Thomas W Gardner

List of Publications by Year
in descending order

149 papers	13,693 citations	46918 47 h-index	25716 108 g-index
151 all docs	151 docs citations	151 times ranked	11832 citing authors

#	Article	IF	Citations
1	It is time for a moonshot to find â€œCuresâ€•for diabetic retinal disease. Progress in Retinal and Eye Research, 2022, 90, 101051.	7.3	15
2	mTORC1 regulates high levels of protein synthesis in retinal ganglion cells of adult mice. Journal of Biological Chemistry, 2022, 298, 101944.	1.6	2
3	A critical review: Psychophysical assessments of diabetic retinopathy. Survey of Ophthalmology, 2021, 66, 213-230.	1.7	21
4	Updating the Staging System for Diabetic Retinal Disease. Ophthalmology, 2021, 128, 490-493.	2.5	49
5	Integrative Biology of Diabetic Retinal Disease: Lessons from Diabetic Kidney Disease. Journal of Clinical Medicine, 2021, 10, 1254.	1.0	10
6	Proteomic Analyses of Vitreous in Proliferative Diabetic Retinopathy: Prior Studies and Future Outlook. Journal of Clinical Medicine, 2021, 10, 2309.	1.0	6
7	Awareness of Diabetic Retinopathy: Insight From the National Health and Nutrition Examination Survey. American Journal of Preventive Medicine, 2021, 61, 900-909.	1.6	10
8	Diminished retinal complex lipid synthesis and impaired fatty acid Î²-oxidation associated with human diabetic retinopathy. JCI Insight, 2021, 6, .	2.3	20
9	Insulin-like growth factor-2 regulates basal retinal insulin receptor activity. Journal of Biological Chemistry, 2021, 296, 100712.	1.6	5
10	Lapses in Care Among Patients Assigned to Ranibizumab for Proliferative Diabetic Retinopathy. JAMA Ophthalmology, 2021, 139, 1266.	1.4	12
11	A validated analysis pipeline for mass spectrometry-based vitreous proteomics: new insights into proliferative diabetic retinopathy. Clinical Proteomics, 2021, 18, 28.	1.1	4
12	Density-based classification in diabetic retinopathy through thickness of retinal layers from optical coherence tomography. Scientific Reports, 2020, 10, 15937.	1.6	8
13	Randomized Safety and Feasibility Trial of Ultra-Rapid Cooling Anesthesia for Intravitreal Injections. Ophthalmology Retina, 2020, 4, 979-986.	1.2	4
14	Treated PDR Reveals Age-Appropriate Vision Deterioration But Distorted Retinal Organization. Translational Vision Science and Technology, 2020, 9, 3.	1.1	2
15	mTORC1 and mTORC2 expression in inner retinal neurons and glial cells. Experimental Eye Research, 2020, 197, 108131.	1.2	13
16	The Prevalence and Determinants of Cognitive Deficits and Traditional Diabetic Complications in the Severely Obese. Diabetes Care, 2020, 43, 683-690.	4.3	38
17	Visual Field Changes Over 5 Years in Patients Treated With Panretinal Photocoagulation or Ranibizumab for Proliferative Diabetic Retinopathy. JAMA Ophthalmology, 2020, 138, 285.	1.4	35
18	Patient-Reported Outcomes Reveal Impairments Not Explained by Psychophysical Testing in Patients With Regressed PDR. Translational Vision Science and Technology, 2019, 8, 11.	1.1	5

#	Article	IF	Citations
19	New insights into the mechanisms of diabetic complications: role of lipids and lipid metabolism. Diabetologia, 2019, 62, 1539-1549.	2.9	240
20	Identification of population characteristics through implementation of the Comprehensive Diabetic Retinopathy Program. Clinical Diabetes and Endocrinology, 2019, 5, 6.	1.3	1
21	Risk Factors for Retinopathy in Type 1 Diabetes: The DCCT/EDIC Study. Diabetes Care, 2019, 42, 875-882.	4.3	114
22	Antiâ€"Vascular Endothelial Growth Factor Therapy for Diabetic Retinopathy: Consequences of Inadvertent Treatment Interruptions. American Journal of Ophthalmology, 2019, 204, 13-18.	1.7	51
23	Reading deficits in diabetic patients treated with panretinal photocoagulation and good visual acuity. Acta Ophthalmologica, 2019, 97, e1013-e1018.	0.6	3
24	Blood Pressure Is Associated with Receiving Intravitreal Antiâ€"Vascular Endothelial Growth Factor Treatment in Patients with Diabetes. Ophthalmology Retina, 2019, 3, 410-416.	1.2	12
25	Increased lipogenesis and impaired Î²-oxidation predict type 2 diabetic kidney disease progression in American Indians. JCI Insight, 2019, 4, .	2.3	74
26	Shared and distinct lipid-lipid interactions in plasma and affected tissues in a diabetic mouse model. Journal of Lipid Research, 2018, 59, 173-183.	2.0	38
27	Disorganization of Retinal Inner Layers (DRIL) and Neuroretinal Dysfunction in Early Diabetic Retinopathy. , 2018, 59, 5481.		64
28	Neurodegeneration in diabetic retinopathy: does it really matter?. Diabetologia, 2018, 61, 1902-1912.	2.9	358
29	Five-Year Outcomes of Panretinal Photocoagulation vs Intravitreous Ranibizumab for Proliferative Diabetic Retinopathy. JAMA Ophthalmology, 2018, 136, 1138.	1.4	264
30	Approach for a Clinically Useful Comprehensive Classification of Vascular and Neural Aspects of Diabetic Retinal Disease. , 2018, 59, 519.		62
31	Proteomic Analysis of Early Diabetic Retinopathy Reveals Mediators of Neurodegenerative Brain Diseases. , 2018, 59, 2264.		91
32	Developmental and light regulation of tumor suppressor protein PP2A in the retina. Oncotarget, 2018, 9, 1505-1523.	0.8	7
33	Diabetic Retinopathy: A Position Statement by the American Diabetes Association. Diabetes Care, 2017, 40, 412-418.	4.3	596
34	Incidence and Risk Factors for Developing Diabetic Retinopathy among Youths with Type 1 or Type 2 Diabetes throughout the United States. Ophthalmology, 2017, 124, 424-430.	2.5	111
35	Impaired Retinal Vasoreactivity: An Early Marker of Stroke Risk in Diabetes. Journal of Neuroimaging, 2017, 27, 78-84.	1.0	16
36	Ophthalmic Screening Patterns Among Youths With Diabetes Enrolled in a Large US Managed Care Network. JAMA Ophthalmology, 2017, 135, 432.	1.4	45

#	Article	IF	Citations
37	Reply. Ophthalmology, 2017, 124, e69-e70.	2.5	0
38	A proposal for early and personalized treatment of diabetic retinopathy based on clinical pathophysiology and molecular phenotyping. Vision Research, 2017, 139, 153-160.	0.7	32
39	The neurovascular unit and the pathophysiologic basis of diabetic retinopathy. Graefe's Archive for Clinical and Experimental Ophthalmology, 2017, 255, 1-6.	1.0	129
40	Multidimensional Functional and Structural Evaluation Reveals Neuroretinal Impairment in Early Diabetic Retinopathy. , 2017, 58, BIO277.		69
41	Diabetic retinopathy: research to clinical practice. Clinical Diabetes and Endocrinology, 2017, 3, 9.	1.3	41
42	Diabetic Retinopathy and Diabetic Macular Edema. Developments in Ophthalmology, 2016, 55, 137-146.	0.1	92
43	The Effects of Diabetic Retinopathy and Pan-Retinal Photocoagulation on Photoreceptor Cell Function as Assessed by Dark Adaptometry. , 2016, 57, 208.		36
44	Report From the NEI/FDA Diabetic Retinopathy Clinical Trial Design and Endpoints Workshop. , 2016, 57, 5127.		23
45	Safety and Feasibility of Quantitative Multiplexed Cytokine Analysis From Office-Based Vitreous Aspiration. , 2016, 57, 3017.		36
46	Future opportunities in diabetic retinopathy research. Current Opinion in Endocrinology, Diabetes and Obesity, 2016, 23, 91-96.	1.2	11
47	Rates of Vitrectomy among Enrollees in a United States Managed Care Network, 2001â€“2012. Ophthalmology, 2016, 123, 590-598.	2.5	31
48	Burning fat fuels photoreceptors. Nature Medicine, 2016, 22, 342-343.	15.2	12
49	Occludin S490 Phosphorylation Regulates Vascular Endothelial Growth Factorâ€“Induced Retinal Neovascularization. American Journal of Pathology, 2016, 186, 2486-2499.	1.9	37
50	Insulin-like growth factor 1 rescues R28 retinal neurons from apoptotic death through ERK-mediated BimEL phosphorylation independent of Akt. Experimental Eye Research, 2016, 151, 82-95.	1.2	25
51	Bioelectric impact of pathological angiogenesis on vascular function. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9934-9939.	3.3	29
52	Impact of diagnosing diabetic complications on future hemoglobin A1c levels. Journal of Diabetes and Its Complications, 2016, 30, 323-328.	1.2	10
53	Tissue-specific metabolic reprogramming drives nutrient flux in diabetic complications. JCI Insight, 2016, 1, e86976.	2.3	188
54	Subconjunctivally Implanted Hydrogels for Sustained Insulin Release to Reduce Retinal Cell Apoptosis in Diabetic Rats. , 2015, 56, 7839.		23

#	Article	IF	Citations
55	Impaired coronary and retinal vasomotor function to hyperoxia in Individuals with Type 2 diabetes. Microvascular Research, 2015, 101, 1-7.	1.1	14
56	Multimodal Characterization of Proliferative Diabetic Retinopathy Reveals Alterations in Outer Retinal Function and Structure. Ophthalmology, 2015, 122, 957-967.	2.5	49
57	Phosphatase control of 4E-BP1 phosphorylation state is central for glycolytic regulation of retinal protein synthesis. American Journal of Physiology - Endocrinology and Metabolism, 2015, 309, E546-E556.	1.8	22
58	Retinal Failure in Diabetes: a Feature of Retinal Sensory Neuropathy. Current Diabetes Reports, 2015, 15, 107.	1.7	12
59	Diabetic retinopathy: loss of neuroretinal adaptation to the diabetic metabolic environment. Annals of the New York Academy of Sciences, 2014, 1311, 174-190.	1.8	186
60	Visual Fields Refine Understanding of Diabetic Retinopathy Progression. Diabetes, 2014, 63, 2909-2910.	0.3	1
61	Time to Look Back and to Look Forward. Diabetes, 2014, 63, 1169-1170.	0.3	0
62	Effect of Doxycycline vs Placebo on Retinal Function and Diabetic Retinopathy Progression in Patients With Severe Nonproliferative or Nonâ€"High-Risk Proliferative Diabetic Retinopathy. JAMA Ophthalmology, 2014, 132, 535.	1.4	55
63	Effect of Doxycycline vs Placebo on Retinal Function and Diabetic Retinopathy Progression in Mild to Moderate Nonproliferative Diabetic Retinopathy. JAMA Ophthalmology, 2014, 132, 1137.	1.4	27
64	Differential reduction in corneal nerve fiber length in patients with type 1 or type 2 diabetes mellitus. Journal of Diabetes and Its Complications, 2014, 28, 658-661.	1.2	47
65	mTORC1-Independent Reduction of Retinal Protein Synthesis in Type 1 Diabetes. Diabetes, 2014, 63, 3077-3090.	0.3	24
66	Predicting Development of Proliferative Diabetic Retinopathy. Diabetes Care, 2013, 36, 1562-1568.	4.3	86
67	Nanoliposomal minocycline for ocular drug delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 130-140.	1.7	49
68	Current and future management of diabetic retinopathy: a personalized evidence-based approach. Diabetes Management, 2013, 3, 481-494.	0.5	10
69	Impaired retinal vasodilator responses in prediabetes and type 2 diabetes. Acta Ophthalmologica, 2013, 91, e462-e469.	0.6	50
70	Quantification of Fundus Autofluorescence to Detect Disease Severity in Nonexudative Age-Related Macular Degeneration. JAMA Ophthalmology, 2013, 131, 1009.	1.4	9
71	Neurodegeneration in the Pathogenesis of Diabetic Retinopathy: Molecular Mechanisms and Therapeutic Implications. Current Medicinal Chemistry, 2013, 20, 3241-3250.	1.2	154
72	Diabetes and Nonrefractive Visual Impairment. JAMA - Journal of the American Medical Association, 2012, 308, 2403.	3.8	0

#	Article	IF	Citations
73	Inner retinal visual dysfunction is a sensitive marker of non-proliferative diabetic retinopathy. British Journal of Ophthalmology, 2012, 96, 699-703.	2.1	101
74	Diabetic Retinopathy. New England Journal of Medicine, 2012, 366, 1227-1239.	13.9	1,363
75	Comparison of retinal vasodilator and constrictor responses in type 2 diabetes. Acta Ophthalmologica, 2012, 90, e434-41.	0.6	48
76	Diabetes Diminishes Phosphatidic Acid in the Retina: A Putative Mediator for Reduced mTOR Signaling and Increased Neuronal Cell Death. , 2012, 53, 7257.		12
77	Diabetic macular edema. , 2012, , 536-540.		0
78	The Significance of Vascular and Neural Apoptosis to the Pathology of Diabetic Retinopathy. , 2011, 52, 1156.		361
79	THE RESTORE STUDY. Evidence-Based Ophthalmology, 2011, 12, 206-207.	0.0	6
80	An Integrated Approach to Diabetic Retinopathy Research. JAMA Ophthalmology, 2011, 129, 230.	2.6	83
81	Insulin signaling in retinal neurons is regulated within cholesterol-enriched membrane microdomains. American Journal of Physiology - Endocrinology and Metabolism, 2011, 300, E600-E609.	1.8	8
82	Hydrogels for Ocular Posterior Segment Drug Delivery. AAPS Advances in the Pharmaceutical Sciences Series, 2011, , 291-304.	0.2	3
83	Differential Roles of Hyperglycemia and Hypoinsulinemia in Diabetes Induced Retinal Cell Death: Evidence for Retinal Insulin Resistance. PLoS ONE, 2011, 6, e26498.	1.1	62
84	Ophthalmology Patient Knowledge of Personal and Recommended ABCs of Diabetes Care. JAMA Ophthalmology, 2010, 128, 1495.	2.6	3
85	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.	0.3	41
86	Diabetic retinopathy and diabetic macular edema. , 2010, , 133-136.		1
87	Insulin Signaling in Normal and Diabetic Conditions. , 2010, , 101-118.		1
88	The Retinal Proteome in Experimental Diabetic Retinopathy. Molecular and Cellular Proteomics, 2009, 8, 767-779.	2.5	79
89	Diabetes and Obesity. JAMA Ophthalmology, 2009, 127, 328.	2.6	14
90	Neuroprotection for Diabetic Retinopathy. Developments in Ophthalmology, 2009, 44, 56-68.	0.1	31

#	Article	IF	Citations
91	Subconjunctivally implantable hydrogels with degradable and thermoresponsive properties for sustained release of insulin to the retina. Biomaterials, 2009, 30, 6541-6547.	5.7	86
92	Phosphorylation Site Mapping of Endogenous Proteins: A Combined MS and Bioinformatics Approach. Journal of Proteome Research, 2009, 8, 798-807.	1.8	10
93	Diabetic macular oedema and visual loss: relationship to location, severity and duration. Acta Ophthalmologica, 2009, 87, 709-713.	0.6	36
94	Novel potential mechanisms for diabetic macular edema: Leveraging new investigational approaches. Current Diabetes Reports, 2008, 8, 263-269.	1.7	37
95	Whole genome assessment of the retinal response to diabetes reveals a progressive neurovascular inflammatory response. BMC Medical Genomics, 2008, 1, 26.	0.7	98
96	PDGF- and Insulin/IGF-1â€"Specific Distinct Modes of Class IAPI 3-Kinase Activation in Normal Rat Retinas and RGC-5 Retinal Ganglion Cells. , 2008, 49, 3687.		26
97	Effect of IL-1Î² on Survival and Energy Metabolism of R28 and RGC-5 Retinal Neurons. , 2008, 49, 5581.		35
98	Neuroglial Dysfunction in Diabetic Retinopathy. , 2008, , 283-301.		1
99	Nonobese, insulin-deficient Ins2^{Akita}mice develop type 2 diabetes phenotypes including insulin resistance and cardiac remodeling. American Journal of Physiology - Endocrinology and Metabolism, 2007, 293, E1687-E1696.	1.8	64
100	A prize catch for diabetic retinopathy. Nature Medicine, 2007, 13, 131-132.	15.2	22
101	An Extension of the Early Treatment Diabetic Retinopathy Study (ETDRS) System for Grading of Diabetic Macular Edema in the Astemizole Retinopathy Trial. Current Eye Research, 2006, 31, 535-547.	0.7	24
102	Ruboxistaurin for Diabetic Retinopathy. Ophthalmology, 2006, 113, 2135-2136.	2.5	10
103	VEGF Activation of Protein Kinase C Stimulates Occludin Phosphorylation and Contributes to Endothelial Permeability. , 2006, 47, 5106.		215
104	Analysis of glucose metabolism in diabetic rat retinas. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E1057-E1067.	1.8	84
105	Diabetes Alters Sphingolipid Metabolism in the Retina: A Potential Mechanism of Cell Death in Diabetic Retinopathy. Diabetes, 2006, 55, 3573-3580.	0.3	90
106	Diabetes Reduces Basal Retinal Insulin Receptor Signaling: Reversal With Systemic and Local Insulin. Diabetes, 2006, 55, 1148-1156.	0.3	164
107	Diabetic Retinopathy. Diabetes, 2006, 55, 2401-2411.	0.3	673
108	Dynamic Intraocular Pressure Measurements During Vitrectomy. JAMA Ophthalmology, 2005, 123, 1514.	2.6	31

#	Article	IF	Citations
109	Retinal angiogenesis in development and disease. Nature, 2005, 438, 960-966.	13.7	613
110	The Ins2AkitaMouse as a Model of Early Retinal Complications in Diabetes. , 2005, 46, 2210.		442
111	Minocycline Reduces Proinflammatory Cytokine Expression, Microglial Activation, and Caspase-3 Activation in a Rodent Model of Diabetic Retinopathy. Diabetes, 2005, 54, 1559-1565.	0.3	485
112	Insulin Promotes Rat Retinal Neuronal Cell Survival in a p70S6K-dependent Manner. Journal of Biological Chemistry, 2004, 279, 9167-9175.	1.6	74
113	Retinopathy in Diabetes. Diabetes Care, 2004, 27, S84-S87.	4.3	853
114	VEGF increases paracellular transport without altering the solvent-drag reflection coefficient. Microvascular Research, 2004, 68, 295-302.	1.1	17
115	Optical combing to align photoreceptors in detached retinas. , 2004, , .		0
116	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.	1.5	48
117	Functions of insulin and insulin receptor signaling in retina: possible implications for diabetic retinopathy. Progress in Retinal and Eye Research, 2003, 22, 545-562.	7.3	94
118	Diabetic Retinopathy. Diabetes Care, 2003, 26, 226-229.	4.3	255
119	Characterization of insulin signaling in rat retina in vivo and ex vivo. American Journal of Physiology - Endocrinology and Metabolism, 2003, 285, E763-E774.	1.8	101
120	Light Scatter Causes the Grayness of Detached Retinas. JAMA Ophthalmology, 2003, 121, 1002.	2.6	10
121	An eye on insulin. Journal of Clinical Investigation, 2003, 111, 1817-1819.	3.9	21
122	Optic disk drusen, peripapillary choroidal neovascularization, and POEMS syndrome. American Journal of Ophthalmology, 2002, 133, 275-276.	1.7	22
123	Diabetic Retinopathy. Survey of Ophthalmology, 2002, 47, S253-S262.	1.7	499
124	Shear stress regulates occludin content and phosphorylation. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H105-H113.	1.5	106
125	Excessive Hexosamines Block the Neuroprotective Effect of Insulin and Induce Apoptosis in Retinal Neurons. Journal of Biological Chemistry, 2001, 276, 43748-43755.	1.6	162
126	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.	1.6	279

#	Article	IF	Citations
127	Retinal neurodegeneration: early pathology in diabetes. Clinical and Experimental Ophthalmology, 2000, 28, 3-8.	1.3	313
128	Effect of Vascular Endothelial Growth Factor on Cultured Endothelial Cell Monolayer Transport Properties. Microvascular Research, 2000, 59, 265-277.	1.1	118
129	Review Paper: New Insights into the Pathophysiology of Diabetic Retinopathy: Potential Cell-Specific Therapeutic Targets. Diabetes Technology and Therapeutics, 2000, 2, 601-608.	2.4	62
130	Effect of shear stress on the hydraulic conductivity of cultured bovine retinal microvascular endothelial cell monolayers. Current Eye Research, 2000, 21, 944-951.	0.7	36
131	The molecular structure and function of the inner blood-retinal barrier. , 2000, , 25-33.		0
132	Vascular Endothelial Growth Factor Induces Rapid Phosphorylation of Tight Junction Proteins Occludin and Zonula Occluden 1. Journal of Biological Chemistry, 1999, 274, 23463-23467.	1.6	575
133	Molecular Mechanisms of Vascular Permeability in Diabetic Retinopathy. Seminars in Ophthalmology, 1999, 14, 240-248.	0.8	202
134	The molecular structure and function of the inner blood-retinal barrier. Penn State Retina Research Group. Documenta Ophthalmologica, 1999, 97, 229-237.	1.0	64
135	DIABETIC RETINOPATHY. Medical Clinics of North America, 1998, 82, 847-876.	1.1	31
136	A new hypothesis on mechanisms of retinal vascular permeability in diabetes. , 1998, , 169-179.		2
137	Physiological transport properties of cultured retinal microvascular endothelial cell monolayers. Current Eye Research, 1997, 16, 761-768.	0.7	24
138	Histamine reduces ZO-1 tight-junction protein expression in cultured retinal microvascular endothelial cells. Biochemical Journal, 1996, 320, 717-721.	1.7	87
139	Ocular findings in HIV-infected haemophiliacs. Haemophilia, 1996, 2, 63-64.	1.0	7
140	ANTIHISTAMINES REDUCE BLOODRETINAL BARRIER PERMEABILITY IN TYPE I (INSULIN-DEPENDENT) DIABETIC PATIENTS WITH NONPROLIFERATIVE RETINOPATHY. Retina, 1995, 15, 134-140.	1.0	34
141	The retinal depression sign in diabetic retinopathy. Graefe's Archive for Clinical and Experimental Ophthalmology, 1995, 233, 617-620.	1.0	2
142	A method for real-time intraocular pressure monitoring during scleral buckling surgery. Graefe's Archive for Clinical and Experimental Ophthalmology, 1993, 231, 671-673.	1.0	0
143	Intraocular Pressure Fluctuations during Scleral Buckling Surgery. Ophthalmology, 1993, 100, 1050-1054.	2.5	26
144	A Survey of Intraocular Silicone Oil Use in the United States. Ophthalmology, 1992, 99, 1174-1176.	2.5	7

#	Article	IF	Citations
145	Astemizole reduces blood-retinal barrier leakage in experimental diabetes. Journal of Diabetes and Its Complications, 1992, 6, 230-235.	1.2	9
146	Reduction of severe macular edema in eyes with poor vision after panretinal photocoagulation for proliferative diabetic retinopathy. Graefe's Archive for Clinical and Experimental Ophthalmology, 1991, 229, 323-328.	1.0	19
147	Complications of Retinal Laser Therapy and Their Prevention. Seminars in Ophthalmology, 1991, 6, 19-26.	0.8	6
148	Mucinous Adenocarcinoma of the Eyelid. JAMA Ophthalmology, 1984, 102, 912.	2.6	21
149	Photic Maculopathy Secondary to Short-circuiting of a High-tension Electric Current. Ophthalmology, 1982, 89, 865-868.	2.5	16