David A Antonetti

List of Publications by Year
in descending order

108 papers	12,530 citations	50276 46 h-index	48315 88 g-index
112 all docs	112 docs citations	112 times ranked	10622 citing authors

#	Article	IF	Citations
1	Structure and function of the retina of low-density lipoprotein receptor-related protein 5 (Lrp5)-deficient rats. Experimental Eye Research, 2022, 217, 108977.	2.6	0
2	Current understanding of the molecular and cellular pathology of diabetic retinopathy. Nature Reviews Endocrinology, 2021, 17, 195-206.	9.6	213
3	Vascular Expression of Permeability-Resistant Occludin Mutant Preserves Visual Function in Diabetes. Diabetes, 2021, 70, 1549-1560.	0.6	13
4	Regulation of Adrenergic, Serotonin, and Dopamine Receptors to Inhibit Diabetic Retinopathy: Monotherapies versus Combination Therapies. Molecular Pharmacology, 2021, 100, 470-479.	2.3	6
5	Correlation of Retinal Structure and Visual Function Assessments in Mouse Diabetes Models. , 2021, 62, 20.		18
6	Inflammatory resolution and vascular barrier restoration after retinal ischemia reperfusion injury. Journal of Neuroinflammation, 2021, 18, 186.	7.2	36
7	The neuroscience of diabetic retinopathy. Visual Neuroscience, 2021, 38, E001.	1.0	6
8	Organ-On-A-Chip Technologies for Advanced Bloodâ€"Retinal Barrier Models. Journal of Ocular Pharmacology and Therapeutics, 2020, 36, 30-41.	1.4	23
9	All-<i>trans</i>-Retinaldehyde Contributes to Retinal Vascular Permeability in Ischemia Reperfusion. , 2020, 61, 8.		5
10	Targeting Neurovascular Interaction in Retinal Disorders. International Journal of Molecular Sciences, 2020, 21, 1503.	4.1	26
11	Norrin restores blood-retinal barrier properties after vascular endothelial growth factorâ€"induced permeability. Journal of Biological Chemistry, 2020, 295, 4647-4660.	3.4	28
12	Synthesis and structure-activity relationships of thieno[2,3-d]pyrimidines as atypical protein kinase C inhibitors to control retinal vascular permeability and cytokine-induced edema. Bioorganic and Medicinal Chemistry, 2020, 28, 115480.	3.0	1
13	Pathophysiology of Diabetic Retinopathy: Contribution and Limitations of Laboratory Research. Ophthalmic Research, 2019, 62, 196-202.	1.9	25
14	Tight Junctions in Cell Proliferation. International Journal of Molecular Sciences, 2019, 20, 5972.	4.1	48
15	Tight junction protein occludin regulates progenitor Self-Renewal and survival in developing cortex. ELife, 2019, 8, .	6.0	27
16	Retinal pH and Acid Regulation During Metabolic Acidosis. Current Eye Research, 2018, 43, 902-912.	1.5	13
17	ELOVL4-Mediated Production of Very Long-Chain Ceramides Stabilizes Tight Junctions and Prevents Diabetes-Induced Retinal Vascular Permeability. Diabetes, 2018, 67, 769-781.	0.6	41
18	The EPACâ€"Rap1 pathway prevents and reverses cytokine-induced retinal vascular permeability. Journal of Biological Chemistry, 2018, 293, 717-730.	3.4	48

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19	Inhibition of Atypical Protein Kinase C Reduces Inflammation-Induced Retinal Vascular Permeability. American Journal of Pathology, 2018, 188, 2392-2405.	3.8	18
20	Brain endothelial cell junctions after cerebral hemorrhage: Changes, mechanisms and therapeutic targets. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1255-1275.	4.3	123
21	The role of small GTPases and EPAC-Rap signaling in the regulation of the blood-brain and blood-retinal barriers. Tissue Barriers, 2017, 5, e1339768.	3.2	22
22	Cell autonomous sonic hedgehog signaling contributes to maintenance of retinal endothelial tight junctions. Experimental Eye Research, 2017, 164, 82-89.	2.6	4
23	The inner blood-retinal barrier: Cellular basis and development. Vision Research, 2017, 139, 123-137.	1.4	192
24	Protective Effect of a GLP-1 Analog on Ischemia-Reperfusion Induced Bloodâ€“Retinal Barrier Breakdown and Inflammation. , 2016, 57, 2584.		41
25	Moving Past Anti-VEGF: Novel Therapies for Treating Diabetic Retinopathy. International Journal of Molecular Sciences, 2016, 17, 1498.	4.1	82
26	Occludin S471 Phosphorylation Contributes to Epithelial Monolayer Maturation. Molecular and Cellular Biology, 2016, 36, 2051-2066.	2.3	19
27	Occludin S490 Phosphorylation Regulates Vascular Endothelial Growth Factorâ€“Induced Retinal Neovascularization. American Journal of Pathology, 2016, 186, 2486-2499.	3.8	37
28	â€œSmall Blood Vessels: Big Health Problems?â€ Scientific Recommendations of the National Institutes of Health Workshop. Journal of the American Heart Association, 2016, 5, .	3.7	67
29	Algorithm for the Measure of Vitreous Hyperreflective Foci in Optical Coherence Tomographic Scans of Patients With Diabetic Macular Edema. JAMA Ophthalmology, 2016, 134, 15.	2.5	26
30	Adrenergic and serotonin receptors affect retinal superoxide generation in diabetic mice: relationship to capillary degeneration and permeability. FASEB Journal, 2015, 29, 2194-2204.	0.5	45
31	Retinylamine Benefits Early Diabetic Retinopathy in Mice. Journal of Biological Chemistry, 2015, 290, 21568-21579.	3.4	44
32	Ischemiaâ€“Reperfusion Injury Induces Occludin Phosphorylation/Ubiquitination and Retinal Vascular Permeability in a VEGFR-2-Dependent Manner. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 522-531.	4.3	78
33	Mechanism of metabolic stroke and spontaneous cerebral hemorrhage in glutaric aciduria type I. Acta Neuropathologica Communications, 2014, 2, 13.	5.2	28
34	Ocular Anti-VEGF Therapy for Diabetic Retinopathy: The Role of VEGF in the Pathogenesis of Diabetic Retinopathy. Diabetes Care, 2014, 37, 893-899.	8.6	198
35	Minocycline prevents retinal inflammation and vascular permeability following ischemia-reperfusion injury. Journal of Neuroinflammation, 2013, 10, 149.	7.2	104
36	Synthesis and structureâ€“activity relationships of 2-amino-3-carboxy-4-phenylthiophenes as novel atypical protein kinase C inhibitors. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 3034-3038.	2.2	13

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37	Using the Past to Inform the Future: Anti-VEGF Therapy as a Road Map to Develop Novel Therapies for Diabetic Retinopathy. Diabetes, 2013, 62, 1808-1815.	0.6	48
38	Glucocorticoid Induction of Occludin Expression and Endothelial Barrier Requires Transcription Factor p54 NONO. , 2013, 54, 4007.		34
39	Polychromatic Angiography for the Assessment of VEGF-Induced BRB Dysfunction in the Rabbit Retina. , 2013, 54, 5550.		3
40	A Role for Systemic Inflammation in Diabetic Retinopathy. , 2013, 54, 2384.		15
41	High Glucose Attenuates Shear-Induced Changes in Endothelial Hydraulic Conductivity by Degrading the Glycocalyx. PLoS ONE, 2013, 8, e78954.	2.5	49
42	Novel atypical PKC inhibitors prevent vascular endothelial growth factor-induced bloodâ€"retinal barrier dysfunction. Biochemical Journal, 2012, 446, 455-467.	3.7	60
43	Occludin Is a Direct Target of Thyroid Transcription Factor-1 (TTF-1/NKX2â€"1). Journal of Biological Chemistry, 2012, 287, 28790-28801.	3.4	43
44	Protein Kinase CÎ² Phosphorylates Occludin Regulating Tight Junction Trafficking in Vascular Endothelial Growth Factorâ€"Induced Permeability In Vivo. Diabetes, 2012, 61, 1573-1583.	0.6	133
45	The occludin and ZO-1 complex, defined by small angle X-ray scattering and NMR, has implications for modulating tight junction permeability. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10855-10860.	7.1	46
46	Diabetic Retinopathy. New England Journal of Medicine, 2012, 366, 1227-1239.	27.0	1,363
47	Molecular Regulation of Endothelial Cell Tight Junctions and the Blood-Retinal Barrier. , 2012, , 123-141.		0
48	Occludin Localizes to Centrosomes and Modifies Mitotic Entry*. Journal of Biological Chemistry, 2011, 286, 30847-30858.	3.4	33
49	The Blood-Retinal Barrier: Structure and Functional Significance. Methods in Molecular Biology, 2011, 686, 133-148.	0.9	131
50	Placenta Growth Factor-1 Exerts Time-Dependent Stabilization of Adherens Junctions Following VEGF-Induced Vascular Permeability. PLoS ONE, 2011, 6, e18076.	2.5	35
51	Alterations to the Bloodâ€"Retinal Barrier in Diabetes: Cytokines and Reactive Oxygen Species. Antioxidants and Redox Signaling, 2011, 15, 1271-1284.	5.4	114
52	A Three-Pore Model Describes Transport Properties of Bovine Retinal Endothelial Cells in Normal and Elevated Glucose. , 2011, 52, 1171.		12
53	Effects of Ischemic Preconditioning and Bevacizumab on Apoptosis and Vascular Permeability Following Retinal Ischemiaâ€"Reperfusion Injury. , 2010, 51, 5920.		70
54	Ablation of 4E-BP1/2 Prevents Hyperglycemia-Mediated Induction of VEGF Expression in the Rodent Retina and in MÃ¼ller Cells in Culture. Diabetes, 2010, 59, 2107-2116.	0.6	41

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55	A multistep validation process of biomarkers for preclinical drug development. Pharmacogenomics Journal, 2010, 10, 385-395.	2.0	27
56	TNF-Î± Signals Through PKCÎ¶/NF-Îº B to Alter the Tight Junction Complex and Increase Retinal Endothelial Cell Permeability. Diabetes, 2010, 59, 2872-2882.	0.6	343
57	Occludin Phosphorylation and Ubiquitination Regulate Tight Junction Trafficking and Vascular Endothelial Growth Factor-induced Permeability. Journal of Biological Chemistry, 2009, 284, 21036-21046.	3.4	301
58	Efficacy of interleukin-13 receptorâ€“targeted liposomal doxorubicin in the intracranial brain tumor model. Molecular Cancer Therapeutics, 2009, 8, 648-654.	4.1	110
59	Eye vessels saved by rescuing their pericyte partners. Nature Medicine, 2009, 15, 1248-1249.	30.7	15
60	Identification and Analysis of Occludin Phosphosites: A Combined Mass Spectrometry and Bioinformatics Approach. Journal of Proteome Research, 2009, 8, 808-817.	3.7	66
61	Phosphorylation Site Mapping of Endogenous Proteins: A Combined MS and Bioinformatics Approach. Journal of Proteome Research, 2009, 8, 798-807.	3.7	10
62	Phosphorylation of the Tight Junction Protein Occludin on Ser490 Regulates Barrier Function and Contributes to Growth Control. FASEB Journal, 2009, 23, 996.2.	0.5	0
63	Novel potential mechanisms for diabetic macular edema: Leveraging new investigational approaches. Current Diabetes Reports, 2008, 8, 263-269.	4.2	37
64	Whole genome assessment of the retinal response to diabetes reveals a progressive neurovascular inflammatory response. BMC Medical Genomics, 2008, 1, 26.	1.5	98
65	Glucocorticoids induce transactivation of tight junction genes occludin and claudin-5 in retinal endothelial cells via a novel cis-element. Experimental Eye Research, 2008, 86, 867-878.	2.6	81
66	Occludin Independently Regulates Permeability under Hydrostatic Pressure and Cell Division in Retinal Pigment Epithelial Cells. , 2008, 49, 2568.		33
67	Vascular Permeability in Diabetic Retinopathy. , 2008, , 333-352.		4
68	A prize catch for diabetic retinopathy. Nature Medicine, 2007, 13, 131-132.	30.7	22
69	Vascular permeability in ocular disease and the role of tight junctions. Angiogenesis, 2007, 10, 103-117.	7.2	166
70	Blood Retinal Barrier. , 2007, , 139-166.		4
71	Ruboxistaurin for Diabetic Retinopathy. Ophthalmology, 2006, 113, 2135-2136.	5.2	10
72	VEGF Activation of Protein Kinase C Stimulates Occludin Phosphorylation and Contributes to Endothelial Permeability. , 2006, 47, 5106.		215

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73	Pharmacologic Manipulation of Sphingosine Kinase in Retinal Endothelial Cells: Implications for Angiogenic Ocular Diseases. , 2006, 47, 5022.		65
74	A diet-induced mouse model for glutaric aciduria type I. Brain, 2006, 129, 899-910.	7.6	106
75	New insights for glutaric aciduria type I. Brain, 2006, 129, e55-e55.	7.6	6
76	Diabetes Reduces Basal Retinal Insulin Receptor Signaling: Reversal With Systemic and Local Insulin. Diabetes, 2006, 55, 1148-1156.	0.6	164
77	Diabetic Retinopathy. Diabetes, 2006, 55, 2401-2411.	0.6	673
78	Shear Stress Regulates HUVEC Hydraulic Conductivity by Occludin Phosphorylation. Annals of Biomedical Engineering, 2005, 33, 1536-1545.	2.5	32
79	The Ins2^{Akita}Mouse as a Model of Early Retinal Complications in Diabetes. , 2005, 46, 2210.		442
80	Glucocorticoid Regulation of Endothelial Cell Tight Junction Gene Expression: Novel Treatments for Diabetic Retinopathy. Current Eye Research, 2005, 30, 949-957.	1.5	102
81	Evaluation of the role of P-glycoprotein in the uptake of paroxetine, clozapine, phenytoin and carbamazapine by bovine retinal endothelial cells. Neuropharmacology, 2005, 49, 610-617.	4.1	86
82	Insulin Promotes Rat Retinal Neuronal Cell Survival in a p70S6K-dependent Manner. Journal of Biological Chemistry, 2004, 279, 9167-9175.	3.4	74
83	VEGF increases paracellular transport without altering the solvent-drag reflection coefficient. Microvascular Research, 2004, 68, 295-302.	2.5	17
84	Regulation of tight junctions and loss of barrier function in pathophysiology. International Journal of Biochemistry and Cell Biology, 2004, 36, 1206-1237.	2.8	467
85	A transmural pressure gradient induces mechanical and biological adaptive responses in endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 286, H731-H741.	3.2	48
86	Isolation and Characterization of Retinal Endothelial Cells. , 2003, 89, 365-374.		25
87	Characterization of insulin signaling in rat retina in vivo and ex vivo. American Journal of Physiology - Endocrinology and Metabolism, 2003, 285, E763-E774.	3.5	101
88	Mapping the Blood Vessels with Paracellular Permeability in the Retinas of Diabetic Rats. , 2003, 44, 5410.		98
89	Diabetic Retinopathy. Survey of Ophthalmology, 2002, 47, S253-S262.	4.0	499
90	Platelet-derived growth factor mediates tight junction redistribution and increases permeability in MDCK cells. Journal of Cellular Physiology, 2002, 193, 349-364.	4.1	63

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91	Hydrocortisone decreases retinal endothelial cell water and solute flux coincident with increased content and decreased phosphorylation of occludin. Journal of Neurochemistry, 2002, 80, 667-677.	3.9	257
92	New Insights into the Molecular Mechanisms of Vascular Permeability in Diabetes. , 2002, , 23-33.		0
93	Shear stress regulates occludin content and phosphorylation. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H105-H113.	3.2	106
94	Excessive Hexosamines Block the Neuroprotective Effect of Insulin and Induce Apoptosis in Retinal Neurons. Journal of Biological Chemistry, 2001, 276, 43748-43755.	3.4	162
95	Insulin Rescues Retinal Neurons from Apoptosis by a Phosphatidylinositol 3-Kinase/Akt-mediated Mechanism That Reduces the Activation of Caspase-3. Journal of Biological Chemistry, 2001, 276, 32814-32821.	3.4	279
96	Retinal neurodegeneration: early pathology in diabetes. Clinical and Experimental Ophthalmology, 2000, 28, 3-8.	2.6	313
97	Diabetes Reduces Glutamate Oxidation and Glutamine Synthesis in the Retina. Experimental Eye Research, 2000, 70, 723-730.	2.6	163
98	Review Paper: New Insights into the Pathophysiology of Diabetic Retinopathy: Potential Cell-Specific Therapeutic Targets. Diabetes Technology and Therapeutics, 2000, 2, 601-608.	4.4	62
99	The molecular structure and function of the inner blood-retinal barrier. , 2000, , 25-33.		0
100	Leucine, Glutamine, and Tyrosine Reciprocally Modulate the Translation Initiation Factors eIF4F and eIF2B in Perfused Rat Liver. Journal of Biological Chemistry, 1999, 274, 36168-36175.	3.4	29
101	Vascular Endothelial Growth Factor Induces Rapid Phosphorylation of Tight Junction Proteins Occludin and Zonula Occluden 1. Journal of Biological Chemistry, 1999, 274, 23463-23467.	3.4	575
102	Molecular Mechanisms of Vascular Permeability in Diabetic Retinopathy. Seminars in Ophthalmology, 1999, 14, 240-248.	1.6	202
103	The molecular structure and function of the inner blood-retinal barrier. Penn State Retina Research Group. Documenta Ophthalmologica, 1999, 97, 229-237.	2.2	64
104	Vascular permeability in experimental diabetes is associated with reduced endothelial occludin content: vascular endothelial growth factor decreases occludin in retinal endothelial cells. Penn State Retina Research Group.. Diabetes, 1998, 47, 1953-1959.	0.6	547
105	Neural apoptosis in the retina during experimental and human diabetes. Early onset and effect of insulin.. Journal of Clinical Investigation, 1998, 102, 783-791.	8.2	1,090
106	Insulin Receptor Substrate Proteins Create a Link between the Tyrosine Phosphorylation Cascade and the Ca2+-ATPases in Muscle and Heart. Journal of Biological Chemistry, 1997, 272, 23696-23702.	3.4	70
107	Rad, a Novel Ras-related GTPase, Interacts with Skeletal Muscle Î²-Tropomyosin. Journal of Biological Chemistry, 1996, 271, 768-773.	3.4	48
108	P-124: Novel interactions of IRS-1 in human skeletal muscle. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 145-146.	1.2	3