion Molecule Expression Suggests Multiple Roles for a Vascular Adhesion Molecule. American Journal of Pathology, 1999, 154, 1137-1147.	3.8	45
44	Blood Vessel Patterning at the Embryonic Midline. Current Topics in Developmental Biology, 2004, 62, 55-85.	2.2	43
45	Flt-1 (Vascular Endothelial Growth Factor Receptor-1) Is Essential for the Vascular Endothelial Growth Factorâ€“Notch Feedback Loop During Angiogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 1952-1959.	2.4	42
46	Structure and Evolution of the HumanIKBAGene. Genomics, 1995, 29, 490-495.	2.9	41
47	Tumour stem cells switch sides. Nature, 2010, 468, 770-771.	27.8	38
48	The chemokine CX3CL1 regulates NK cell activity in vivo. Cellular Immunology, 2003, 225, 122-130.	3.0	37
49	Modulation of Endothelial Bone Morphogenetic Protein Receptor Type 2 Activity by Vascular Endothelial Growth Factor Receptor 3 in Pulmonary Arterial Hypertension. Circulation, 2017, 135, 2288-2298.	1.6	36
50	Stem cell-derived endothelial cells/progenitors migrate and pattern in the embryo using the VEGF signaling pathway. Developmental Biology, 2003, 257, 205-219.	2.0	35
51	Alk2/ACVR1 and Alk3/BMPR1A Provide Essential Function for Bone Morphogenetic Proteinâ€“Induced Retinal Angiogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 657-663.	2.4	34
52	Ultrasound Molecular Imaging of VEGFR-2 in Clear-Cell Renal Cell Carcinoma Tracks Disease Response to Antiangiogenic and Notch-Inhibition Therapy. Theranostics, 2018, 8, 141-155.	10.0	33
53	Ups and Downs of Guided Vessel Sprouting: The Role of Polarity. Physiology, 2011, 26, 326-333.	3.1	32
54	Tortuous Microvessels Contribute to Wound Healing via Sprouting Angiogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1903-1912.	2.4	31

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55	Integration of experimental and computational approaches to sprouting angiogenesis. Current Opinion in Hematology, 2012, 19, 184-191.	2.5	30
56	Endothelial Cells Form a Phalanx to Block Tumor Metastasis. Cell, 2009, 136, 810-812.	28.9	29
57	Multiple endothelial cells constitute the tip of developing blood vessels and polarize to promote lumen formation. Development (Cambridge), 2014, 141, 4121-4126.	2.5	28
58	Murine endothelial cells support fetal liver erythropoiesis and myelopoiesis via distinct interactions. British Journal of Haematology, 1997, 98, 798-808.	2.5	27
59	Developmental SMAD6 loss leads to blood vessel hemorrhage and disrupted endothelial cell junctions. Developmental Biology, 2018, 442, 199-209.	2.0	26
60	Excess centrosomes perturb dynamic endothelial cell repolarization during blood vessel formation. Molecular Biology of the Cell, 2016, 27, 1911-1920.	2.1	24
61	Expression and inducibility of vascular adhesion receptors in development. FASEB Journal, 1995, 9, 956-962.	0.5	23
62	SMAD6 transduces endothelial cell flow responses required for blood vessel homeostasis. Angiogenesis, 2021, 24, 387-398.	7.2	22
63	The adaptor protein Shc integrates growth factor and ECM signaling during postnatal angiogenesis. Blood, 2012, 119, 1946-1955.	1.4	21
64	Excess centrosomes disrupt vascular lumenization and endothelial cell adherens junctions. Angiogenesis, 2020, 23, 567-575.	7.2	21
65	Characterization of the vasculogenic block in the absence of vascular endothelial growth factor-A. Blood, 2000, 95, 1979-87.	1.4	21
66	The Ras Activator RasGRP3 Mediates Diabetes-Induced Embryonic Defects and Affects Endothelial Cell Migration. Circulation Research, 2011, 108, 1199-1208.	4.5	19
67	Single-Cell RNA Sequencing Reveals Endothelial Cell Transcriptome Heterogeneity Under Homeostatic Laminar Flow. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 2575-2584.	2.4	19
68	Von Hippel-Lindau mutations disrupt vascular patterning and maturation via Notch. JCI Insight, 2018, 3, .	5.0	19
69	The RhoGEF TEM4 Regulates Endothelial Cell Migration by Suppressing Actomyosin Contractility. PLoS ONE, 2013, 8, e66260.	2.5	18
70	The versatility and paradox of BMP signaling in endothelial cell behaviors and blood vessel function. Cellular and Molecular Life Sciences, 2022, 79, 77.	5.4	18
71	Embryonic Stem Cell Differentiation and the Vascular Lineage. , 2002, 185, 117-125.		15
72	Endoglin moves and shapes endothelial cells. Nature Cell Biology, 2017, 19, 593-595.	10.3	14

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73	Antiangiogenic VEGF-A in peripheral artery disease. Nature Medicine, 2014, 20, 1383-1385.	30.7	13
74	Blood Vessel Patterning on Retinal Astrocytes Requires Endothelial Flt-1 (VEGFR-1). Journal of Developmental Biology, 2019, 7, 18.	1.7	12
75	Bone morphogenetic protein and blood vessels. Current Opinion in Hematology, 2019, 26, 154-160.	2.5	12
76	Assembly and Patterning of Vertebrate Blood Vessels. Trends in Cardiovascular Medicine, 2004, 14, 138-143.	4.9	11
77	LGN Directs Interphase Endothelial Cell Behavior via the Microtubule Network. PLoS ONE, 2015, 10, e0138763.	2.5	11
78	Yolk sac-derived murine macrophage cell line has a counterpart during ES cell differentiation. Developmental Dynamics, 1997, 210, 487-497.	1.8	10
79	Flk1 expression: promiscuity revealed. Blood, 2006, 107, 3-4.	1.4	10
80	Chapter 6 In Vitro Differentiation of Mouse Embryonic Stem Cells Into Primitive Blood Vessels. Methods in Enzymology, 2008, 443, 103-117.	1.0	9
81	Excess centrosomes induce p53â€dependent senescence without DNA damage in endothelial cells. FASEB Journal, 2017, 31, 4295-4304.	0.5	7
82	Endocrine and metabolic characteristics of polyoma large T transgenic mice that develop ACTH-producing pituitary tumors. Journal of Neurosurgery, 1995, 82, 879-885.	1.6	6
83	csf1 is required for early embryonic macrophage development: characterization of the csf1op/csf1opmutation in ES cell-derived macrophages. British Journal of Haematology, 2008, 141, 739-742.	2.5	6
84	Tumor-Derived Factors and Reduced p53 Promote Endothelial Cell Centrosome Over-Duplication. PLoS ONE, 2016, 11, e0168334.	2.5	6
85	Arginine methylation of R81 in Smad6 confines BMP-induced Smad1 signaling. Journal of Biological Chemistry, 2021, 296, 100496.	3.4	4
86	Maintenance and In Vitro Differentiation of Mouse Embryonic Stem Cells to Form Blood Vessels. Current Protocols in Cell Biology, 2007, 34, Unit 23.3.	2.3	3
87	The Beauty and Complexity of Blood Vessel Patterning. Cold Spring Harbor Perspectives in Medicine, 2022, , a041167.	6.2	2
88	Blood island formation in attached cultures of murine embryonic stem cells. Developmental Dynamics, 1996, 205, 1-12.	1.8	1
89	Signaling pathways that regulate blood vessel morphogenesis. FASEB Journal, 2006, 20, A22.	0.5	0
90	The Role of Fltâ€1 (VEGFRâ€1) in Vascular Morphogenesis. FASEB Journal, 2007, 21, A82.	0.5	0

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91	Neurovascular development utilizes VEGFâ€A signaling to regulate blood vessel ingression into the neural tube. FASEB Journal, 2009, 23, 299.1.	0.5	0
92	Variations in Tip Cell Proximity and sFlt1 Gradients Alter VEGF Receptor Activation in a Computational Model. FASEB Journal, 2011, 25, 1091.11.	0.5	0
93	BMP signaling promotes lateral vessel branching. FASEB Journal, 2012, 26, lb49.	0.5	0
94	Multiple endothelial cells constitute the tip of developing blood vessels and polarize to promote lumen formation. Journal of Cell Science, 2014, 127, e1-e1.	2.0	0
95	Vascular development and organogenesis. , 2022, , 241-249.		0