W Daniel Stamer

List of Publications by Year in Descending Order

143 papers	4,947 citations	41 h-index	65 g-index
157 ext. papers	6,034 ext. citations	5.7 avg, IF	5.88 L-index

#	Paper	IF	Citations
143	Anterior Segment Anatomy and Conventional Outflow Physiology of the Tree Shrew (Tupaia belangeri). **2022**, 63, 21		
142	Matrix Mechanotransduction via Yes-Associated Protein in Human Lamina Cribrosa Cells in Glaucoma. **2022**, 63, 16		1
141	Consensus Recommendation for Mouse Models of Ocular Hypertension to Study Aqueous Humor Outflow and Its Mechanisms. **2022**, 63, 12		1
140	A Role of Caveolae in Trabecular Meshwork Mechanosensing and Contractile Tone.. *Frontiers in Cell and Developmental Biology*, **2022**, 10, 855097	5.7	0
139	Extracellular Matrix Stiffness and TGF Regulate YAP/TAZ Activity in Human Trabecular Meshwork Cells.. *Frontiers in Cell and Developmental Biology*, **2022**, 10, 844342	5.7	4
138	A novel glaucoma approach: Stem cell regeneration of the trabecular meshwork.. *Progress in Retinal and Eye Research*, **2022**, 101063	20.5	0
137	Cellular Mechanisms Regulating Conventional Outflow of Aqueous Humor **2022**, 2035-2062		
136	Open-source deep learning-based automatic segmentation of mouse Schlemm canal in optical coherence tomography images. *Experimental Eye Research*, **2021**, 214, 108844	3.7	1
135	The role of microRNAs in glaucoma.. *Experimental Eye Research*, **2021**, 215, 108909	3.7	2
134	The vital role for nitric oxide in intraocular pressure homeostasis. *Progress in Retinal and Eye Research*, **2021**, 83, 100922	20.5	11
133	Anti-fibrotic activity of a rho-kinase inhibitor restores outflow function and intraocular pressure homeostasis. *ELife*, **2021**, 10,	8.9	10
132	The ocular pulse decreases aqueous humor outflow resistance by stimulating nitric oxide production. *American Journal of Physiology - Cell Physiology*, **2021**, 320, C652-C665	5.4	6
131	A tissue-engineered human trabecular meshwork hydrogel for advanced glaucoma disease modeling. *Experimental Eye Research*, **2021**, 205, 108472	3.7	12
130	Optogenetic Modulation of Intraocular Pressure in a Glucocorticoid-Induced Ocular Hypertension Mouse Model. *Translational Vision Science and Technology*, **2021**, 10, 10	3.3	1
129	Thrombospondin-1 mediates Rho-kinase inhibitor-induced increase in outflow-facility. *Journal of Cellular Physiology*, **2021**,	7	1
128	Distribution of Gold Nanoparticles in the Anterior Chamber of the Eye after Intracameral Injection for Glaucoma Therapy. *Pharmaceutics*, **2021**, 13,	6.4	1
127	In vivo estimation of murine iris stiffness using finite element modeling. *Experimental Eye Research*, **2021**, 202, 108374	3.7	3

126	Piezo1 channels mediate trabecular meshwork mechanotransduction and promote aqueous fluid outflow. *Journal of Physiology*, **2021**, 599, 571-592	3.9	16
125	siRNA targeting Schlemm Q canal endothelial tight junctions enhances outflow facility and reduces IOP in a steroid-induced OHT rodent model. *Molecular Therapy - Methods and Clinical Development*, **2021**, 20, 86-94	6.4	3
124	Surface Engineering of FLT4-Targeted Nanocarriers Enhances Cell-Softening Glaucoma Therapy. *ACS Applied Materials & Interfaces*, **2021**, 13, 32823-32836	9.5	3
123	Fibrotic Changes to Schlemm Q Canal Endothelial Cells in Glaucoma. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
122	Expression of mRNAs, miRNAs, and lncRNAs in Human Trabecular Meshwork Cells Upon Mechanical Stretch **2020**, 61, 2		9
121	Optogenetic stimulation of phosphoinositides reveals a critical role of primary cilia in eye pressure regulation. *Science Advances*, **2020**, 6, eaay8699	14.3	7
120	The 4-Subunit of the Large-Conductance Potassium Ion Channel KCa1.1 Regulates Outflow Facility in Mice **2020**, 61, 41		2
119	Data on differentially expressed proteins in rock inhibitor-treated human trabecular meshwork cells using SWATH-based proteomics. *Data in Brief*, **2020**, 31, 105846	1.2	1
118	Identification and activity of the functional complex between hnRNPL and the pseudoexfoliation syndrome-associated lncRNA, LOXL1-AS1. *Human Molecular Genetics*, **2020**, 29, 1986-1995	5.6	4
117	Shear Stress in Schlemm Q Canal as a Sensor of Intraocular Pressure. *Scientific Reports*, **2020**, 10, 5804	4.9	13
116	A Small Molecule Inhibitor of VE-PTP Activates Tie2 in Schlemm Q Canal Increasing Outflow Facility and Reducing Intraocular Pressure **2020**, 61, 12		14
115	Cellular Mechanisms Regulating Conventional Outflow of Aqueous Humor **2020**, 1-29		
114	Differential DNA methylation patterns in human Schlemm Q canal endothelial cells with glaucoma. *Molecular Vision*, **2020**, 26, 483-493	2.3	1
113	Molecular taxonomy of human ocular outflow tissues defined by single-cell transcriptomics. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 12856-12867	11.5	33
112	Physiologic Consequences of Caveolin-1 Ablation in Conventional Outflow Endothelia **2020**, 61, 32		9
111	Targeted Delivery of Cell Softening Micelles to Schlemm Q Canal Endothelial Cells for Treatment of Glaucoma. *Small*, **2020**, 16, e2004205	11	11
110	Integral role for lysyl oxidase-like-1 in conventional outflow tissue function and behavior. *FASEB Journal*, **2020**, 34, 10762-10777	0.9	12
109	Fasudil Loaded PLGA Microspheres as Potential Intravitreal Depot Formulation for Glaucoma Therapy. *Pharmaceutics*, **2020**, 12,	6.4	8

108	Reduced Oxidative Phosphorylation and Increased Glycolysis in Human Glaucoma Lamina Cribrosa Cells **2020**, 61, 4		7
107	An In Vitro Bovine Cellular Model for Human Schlemm Canal Endothelial Cells and Their Response to TGF Treatment. *Translational Vision Science and Technology*, **2020**, 9, 32	3.3	0
106	Matrix Metalloproteinases and Glaucoma Treatment. *Journal of Ocular Pharmacology and Therapeutics*, **2020**, 36, 208-228	2.6	27
105	Age-related changes in eye morphology and aqueous humor dynamics in DBA/2J mice using contrast-enhanced ocular MRI. *Magnetic Resonance Imaging*, **2019**, 59, 10-16	3.3	6
104	Probe Sensitivity to Cortical versus Intracellular Cytoskeletal Network Stiffness. *Biophysical Journal*, **2019**, 116, 518-529	2.9	26
103	A Highly Effective and Ultra-Long-Acting Anti-Glaucoma Drug, with a Novel Periorbital Delivery Method. *Journal of Ocular Pharmacology and Therapeutics*, **2019**, 35, 265-277	2.6	5
102	GPR158 in the Visual System: Homeostatic Role in Regulation of Intraocular Pressure. *Journal of Ocular Pharmacology and Therapeutics*, **2019**, 35, 203-215	2.6	2
101	A model of the oscillatory mechanical forces in the conventional outflow pathway. *Journal of the Royal Society Interface*, **2019**, 16, 20180652	4.1	17
100	Antiglaucoma EP Agonists: A Long Road That Led Somewhere. *Journal of Ocular Pharmacology and Therapeutics*, **2019**, 35, 469-474	2.6	5
99	ISOPT Special Issue. *Journal of Ocular Pharmacology and Therapeutics*, **2019**, 35, 423	2.6	
98	Isolation of Retinal Exosome Biomarkers from Blood by Targeted Immunocapture. *Advances in Experimental Medicine and Biology*, **2019**, 1185, 21-25	3.6	6
97	Increased stiffness and flow resistance of the inner wall of Schlemm canal in glaucomatous human eyes. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**,	11.5	39
96	In vivo measurement of trabecular meshwork stiffness in a corticosteroid-induced ocular hypertensive mouse model. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 1714-1722	11.5	41
95	The relationship between outflow resistance and trabecular meshwork stiffness in mice. *Scientific Reports*, **2018**, 8, 5848	4.9	37
94	Differentially expressed microRNAs in the aqueous humor of patients with exfoliation glaucoma or primary open-angle glaucoma. *Human Molecular Genetics*, **2018**, 27, 1263-1275	5.6	41
93	Polarized Exosome Release from the Retinal Pigmented Epithelium. *Advances in Experimental Medicine and Biology*, **2018**, 1074, 539-544	3.6	14
92	Consensus recommendations for trabecular meshwork cell isolation, characterization and culture. *Experimental Eye Research*, **2018**, 171, 164-173	3.7	130
91	Characterizing differences between MSCs and TM cells: Toward autologous stem cell therapies for the glaucomatous trabecular meshwork. *Journal of Tissue Engineering and Regenerative Medicine*, **2018**, 12, 695-704	4.4	18

90	Pharmacological regulation of outflow resistance distal to Schlemm's canal. *American Journal of Physiology - Cell Physiology*, **2018**, 315, C44-C51	5.4	42
89	Trabodenoson, an Adenosine Mimetic With A1 Receptor Selectivity Lowers Intraocular Pressure by Increasing Conventional Outflow Facility in Mice **2018**, 59, 383-392		24
88	Accessibility to and Quality of Human Eye Tissue for Research: A Cross-Sectional Survey of ARVO Members **2018**, 59, 4783-4792		12
87	Intracameral Delivery of Layer-by-Layer Coated siRNA Nanoparticles for Glaucoma Therapy. *Small*, **2018**, 14, e1803239	11	29
86	Differential Expression of Coding and Long Noncoding RNAs in Keratoconus-Affected Corneas **2018**, 59, 2717-2728		26
85	Enhancement of Outflow Facility in the Murine Eye by Targeting Selected Tight-Junctions of Schlemm's Canal Endothelia. *Scientific Reports*, **2017**, 7, 40717	4.9	20
84	Localized and Controlled Delivery of Nitric Oxide to the Conventional Outflow Pathway via Enzyme Biocatalysis: Toward Therapy for Glaucoma. *Advanced Materials*, **2017**, 29, 1604932	24	69
83	Roles of exosomes in the normal and diseased eye. *Progress in Retinal and Eye Research*, **2017**, 59, 158-177	20.5	80
82	Peptide-Functionalized Fluorescent Particles for In Situ Detection of Nitric Oxide via Peroxynitrite-Mediated Nitration. *Advanced Healthcare Materials*, **2017**, 6, 1700383	10.1	7
81	A Review of Nitric Oxide for the Treatment of Glaucomatous Disease. *Ophthalmology and Therapy*, **2017**, 6, 221-232	5	53
80	Differential response and withdrawal profile of glucocorticoid-treated human trabecular meshwork cells. *Experimental Eye Research*, **2017**, 155, 38-46	3.7	5
79	The Ability of Nitric Oxide to Lower Intraocular Pressure Is Dependent on Guanylyl Cyclase **2017**, 58, 4826-4835		16
78	A Comparative Study of Serum Exosome Isolation Using Differential Ultracentrifugation and Three Commercial Reagents. *PLoS ONE*, **2017**, 12, e0170628	3.7	315
77	Comment on "Identification of Novel G Protein-Coupled Receptor 143 Ligands as Pharmacologic Tools for Investigating X-Linked Ocular Albinism" **2017**, 58, 4733-4734		2
76	Stanniocalcin-1 Is an Ocular Hypotensive Agent and a Downstream Effector Molecule That Is Necessary for the Intraocular Pressure-Lowering Effects of Latanoprost **2017**, 58, 2715-2724		9
75	Intravitreal Anti-VEGF Injections Reduce Aqueous Outflow Facility in Patients With Neovascular Age-Related Macular Degeneration **2017**, 58, 1893-1898		26
74	Regulatory Roles of Anoctamin-6 in Human Trabecular Meshwork Cells **2017**, 58, 492-501		5
73	Pentablock copolymer dexamethasone nanoformulations elevate MYOC: in vitro liberation, activity and safety in human trabecular meshwork cells. *Nanomedicine*, **2017**, 12, 1911-1926	5.6	9

72	Directional Exosome Proteomes Reflect Polarity-Specific Functions in Retinal Pigmented Epithelium Monolayers. *Scientific Reports*, **2017**, 7, 4901	4.9	41
71	Major review: Exfoliation syndrome; advances in disease genetics, molecular biology, and epidemiology. *Experimental Eye Research*, **2017**, 154, 88-103	3.7	77
70	Steroid-induced ocular hypertension/glaucoma: Focus on pharmacogenomics and implications for precision medicine. *Progress in Retinal and Eye Research*, **2017**, 56, 58-83	20.5	65
69	The many faces of the trabecular meshwork cell. *Experimental Eye Research*, **2017**, 158, 112-123	3.7	117
68	Therapeutic potential of AAV-mediated MMP-3 secretion from corneal endothelium in treating glaucoma. *Human Molecular Genetics*, **2017**, 26, 1230-1246	5.6	48
67	VEGF as a Paracrine Regulator of Conventional Outflow Facility **2017**, 58, 1899-1908		27
66	Caveolin-1 modulates intraocular pressure: implications for caveolae mechanoprotection in glaucoma. *Scientific Reports*, **2016**, 6, 37127	4.9	46
65	Visualization of conventional outflow tissue responses to netarsudil in living mouse eyes. *European Journal of Pharmacology*, **2016**, 787, 20-31	5.3	66
64	Eye Care ProfessionalsQPerspectives on Eye Donation and an Eye Donation Registry for Research: A Single-Institution, Cross-Sectional Study. *Current Eye Research*, **2016**, 41, 867-71	2.9	7
63	Mechanism of Fibronectin Binding to Human Trabecular Meshwork Exosomes and Its Modulation by Dexamethasone. *PLoS ONE*, **2016**, 11, e0165326	3.7	24
62	The Soluble Guanylate Cyclase Stimulator IWP-953 Increases Conventional Outflow Facility in Mouse Eyes **2016**, 57, 1317-26		20
61	Netarsudil Increases Outflow Facility in Human Eyes Through Multiple Mechanisms **2016**, 57, 6197-6209		96
60	A Common Variant in MIR182 Is Associated With Primary Open-Angle Glaucoma in the NEIGHBORHOOD Consortium **2016**, 57, 4528-4535		31
59	Life under pressure: The role of ocular cribriform cells in preventing glaucoma. *Experimental Eye Research*, **2016**, 151, 150-9	3.7	6
58	Dedication of Special Issue on Purinergic Regulation in the Eye to Mortimer M. Civan. *Journal of Ocular Pharmacology and Therapeutics*, **2016**, 32, 484	2.6	
57	Genetic variants and cellular stressors associated with exfoliation syndrome modulate promoter activity of a lncRNA within the LOXL1 locus. *Human Molecular Genetics*, **2015**, 24, 6552-63	5.6	61
56	Autophagic dysregulation in glaucomatous trabecular meshwork cells. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2015**, 1852, 379-85	6.9	43
55	Biomechanics of Schlemm@ canal endothelium and intraocular pressure reduction. *Progress in Retinal and Eye Research*, **2015**, 44, 86-98	20.5	90

54	Role of nitric oxide in murine conventional outflow physiology. *American Journal of Physiology - Cell Physiology*, **2015**, 309, C205-14	5.4	69
53	Expression Profiling of Human Schlemm's Canal Endothelial Cells From Eyes With and Without Glaucoma **2015**, 56, 6747-53		22
52	Aqueous humor outflow: dynamics and disease **2015**, 56, 2993-3003		45
51	Physical Factors Affecting Outflow Facility Measurements in Mice **2015**, 56, 8331-9		27
50	High-throughput screening for modulators of cellular contractile force. *Integrative Biology (United Kingdom)*, **2015**, 7, 1318-24	3.7	47
49	Human aqueous humor exosomes. *Experimental Eye Research*, **2015**, 132, 73-7	3.7	74
48	Controlled exosome release from the retinal pigment epithelium in situ. *Experimental Eye Research*, **2014**, 129, 1-4	3.7	32
47	Biomechanical strain as a trigger for pore formation in Schlemm's canal endothelial cells. *Experimental Eye Research*, **2014**, 127, 224-35	3.7	34
46	Ultrastructural changes associated with dexamethasone-induced ocular hypertension in mice **2014**, 55, 4922-33		93
45	Concentration-related effects of nitric oxide and endothelin-1 on human trabecular meshwork cell contractility. *Experimental Eye Research*, **2014**, 120, 28-35	3.7	59
44	Pilocarpine-induced dilation of Schlemm's canal and prevention of lumen collapse at elevated intraocular pressures in living mice visualized by OCT **2014**, 55, 3737-46		61
43	The structure of the trabecular meshwork, its connections to the ciliary muscle, and the effect of pilocarpine on outflow facility in mice **2014**, 55, 3727-36		72
42	Circumferential tensile stiffness of glaucomatous trabecular meshwork **2014**, 55, 814-23		34
41	Shear stress-triggered nitric oxide release from Schlemm's canal cells. *Investigative Ophthalmology and Visual Science*, **2014**, 55, 8067-76		56
40	Altered mechanobiology of Schlemm's canal endothelial cells in glaucoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13876-81	11.5	110
39	Disease progression in iridocorneal angle tissues of BMP2-induced ocular hypertensive mice with optical coherence tomography. *Molecular Vision*, **2014**, 20, 1695-709	2.3	16
38	Unique response profile of trabecular meshwork cells to the novel selective glucocorticoid receptor agonist, GW870086X **2013**, 54, 2100-7		17
37	Pigment epithelium-derived factor decreases outflow facility **2013**, 54, 6655-61		20

36	Differential effects of prostaglandin E2-sensitive receptors on contractility of human ocular cells that regulate conventional outflow **2013**, 54, 4782-90		32
35	A role for myocilin in receptor-mediated endocytosis. *PLoS ONE*, **2013**, 8, e82301	3.7	14
34	Mechanisms of ATP release by human trabecular meshwork cells, the enabling step in purinergic regulation of aqueous humor outflow. *Journal of Cellular Physiology*, **2012**, 227, 172-82	7	49
33	Myocilin, a component of a membrane-associated protein complex driven by a homologous Q-SNARE domain. *Biochemistry*, **2012**, 51, 3606-13	3.2	11
32	The cell and molecular biology of glaucoma: mechanisms in the conventional outflow pathway **2012** , 53, 2470-2		24
31	Pharmacologic manipulation of conventional outflow facility in ex vivo mouse eyes **2012**, 53, 5838-45		65
30	Current understanding of conventional outflow dysfunction in glaucoma. *Current Opinion in Ophthalmology*, **2012**, 23, 135-43	5.1	180
29	A model of giant vacuole dynamics in human Schlemm canal endothelial cells. *Experimental Eye Research*, **2011**, 92, 57-66	3.7	29
28	Cytoskeletal dependence of adenosine triphosphate release by human trabecular meshwork cells **2011**, 52, 7996-8005		27
27	eNOS, a pressure-dependent regulator of intraocular pressure **2011**, 52, 9438-44		125
26	Outflow physiology of the mouse eye: pressure dependence and washout **2011**, 52, 1865-71		81
25	The role of the prostaglandin EP4 receptor in the regulation of human outflow facility **2011**, 52, 3506-13		26
24	S1P receptor regulation of sphingosine-1-phosphate effects on conventional outflow physiology. *American Journal of Physiology - Cell Physiology*, **2011**, 300, C1164-71	5.4	29
23	Structural basement membrane components and corresponding integrins in Schlemm canal endothelia. *Molecular Vision*, **2011**, 17, 199-209	2.3	17
22	A new method for selection of angular aqueous plexus cells from porcine eyes: a model for Schlemm canal endothelium **2010**, 51, 5744-50		22
21	Sphingosine-1-phosphate enhancement of cortical actomyosin organization in cultured human Schlemm canal endothelial cell monolayers **2010**, 51, 6633-8		26
20	Cellular basis for bimatoprost effects on human conventional outflow **2010**, 51, 5176-81		29
19	S1P1 receptor activation is insufficient to mimic S1P-mediated effects on aqueous humor outflow physiology. *FASEB Journal*, **2010**, 24, 593.2	0.9	

18	Regulation of myocilin-associated exosome release from human trabecular meshwork cells **2009**, 50, 1313-8		35
17	Cyclic mechanical stress and trabecular meshwork cell contractility **2009**, 50, 3826-32		35
16	Glucocorticoids with different chemical structures but similar glucocorticoid receptor potency regulate subsets of common and unique genes in human trabecular meshwork cells. *BMC Medical Genomics*, **2009**, 2, 58	3.7	70
15	The changing paradigm of outflow resistance generation: towards synergistic models of the JCT and inner wall endothelium. *Experimental Eye Research*, **2009**, 88, 656-70	3.7	174
14	Sphingosine-1-phosphate effects on the inner wall of Schlemm's canal and outflow facility in perfused human eyes. *Experimental Eye Research*, **2009**, 89, 980-8	3.7	44
13	Aquaporin-1 expression and conventional aqueous outflow in human eyes. *Experimental Eye Research*, **2008**, 87, 349-55	3.7	10
12	Endogenous Bioactive Lipids and the Regulation of Conventional Outflow Facility. *Expert Review of Ophthalmology*, **2008**, 3, 457-470	1.5	13
11	Bimatoprost, prostamide activity, and conventional drainage. *Investigative Ophthalmology and Visual Science*, **2007**, 48, 4107-15		68
10	Schlemm's canal endothelia, lymphatic, or blood vasculature?. *Journal of Glaucoma*, **2007**, 16, 391-405	2.1	57
9	Targeted gene transfer to Schlemm's canal by retroperfusion. *Experimental Eye Research*, **2007**, 84, 843-9	3.7	5
8	Differential P1-purinergic modulation of human Schlemm's canal inner-wall cells. *American Journal of Physiology - Cell Physiology*, **2005**, 288, C784-94	5.4	31
7	Extracellular trafficking of myocilin in human trabecular meshwork cells. *Journal of Biological Chemistry*, **2005**, 280, 28917-26	5.4	76
6	Aquaporin-1 channels in human retinal pigment epithelium: role in transepithelial water movement. *Investigative Ophthalmology and Visual Science*, **2003**, 44, 2803-8		108
5	Human Schlemm's canal cells express the endothelial adherens proteins, VE-cadherin and PECAM-1. *Current Eye Research*, **2002**, 25, 299-308	2.9	47
4	Isolation of primary open-angle glaucomatous trabecular meshwork cells from whole eye tissue. *Current Eye Research*, **2000**, 20, 347-350	2.9	34
3	Isolation and culture of human trabecular meshwork cells by extracellular matrix digestion. *Current Eye Research*, **1995**, 14, 611-7	2.9	155
2	Cultured human trabecular meshwork cells express aquaporin-1 water channels. *Current Eye Research*, **1995**, 14, 1095-1100	2.9	61
1	Genome-wide Expression Profiling and Pathway Analysis in Cyclic Stretched Human Trabecular Meshwork Cells		1