Marcus Fruttiger

List of Publications by Year
in descending order

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107	13,971	36271	37183
papers	citations	51 h-index	96 g-index

114	114	114	16677
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	VEGF guides angiogenic sprouting utilizing endothelial tip cell filopodia. Journal of Cell Biology, 2003, 161, 1163-1177.	2.3	2,483
2	The Notch Ligands Dll4 and Jagged1 Have Opposing Effects on Angiogenesis. Cell, 2009, 137, 1124-1135.	13.5	914
3	Wnt/Î²-catenin signaling controls development of the bloodâ€“brain barrier. Journal of Cell Biology, 2008, 183, 409-417.	2.3	680
4	Involvement of integrins alpha v beta 3 and alpha v beta 5 in ocular neovascular diseases.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 9764-9769.	3.3	444
5	Development of the retinal vasculature. Angiogenesis, 2007, 10, 77-88.	3.7	438
6	FOXO1 couples metabolic activity and growth state in the vascular endothelium. Nature, 2016, 529, 216-220.	13.7	438
7	Consensus guidelines for the use and interpretation of angiogenesis assays. Angiogenesis, 2018, 21, 425-532.	3.7	429
8	Arteriolar and venular patterning in retinas of mice selectively expressing VEGF isoforms. Journal of Clinical Investigation, 2002, 109, 327-336.	3.9	340
9	Platelet-derived growth factor regulates oligodendrocyte progenitor numbers in adult CNS and their response following CNS demyelination. Molecular and Cellular Neurosciences, 2004, 25, 252-262.	1.0	276
10	VEGFR-3 controls tip to stalk conversion at vessel fusion sites by reinforcing Notch signalling. Nature Cell Biology, 2011, 13, 1202-1213.	4.6	272
11	Efficient, inducible Creâ€recombinase activation in vascular endothelium. Genesis, 2008, 46, 74-80.	0.8	260
12	Essential Regulation of CNS Angiogenesis by the Orphan G Proteinâ€“Coupled Receptor GPR124. Science, 2010, 330, 985-989.	6.0	247
13	Perifoveal MÃ¼ller Cell Depletion in a Case of Macular Telangiectasia Type 2. Ophthalmology, 2010, 117, 2407-2416.	2.5	234
14	Arteriolar and venular patterning in retinas of mice selectively expressing VEGF isoforms. Journal of Clinical Investigation, 2002, 109, 327-336.	3.9	229
15	Crucial Role for the Myelin-associated Glycoprotein in the Maintenance of Axon-Myelin Integrity. European Journal of Neuroscience, 1995, 7, 511-515.	1.2	225
16	PDGF Mediates a Neuronâ€“Astrocyte Interaction in the Developing Retina. Neuron, 1996, 17, 1117-1131.	3.8	221
17	Pathogenesis of Arteriovenous Malformations in the Absence of Endoglin. Circulation Research, 2010, 106, 1425-1433.	2.0	212
18	Retinal vasculature development in health and disease. Progress in Retinal and Eye Research, 2018, 63, 1-19.	7.3	210

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19	Development of the mouse retinal vasculature: angiogenesis versus vasculogenesis. Investigative Ophthalmology and Visual Science, 2002, 43, 522-7.	3.3	208
20	Conditional MÃ¼ller Cell Ablation Causes Independent Neuronal and Vascular Pathologies in a Novel Transgenic Model. Journal of Neuroscience, 2012, 32, 15715-15727.	1.7	207
21	cKit Lineage Hemogenic Endothelium-Derived Cells Contribute to Mesenteric Lymphatic Vessels. Cell Reports, 2015, 10, 1708-1721.	2.9	207
22	Tumour ischaemia by interferon-Î³ resembles physiological blood vessel regression. Nature, 2017, 545, 98-102.	13.7	199
23	Retinal lipid and glucose metabolism dictates angiogenesis through the lipid sensor Ffar1. Nature Medicine, 2016, 22, 439-445.	15.2	183
24	Loss of MÃ¼ller's Cells and Photoreceptors inÂMacular Telangiectasia TypeÂ2. Ophthalmology, 2013, 120, 2344-2352.	2.5	181
25	Disruption of the Gene for the Myelin-Associated Glycoprotein Improves Axonal Regrowth along Myelin in C57BL/Wlds Mice. Neuron, 1996, 16, 1107-1113.	3.8	177
26	Serine and Lipid Metabolism in Macular Disease and Peripheral Neuropathy. New England Journal of Medicine, 2019, 381, 1422-1433.	13.9	166
27	YAP/TAZ-CDC42 signaling regulates vascular tip cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10918-10923.	3.3	147
28	Alk1 and Alk5 inhibition by Nrp1 controls vascular sprouting downstream of Notch. Nature Communications, 2015, 6, 7264.	5.8	143
29	Stabilization of the retinal vascular network by reciprocal feedback between blood vessels and astrocytes. Development (Cambridge), 2005, 132, 1855-1862.	1.2	142
30	NRP1 acts cell autonomously in endothelium to promote tip cell function during sprouting angiogenesis. Blood, 2013, 121, 2352-2362.	0.6	142
31	The Effects of Macular Ischemia on Visual Acuity in Diabetic Retinopathy. , 2013, 54, 2353.		138
32	Oxygen-induced retinopathy: a model for vascular pathology in the retina. Eye, 2010, 24, 416-421.	1.1	134
33	Endothelial Wnt/Î²-catenin signaling inhibits glioma angiogenesis and normalizes tumor blood vessels by inducing PDGF-B expression. Journal of Experimental Medicine, 2012, 209, 1611-1627.	4.2	127
34	VEGFR1 signaling in retinal angiogenesis and microinflammation. Progress in Retinal and Eye Research, 2021, 84, 100954.	7.3	123
35	Patterns of Peripheral Retinal and Central Macula Ischemia in Diabetic Retinopathy as Evaluated by Ultra-widefield Fluorescein Angiography. American Journal of Ophthalmology, 2014, 158, 144-153.e1.	1.7	122
36	Endothelial FAK is required for tumour angiogenesis. EMBO Molecular Medicine, 2010, 2, 516-528.	3.3	121

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37	Astrocyte-Derived Vascular Endothelial Growth Factor Stabilizes Vessels in the Developing Retinal Vasculature. PLoS ONE, 2010, 5, e11863.	1.1	120
38	Periodic Delta-like 4 expression in developing retinal arteries. Gene Expression Patterns, 2004, 5, 123-127.	0.3	116
39	Endothelial Depletion of Acvrl1 in Mice Leads to Arteriovenous Malformations Associated with Reduced Endoglin Expression. PLoS ONE, 2014, 9, e98646.	1.1	107
40	Genome-wide analyses identify common variants associated with macular telangiectasia type 2. Nature Genetics, 2017, 49, 559-567.	9.4	105
41	Inhibition of Endothelial p53 Improves Metabolic Abnormalities Related to Dietary Obesity. Cell Reports, 2014, 7, 1691-1703.	2.9	95
42	Platelet-Derived Growth Factor Promotes Repair of Chronically Demyelinated White Matter. Journal of Neuropathology and Experimental Neurology, 2007, 66, 975-988.	0.9	92
43	Biomechanical aspects of axonal damage in glaucoma: A brief review. Experimental Eye Research, 2017, 157, 13-19.	1.2	88
44	PTEN mediates Notch-dependent stalk cell arrest in angiogenesis. Nature Communications, 2015, 6, 7935.	5.8	86
45	Genetic ablation of retinal pigment epithelial cells reveals the adaptive response of the epithelium and impact on photoreceptors. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18728-18733.	3.3	80
46	Reevaluating the Definition of Intraretinal Microvascular Abnormalities and Neovascularization Elsewhere in Diabetic Retinopathy Using Optical Coherence Tomography and Fluorescein Angiography. American Journal of Ophthalmology, 2015, 159, 101-110.e1.	1.7	73
47	Platelet-derived growth factor is constitutively secreted from neuronal cell bodies but not from axons. Current Biology, 2000, 10, 1283-1286.	1.8	72
48	Predictive Factors for the Progression of Diabetic Macular Ischemia. American Journal of Ophthalmology, 2013, 156, 684-692.e1.	1.7	72
49	Role of arteries in oxygen induced vaso-obliteration. Experimental Eye Research, 2003, 77, 305-311.	1.2	66
50	Whole Mount Immunofluorescent Staining of the Neonatal Mouse Retina to Investigate Angiogenesis In vivo. Journal of Visualized Experiments, 2013, , e50546.	0.2	64
51	Quantitative Analysis of Diabetic Macular Ischemia Using Optical Coherence Tomography. , 2014, 55, 417.		63
52	Biological aspects of axonal damage in glaucoma: A brief review. Experimental Eye Research, 2017, 157, 5-12.	1.2	61
53	Abnormal maturation of the retinal vasculature in type XVIII collagen/endostatin deficient mice and changes in retinal glial cells due to lack of collagen types XV and XVIII. FASEB Journal, 2005, 19, 1564-1566.	0.2	54
54	Repeatability and Reproducibility of Choroidal Vessel Layer Measurements in Diabetic Retinopathy Using Enhanced Depth Optical Coherence Tomography. , 2013, 54, 2893.		54

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55	Expression of Neonatal Fc Receptor in the Eye. , 2014, 55, 1607.		54
56	The ubiquitin ligase PDZRN3 is required for vascular morphogenesis through Wnt/planar cell polarity signalling. Nature Communications, 2014, 5, 4832.	5.8	50
57	Endothelial Expression of TGFÎ² Type II Receptor Is Required to Maintain Vascular Integrity during Postnatal Development of the Central Nervous System. PLoS ONE, 2012, 7, e39336.	1.1	49
58	Survivin-Induced Abnormal Ploidy Contributes to Cystic Kidney and Aneurysm Formation. Circulation, 2014, 129, 660-672.	1.6	48
59	A Crucial Role for CDC42 in Senescence-Associated Inflammation and Atherosclerosis. PLoS ONE, 2014, 9, e102186.	1.1	46
60	Crim1 maintains retinal vascular stability during development by regulating endothelial cell Vegfa autocrine signaling. Development (Cambridge), 2014, 141, 448-459.	1.2	44
61	Oxygen modifies artery differentiation and network morphogenesis in the retinal vasculature. Developmental Dynamics, 2005, 233, 822-828.	0.8	42
62	p53 plays a crucial role in endothelial dysfunction associated with hyperglycemia and ischemia. Journal of Molecular and Cellular Cardiology, 2019, 129, 105-117.	0.9	40
63	Tenascin-C expression during Wallerian degeneration in C57BL/Wlds mice: possible implications for axonal regeneration. Journal of Neurocytology, 1995, 24, 1-14.	1.6	38
64	Acute Depletion of Endothelial Î²3-Integrin Transiently Inhibits Tumor Growth and Angiogenesis in Mice. Circulation Research, 2014, 114, 79-91.	2.0	36
65	Diverse Functions of Retinoic Acid in Brain Vascular Development. Journal of Neuroscience, 2016, 36, 7786-7801.	1.7	35
66	Macular Telangiectasia Type 2: Visual Acuity, Disease End Stage, and the MacTel Area. Ophthalmology, 2020, 127, 1539-1548.	2.5	34
67	Apelin Is Required for Non-Neovascular Remodeling in the Retina. American Journal of Pathology, 2012, 180, 399-409.	1.9	31
68	Conditional MÃ¼ller Cell Ablation Leads to Retinal Iron Accumulation. , 2017, 58, 4223.		28
69	Selective deletion of the endothelial sphingosine-1-phosphate 1 receptor exacerbates kidney ischemiaâ€“reperfusion injury. Kidney International, 2014, 85, 807-823.	2.6	27
70	Quantification of vascular tortuosity as an early outcome measure in oxygen induced retinopathy (OIR). Experimental Eye Research, 2014, 120, 55-60.	1.2	27
71	ABNORMAL RETINAL REFLECTIVITY TO SHORT-WAVELENGTH LIGHT IN TYPE 2 IDIOPATHIC MACULAR TELANGIECTASIA. Retina, 2018, 38, S79-S88.	1.0	26
72	Visualization of gene expression in whole mouse retina by in situ hybridization. Nature Protocols, 2012, 7, 1086-1096.	5.5	25

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73	Evaluation of Nonperfused Retinal Vessels in Ischemic Retinopathy. , 2016, 57, 5031.		25
74	Suppression of transient receptor potential canonical channel 4 inhibits vascular endothelial growth factor-induced retinal neovascularization. Cell Calcium, 2015, 57, 101-108.	1.1	24
75	Systemic lipid dysregulation is a risk factor for macular neurodegenerative disease. Scientific Reports, 2020, 10, 12165.	1.6	24
76	Von Hippel-Lindau protein in the RPE is essential for normal ocular growth and vascular development. Development (Cambridge), 2012, 139, 2340-2350.	1.2	23
77	Endothelial-Rac1 Is Not Required for Tumor Angiogenesis unless Î±vÎ²3-Integrin Is Absent. PLoS ONE, 2010, 5, e9766.	1.1	22
78	Pilot Application of iTRAQ to the Retinal Disease Macular Telangiectasia. Journal of Proteome Research, 2012, 11, 537-553.	1.8	22
79	Diabetic macular ischaemia is associated with narrower retinal arterioles in patients with type 2 diabetes. Acta Ophthalmologica, 2015, 93, e45-51.	0.6	22
80	Basement membrane changes in capillaries of the ageing human retina. British Journal of Ophthalmology, 2011, 95, 1316-1322.	2.1	17
81	RhoJ integrates attractive and repulsive cues in directional migration of endothelial cells. EMBO Journal, 2020, 39, e102930.	3.5	17
82	Analysis of candidate genes for macular telangiectasia type 2. Molecular Vision, 2010, 16, 2718-26.	1.1	17
83	ELECTROPHYSIOLOGICAL CHARACTERIZATION OF MACULAR TELANGIECTASIA TYPE 2 AND STRUCTUREâ€“FUNCTION CORRELATION. Retina, 2018, 38, S33-S42.	1.0	15
84	Neuropilin 1 Involvement in Choroidal and Retinal Neovascularisation. PLoS ONE, 2017, 12, e0169865.	1.1	14
85	Intravitreally Injected Anti-VEGF Antibody Reduces Brown Fat in Neonatal Mice. PLoS ONE, 2015, 10, e0134308.	1.1	13
86	Pleiotropic action of CpG-ODN on endothelium and macrophages attenuates angiogenesis through distinct pathways. Scientific Reports, 2016, 6, 31873.	1.6	13
87	Binocular Inhibition of Reading in Macular Telangiectasia Type 2. , 2019, 60, 3835.		13
88	Contrast sensitivity and visual acuity under low light conditions in macular telangiectasia type 2. British Journal of Ophthalmology, 2019, 103, 398-403.	2.1	12
89	Dark-Adapted Two-Color Fundus-Controlled Perimetry in Macular Telangiectasia Type 2. , 2019, 60, 1760.		11
90	FUNDUS-WIDE SUBRETINAL AND PIGMENT EPITHELIAL ABNORMALITIES IN MACULAR TELANGIECTASIA TYPE 2. Retina, 2018, 38, S105-S113.	1.0	10

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91	Depot Indocyanine green dye forin vivovisualization of infiltrating leukocytes. DMM Disease Models and Mechanisms, 2015, 8, 1479-87.	1.2	9
92	Longitudinal Assessment of Remnant Foveal Cone Structure in a Case Series of Early Macular Telangiectasia Type 2. Translational Vision Science and Technology, 2020, 9, 27.	1.1	8
93	Inhibition of stromal cellâ€"derived factor-1Î±/CXCR4 signaling restores the blood-retina barrier in pericyte-deficient mouse retinas. JCI Insight, 2018, 3, .	2.3	8
94	Associations of Alcohol Consumption and Smoking With Disease Risk and Neurodegeneration in Individuals With Multiple Sclerosis in the United Kingdom. JAMA Network Open, 2022, 5, e220902.	2.8	8
95	MACULAR TELANGIECTASIA TYPE 2. Retina, 2018, 38, S97-S104.	1.0	6
96	Intravenous indocyanine green dye is insufficient for robust immune cell labelling in the human retina. PLoS ONE, 2020, 15, e0226311.	1.1	6
97	VEGF Gene Regulation. , 2008, , 30-39.		6
98	Keeping blood vessels out of sight. ELife, 2013, 2, e00948.	2.8	4
99	Intraretinal pigmented cells in retinal degenerative disease. British Journal of Ophthalmology, 2023, 107, 1736-1743.	2.1	4
100	EFFECT OF DARK ADAPTATION AND BLEACHING ON BLUE LIGHT REFLECTANCE IMAGING IN MACULAR TELANGIECTASIA TYPE 2. Retina, 2018, 38, S89-S96.	1.0	3
101	High-Resolution In Vivo Fundus Angiography using a Nonadaptive Optics Imaging System. Translational Vision Science and Technology, 2019, 8, 54.	1.1	3
102	Synergistic effect of vascular endothelial growth factor gene inactivation in endothelial cells and skeletal myofibres on muscle enzyme activity, capillary supply and endurance exercise in mice. Experimental Physiology, 2020, 105, 2168-2177.	0.9	2
103	Notch Signaling in Vascular Development. , 2012, , 45-57.		1
104	Title is missing!. , 2020, 15, e0226311.		0
105	Title is missing!. , 2020, 15, e0226311.		0
106	Title is missing!. , 2020, 15, e0226311.		0
107	Title is missing!. , 2020, 15, e0226311.		0