Colin R Green

List of Publications by Citations

143 papers	5,967 citations	43 h-index	72 g-index
147 ext. papers	6,667 ext. citations	5.7 avg, IF	5.78 L-index

#	Paper	IF	Citations
143	Structure and function of the vertebrate magnetic sense. *Nature*, **1997**, 390, 371-6	50.4	343
142	Fibroblast network in rabbit sinoatrial node: structural and functional identification of homogeneous and heterogeneous cell coupling. *Circulation Research*, **2004**, 94, 828-35	15.7	272
141	Targeting connexin43 expression accelerates the rate of wound repair. *Current Biology*, **2003**, 13, 1697-703	9.5	241
140	Drug delivery to the posterior segment of the eye. *Drug Discovery Today*, **2011**, 16, 270-7	8.8	224
139	Magnetite defines a vertebrate magnetoreceptor. *Nature*, **2000**, 406, 299-302	50.4	196
138	Blocking connexin43 expression reduces inflammation and improves functional recovery after spinal cord injury. *Molecular and Cellular Neurosciences*, **2008**, 39, 152-60	4.8	154
137	Upregulation in astrocytic connexin 43 gap junction levels may exacerbate generalized seizures in mesial temporal lobe epilepsy. *Brain Research*, **2002**, 929, 105-16	3.7	151
136	Connexin43 mimetic peptide reduces vascular leak and retinal ganglion cell death following retinal ischaemia. *Brain*, **2012**, 135, 506-20	11.2	146
135	Connexin 43 mimetic peptides reduce swelling, astrogliosis, and neuronal cell death after spinal cord injury. *Cell Communication and Adhesion*, **2008**, 15, 27-42		142
134	Connexins in Cardiovascular and Neurovascular Health and Disease: Pharmacological Implications. *Pharmacological Reviews*, **2017**, 69, 396-478	22.5	134
133	Spatially and temporally distinct expression of fibroblast connexins after sheep ventricular infarction. *Cardiovascular Research*, **2004**, 62, 415-25	9.9	128
132	Connexin hemichannel blockade improves outcomes in a model of fetal ischemia. *Annals of Neurology*, **2012**, 71, 121-32	9.4	111
131	Comparison of ion-activated in situ gelling systems for ocular drug delivery. Part 1: physicochemical characterisation and in vitro release. *International Journal of Pharmaceutics*, **2011**, 411, 69-77	6.5	107
130	Vascular degeneration in Parkinson's disease. *Brain Pathology*, **2013**, 23, 154-64	6	105
129	Automated imaging of extended tissue volumes using confocal microscopy. *Microscopy Research and Technique*, **2005**, 67, 227-39	2.8	96
128	Bioglass promotes wound healing by affecting gap junction connexin 43 mediated endothelial cell behavior. *Biomaterials*, **2016**, 84, 64-75	15.6	84
127	Acute wound healing in the human central corneal epithelium appears to be independent of limbal stem cell influence **2008**, 49, 5279-86		83

126	Connexin43 mimetic peptide is neuroprotective and improves function following spinal cord injury. *Neuroscience Research*, **2013**, 75, 256-67	2.9	79
125	Connexin expression in Huntington's diseased human brain. *Cell Biology International*, **1998**, 22, 837-47	4.5	79
124	Role of connexin43 in central nervous system injury. *Experimental Neurology*, **2010**, 225, 250-61	5.7	78
123	Structural and functional coupling of cardiac myocytes and fibroblasts. *Advances in Cardiology*, **2006**, 42, 132-149		73
122	Limiting burn extension by transient inhibition of Connexin43 expression at the site of injury. *Journal of Plastic, Reconstructive and Aesthetic Surgery*, **2005**, 58, 658-67		72
121	Astrocytes and microglia in acute cerebral injury underlying cerebral palsy associated with preterm birth. *Pediatric Research*, **2014**, 75, 234-40	3.2	71
120	Connexins and their channels in inflammation. *Critical Reviews in Biochemistry and Molecular Biology*, **2016**, 51, 413-439	8.7	69
119	Connexin43 in retinal injury and disease. *Progress in Retinal and Eye Research*, **2016**, 51, 41-68	20.5	66
118	Attenuation of mechanical pain hypersensitivity by treatment with Peptide5, a connexin-43 mimetic peptide, involves inhibition of NLRP3 inflammasome in nerve-injured mice. *Experimental Neurology*, **2018**, 300, 1-12	5.7	63
117	Roles for alpha 1 connexin in morphogenesis of chick embryos revealed using a novel antisense approach. *Genesis*, **1999**, 24, 33-42		59
116	Bone morphogenetic protein-2 modulation of chondrogenic differentiation in vitro involves gap junction-mediated intercellular communication. *Journal of Cellular Physiology*, **2002**, 193, 233-43	7	58
115	Regulation of connexin43 gap junction protein triggers vascular recovery and healing in human ocular persistent epithelial defect wounds. *Journal of Membrane Biology*, **2012**, 245, 381-8	2.3	57
114	A key role for connexin hemichannels in spreading ischemic brain injury. *Current Drug Targets*, **2013**, 14, 36-46	3	57
113	Connexin hemichannel blockade is neuroprotective after asphyxia in preterm fetal sheep. *PLoS ONE*, **2014**, 9, e96558	3.7	56
112	The inflammasome pathway is amplified and perpetuated in an autocrine manner through connexin43 hemichannel mediated ATP release. *Biochimica Et Biophysica Acta - General Subjects*, **2018**, 1862, 385-393	4	54
111	Robert Feulgen Prize Lecture. Distribution and role of gap junctions in normal myocardium and human ischaemic heart disease. *Histochemistry*, **1993**, 99, 105-20		53
110	Expression of connexin43 gap junctions between cultured vascular smooth muscle cells is dependent upon phenotype. *Cell and Tissue Research*, **1993**, 271, 323-32	4.2	52
109	Connexin and pannexin signaling pathways, an architectural blueprint for CNS physiology and pathology?. *Cellular and Molecular Life Sciences*, **2015**, 72, 2823-51	10.3	51

108	Connexin43 antisense oligodeoxynucleotide treatment down-regulates the inflammatory response in an in vitro interphase organotypic culture model of optic nerve ischaemia. *Journal of Clinical Neuroscience*, **2008**, 15, 1253-63	2.2	51
107	Expression of the connexin43 gap junctional protein in tissues at the tip of the chick limb bud is related to the epithelial-mesenchymal interactions that mediate morphogenesis. *Developmental Biology*, **1994**, 161, 12-21	3.1	49
106	Role of Hemichannels in CNS Inflammation and the Inflammasome Pathway. *Advances in Protein Chemistry and Structural Biology*, **2016**, 104, 1-37	5.3	49
105	Immunolocalization of gap junction protein connexin43 (GJA1) in the human retina and optic nerve **2010**, 51, 4028-34		47
104	Sustained intravitreal delivery of connexin43 mimetic peptide by poly(D,L-lactide-co-glycolide) acid micro- and nanoparticles--Closing the gap in retinal ischaemia. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 95, 378-86	5.7	46
103	Comparison of ion-activated in situ gelling systems for ocular drug delivery. Part 2: Precorneal retention and in vivo pharmacodynamic study. *International Journal of Pharmaceutics*, **2011**, 411, 78-85	6.5	46
102	Direct cell-cell communication in the blood-forming system. *Tissue and Cell*, **1991**, 23, 457-70	2.7	44
101	Hyaluronic acid coated albumin nanoparticles for targeted peptide delivery in the treatment of retinal ischaemia. *Biomaterials*, **2018**, 168, 10-23	15.6	43
100	Dose-dependent protective effect of connexin43 mimetic peptide against neurodegeneration in an ex vivo model of epileptiform lesion. *Epilepsy Research*, **2010**, 92, 153-62	3	43
99	Assessing RNA quality in postmortem human brain tissue. *Experimental and Molecular Pathology*, **2008**, 84, 71-7	4.4	42
98	Role of gap junctions in chronic pain. *Journal of Neuroscience Research*, **2012**, 90, 337-45	4.4	41
97	Improved corneal wound healing through modulation of gap junction communication using connexin43-specific antisense oligodeoxynucleotides **2012**, 53, 1130-8		41
96	Connexin hemichannel blockade is neuroprotective after, but not during, global cerebral ischemia in near-term fetal sheep. *Experimental Neurology*, **2013**, 248, 301-8	5.7	39
95	Characterizing the mode of action of extracellular Connexin43 channel blocking mimetic peptides in an in vitro ischemia injury model. *Biochimica Et Biophysica Acta - General Subjects*, **2017**, 1861, 68-78	4	37
94	Battle of the hemichannels--Connexins and Pannexins in ischemic brain injury. *International Journal of Developmental Neuroscience*, **2015**, 45, 66-74	2.7	36
93	Wound healing in the eye: Therapeutic prospects. *Advanced Drug Delivery Reviews*, **2018**, 126, 162-176	18.5	35
92	High pressure-induced retinal ischaemia reperfusion causes upregulation of gap junction protein connexin43 prior to retinal ganglion cell loss. *Experimental Neurology*, **2012**, 234, 144-52	5.7	35
91	Molecular profiling and cellular localization of connexin isoforms in the rat ciliary epithelium. *Experimental Eye Research*, **2002**, 75, 9-21	3.7	35

90	Connexin43 Mimetic Peptide Improves Retinal Function and Reduces Inflammation in a Light-Damaged Albino Rat Model **2016**, 57, 3961-73		35
89	Connexin43 gap junction protein plays an essential role in morphogenesis of the embryonic chick face. *Developmental Dynamics*, **2001**, 222, 420-38	2.9	34
88	Evidence mounts for the role of gap junctions during development. *BioEssays*, **1988**, 8, 7-10	4.1	34
87	Connexin expression patterns in the rat cornea: molecular evidence for communication compartments. *Cornea*, **2003**, 22, 457-64	3.1	33
86	Connexins and Pannexins in cerebral ischemia. *Biochimica Et Biophysica Acta - Biomembranes*, **2018**, 1860, 224-236	3.8	32
85	An anastomosing septate junction in endothelial cells of the phylum echinodermata. *Journal of Ultrastructure Research*, **1979**, 68, 72-80		32
84	Comparison of stem cell properties in cell populations isolated from human central and limbal corneal epithelium. *Cornea*, **2011**, 30, 1155-62	3.1	31
83	The Role of Connexin and Pannexin Channels in Perinatal Brain Injury and Inflammation. *Frontiers in Physiology*, **2019**, 10, 141	4.6	31
82	Systemic Administration of Connexin43 Mimetic Peptide Improves Functional Recovery after Traumatic Spinal Cord Injury in Adult Rats. *Journal of Neurotrauma*, **2017**, 34, 707-719	5.4	30
81	The use of connexin-based therapeutic approaches to target inflammatory diseases. *Methods in Molecular Biology*, **2013**, 1037, 519-46	1.4	30
80	Tonabersat Prevents Inflammatory Damage in the Central Nervous System by Blocking Connexin43 Hemichannels. *Neurotherapeutics*, **2017**, 14, 1148-1165	6.4	30
79	Ion-activated in situ gelling systems for antisense oligodeoxynucleotide delivery to the ocular surface. *Molecular Pharmaceutics*, **2011**, 8, 2282-90	5.6	29
78	Deleterious effects of high dose connexin 43 mimetic peptide infusion after cerebral ischaemia in near-term fetal sheep. *International Journal of Molecular Sciences*, **2012**, 13, 6303-19	6.3	29
77	Translating connexin biology into therapeutics. *Seminars in Cell and Developmental Biology*, **2016**, 50, 49-58	7.5	27
76	In-vitro and in-vivo evaluation of carrageenan/methylcellulose polymeric systems for transscleral delivery of macromolecules. *European Journal of Pharmaceutical Sciences*, **2011**, 44, 399-409	5.1	27
75	Connexin43 hemichannel block protects against retinal pigment epithelial cell barrier breakdown. *Acta Diabetologica*, **2020**, 57, 13-22	3.9	27
74	Intravitreal injection of lipoamino acid-modified connexin43 mimetic peptide enhances neuroprotection after retinal ischemia. *Drug Delivery and Translational Research*, **2015**, 5, 480-8	6.2	26
73	Gap junction protein connexin43 (GJA1) in the human glaucomatous optic nerve head and retina. *Journal of Clinical Neuroscience*, **2011**, 18, 102-8	2.2	26

72	Intravitreal pro-inflammatory cytokines in non-obese diabetic mice: Modelling signs of diabetic retinopathy. *PLoS ONE*, **2018**, 13, e0202156	3.7	25
71	Sustained Connexin43 Mimetic Peptide Release From Loaded Nanoparticles Reduces Retinal and Choroidal Photodamage **2018**, 59, 3682-3693		24
70	Neuroprotection in the treatment of glaucoma--A focus on connexin43 gap junction channel blockers. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 95, 182-93	5.7	24
69	Gap junction proteins and their role in spinal cord injury. *Frontiers in Molecular Neuroscience*, **2014**, 7, 102	6.1	23
68	A clarification of the two types of invertebrate pleated septate junction. *Tissue and Cell*, **1981**, 13, 173-88	2.7	23
67	Connexin43 hemichannel block protects against the development of diabetic retinopathy signs in a mouse model of the disease. *Journal of Molecular Medicine*, **2019**, 97, 215-229	5.5	22
66	Cytotoxicity and vitreous stability of chemically modified connexin43 mimetic peptides for the treatment of optic neuropathy. *Journal of Pharmaceutical Sciences*, **2013**, 102, 2322-31	3.9	21
65	Knockdown of connexin43-mediated regulation of the zone of polarizing activity in the developing chick limb leads to digit truncation. *Development Growth and Differentiation*, **2002**, 44, 537-47	3	21
64	Non-additive effects of delayed connexin hemichannel blockade and hypothermia after cerebral ischemia in near-term fetal sheep. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 2052-61	7.3	20
63	Connexin hemichannel induced vascular leak suggests a new paradigm for cancer therapy. *FEBS Letters*, **2014**, 588, 1365-71	3.8	20
62	A novel method of organotypic brain slice culture using connexin-specific antisense oligodeoxynucleotides to improve neuronal survival. *Brain Research*, **2010**, 1353, 194-203	3.7	20
61	The morphology of cilia in sponge larvae. *Tissue and Cell*, **1977**, 9, 179-84	2.7	20
60	Antisense delivery and protein knockdown within the intact central nervous system. *Frontiers in Bioscience - Landmark*, **2006**, 11, 2967-75	2.8	20
59	Connexin43 gap junction levels during development of the thoracic aorta are temporally correlated with elastic laminae deposition and increased blood pressure. *Cell Biology International*, **1997**, 21, 87-97	4.5	19
58	Actions of fibroblast growth factor-8 in bone cells in vitro. *American Journal of Physiology - Endocrinology and Metabolism*, **2009**, 297, E142-50	6	18
57	In vitro optimization of antisense oligodeoxynucleotide design: an example using the connexin gene family. *Journal of Biomolecular Techniques*, **2006**, 17, 270-82	1.1	18
56	Blocking Connexin-43 mediated hemichannel activity protects against early tubular injury in experimental chronic kidney disease. *Cell Communication and Signaling*, **2020**, 18, 79	7.5	17
55	Synergistic effect of chemical penetration enhancer and iontophoresis on transappendageal transport of oligodeoxynucleotides. *International Journal of Pharmaceutics*, **2013**, 441, 687-92	6.5	17

54	Interrupting the inflammatory cycle in chronic diseases--do gap junctions provide the answer?. *Cell Biology International*, **2008**, 32, 1578-83	4.5	17
53	Connexin Hemichannel Block Using Orally Delivered Tonabersat Improves Outcomes in Animal Models of Retinal Disease. *Neurotherapeutics*, **2020**, 17, 371-387	6.4	17
52	Targeting connexin hemichannels to control the inflammasome: the correlation between connexin43 and NLRP3 expression in chronic eye disease. *Expert Opinion on Therapeutic Targets*, **2019**, 23, 855-863	6.4	16
51	Connexin43 modulation inhibits scarring in a rabbit eye glaucoma trabeculectomy model. *Inflammation*, **2012**, 35, 1276-86	5.1	16
50	Gap junction proteins in the light-damaged albino rat. *Molecular Vision*, **2014**, 20, 670-82	2.3	16
49	Connexin43 hemichannels: A potential drug target for the treatment of diabetic retinopathy. *Drug Discovery Today*, **2019**, 24, 1627-1636	8.8	15
48	A model for ex vivo spinal cord segment culture--a tool for analysis of injury repair strategies. *Journal of Neuroscience Methods*, **2010**, 192, 49-57	3	15
47	Fixation-induced intramembrane particle movement demonstrated in freeze-fracture replicas of a new type of septate junction in echinoderm epithelia. *Journal of Ultrastructure Research*, **1981**, 75, 11-22		15
46	Glia and hemichannels: key mediators of perinatal encephalopathy. *Neural Regeneration Research*, **2018**, 13, 181-189	4.5	15
45	Integrity of the dissociated adult cardiac myocyte: gap junction tearing and the mechanism of plasma membrane resealing. *Journal of Muscle Research and Cell Motility*, **1990**, 11, 154-66	3.5	14
44	Connexin hemichannel blockade improves survival of striatal GABA-ergic neurons after global cerebral ischaemia in term-equivalent fetal sheep. *Scientific Reports*, **2017**, 7, 6304	4.9	13
43	Immunohistochemical Characterization of Connexin43 Expression in a Mouse Model of Diabetic Retinopathy and in Human Donor Retinas. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	13
42	Focus on molecules: connexin 43--mind the gap. *Experimental Eye Research*, **2008**, 87, 494-5	3.7	13
41	Chapter 16: Gating of Gap Junction Channels and Hemichannels in the Lens: A Role in Cataract?. *Current Topics in Membranes*, **1999**, 49, 343-356	2.2	13
40	Connexin43 hemichannel block inhibits NLRP3 inflammasome activation in a human retinal explant model of diabetic retinopathy. *Experimental Eye Research*, **2021**, 202, 108384	3.7	13
39	Response of retinal Connexin43 to optic nerve injury **2011**, 52, 3620-9		12
38	In vitro release characteristics and cellular uptake of poly(D,L-lactic-co-glycolic acid) nanoparticles for topical delivery of antisense oligodeoxynucleotides. *Drug Delivery*, **2011**, 18, 493-501	7	12
37	Connexin therapeutics: blocking connexin hemichannel pores is distinct from blocking pannexin channels or gap junctions. *Neural Regeneration Research*, **2021**, 16, 482-488	4.5	12

36	Characterisation of Peptide5 systemic administration for treating traumatic spinal cord injured rats. *Experimental Brain Research*, **2017**, 235, 3033-3048	2.3	11
35	A simplified method for the rapid isolation of cardiac intercalated discs. *Tissue and Cell*, **1983**, 15, 17-26	2.7	11
34	In vivo and ex vivo in situ confocal analysis of a rat model demonstrating transient epithelialization of the endothelium *Clinical and Experimental Ophthalmology*, **2002**, 30, 191-5	2.4	10
33	Detection of submicroscopic magnetite particles using reflectance mode confocal laser scanning microscopy. *Cell Biology International*, **2001**, 25, 985-90	4.5	9
32	Tonabersat Inhibits Connexin43 Hemichannel Opening and Inflammasome Activation in an In Vitro Retinal Epithelial Cell Model of Diabetic Retinopathy. *International Journal of Molecular Sciences*, **2020**, 22,	6.3	9
31	Keratocytes are induced to produce collagen type II: A new strategy for in vivo corneal matrix regeneration. *Experimental Cell Research*, **2016**, 347, 241-249	4.2	8
30	Cells from the adult corneal stroma can be reprogrammed to a neuron-like cell using exogenous growth factors. *Experimental Cell Research*, **2014**, 322, 122-32	4.2	8
29	Spatiotemporal depletion of connexins using antisense oligonucleotides. *Methods in Molecular Biology*, **2001**, 154, 175-85	1.4	8
28	Septate junctions of the phylum Hemichordata. *Journal of Ultrastructure Research*, **1981**, 75, 1-10		8
27	Intracellular oligonucleotide delivery using the cell penetrating peptide Xentry. *Scientific Reports*, **2018**, 8, 11256	4.9	7
26	Antisense down regulation of connexin31.1 reduces apoptosis and increases thickness of human and animal corneal epithelia. *Cell Biology International*, **2009**, 33, 376-85	4.5	7
25	Structure, function, and use of the magnetic sense in animals (invited). *Journal of Applied Physics*, **2000**, 87, 4653-4658	2.5	6
24	A variation of the smooth septate junction in sea spiders (pycnogonida). *Tissue and Cell*, **1981**, 13, 189-95	2.7	6
23	Xentry-Gap19 inhibits Connexin43 hemichannel opening especially during hypoxic injury. *Drug Delivery and Translational Research*, **2020**, 10, 751-765	6.2	6
22	Differential Action of Connexin Hemichannel and Pannexin Channel Therapeutics for Potential Treatment of Retinal Diseases. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	6
21	Corneal Curvature: the Influence of Corneal Accommodation and Biomechanics on Corneal Shape. *Translational Vision Science and Technology*, **2019**, 8, 5	3.3	5
20	Transdifferentiation of chondrocytes into neuron-like cells induced by neuronal lineage specifying growth factors. *Cell Biology International*, **2015**, 39, 185-91	4.5	4
19	Comparison of bidirectional and bicistronic inducible systems for coexpression of connexin genes and fluorescent reporters. *Analytical Biochemistry*, **2012**, 431, 90-5	3.1	4

18	A new type of gap junction in the phylum Brachiopoda. *Cell and Tissue Research*, **1982**, 227, 231-4	4.2	4
17	Collagen I Modifies Connexin-43 Hemichannel Activity via Integrin 21 Binding in TGF1-Evoked Renal Tubular Epithelial Cells. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
16	Effect of low Mg2+ and bicuculline on cell survival in hippocampal slice cultures. *International Journal of Neuroscience*, **2010**, 120, 752-9	2	3
15	Targeting connexin43 expression accelerates the rate of skin and diabetic wound repair. *Journal of Biotechnology*, **2007**, 131, S64	3.7	3
14	Assessing Connexin Hemichannel Function during Ischemic Injury and Reperfusion **2016**, 169-188		3
13	Connexins in the lens: are they to blame in diabetic cataractogenesis?. *Novartis Foundation Symposium*, **1999**, 219, 97-108; discussion 108-12		3
12	Connexin Hemichannel Mimetic Peptide Attenuates Cortical Interneuron Loss and Perineuronal Net Disruption Following Cerebral Ischemia in Near-Term Fetal Sheep. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	3
11	Evaluation of Fluorescence Resonance Energy Transfer Approaches as a Tool to Quantify the Stability of Antisense Oligodeoxynucleotides. *Current Pharmaceutical Analysis*, **2012**, 8, 20-27	0.6	2
10	Keratocytes: more than a framework for the window. *Clinical and Experimental Ophthalmology*, **2003**, 31, 91-2	2.4	2
9	Chapter 6 Gap junctions. *Principles of Medical Biology*, **1998**, 103-121		2
8	Spatiotemporal changes in Cx30 and Cx43 expression during neuronal differentiation of P19 EC and NT2/D1 cells. *Cell Biology International Reports*, **2013**, 20, 13-23		1
7	Intramembrane particle movement revealed by study of an intercellular junction. *Journal of Microscopy*, **1982**, 125, 201-206	1.9	1
6	The NLRP3 inflammasome in age-related eye disease: Evidence-based connexin hemichannel therapeutics.. *Experimental Eye Research*, **2021**, 215, 108911	3.7	0
5	Cx31.1 expression is modulated in HaCaT cells exposed to UV-induced damage and scrape-wounding. *Journal of Cellular Physiology*, **2021**, 236, 911-920	7	0
4	GAP JUNCTIONS IN THE BRAIN: PREFACE. *Cell Biology International*, **1998**, 22, 717	4.5	
3	One Cell, Two Phenotypes: Capturing Pluripotency for Corneal Regeneration. *Essentials in Ophthalmology*, **2019**, 145-154	0.2	
2	Connexin43 Expression and Associated Chronic Inflammation Presages the Development of Cerebral Radiation Necrosis. *Journal of Neuropathology and Experimental Neurology*, **2020**, 79, 791-799	3.1	
1	Cell transdifferentiation in ocular disease: Potential role for connexin channels. *Experimental Cell Research*, **2021**, 407, 112823	4.2	