Sayon Roy

List of Publications by Year
in descending order

70 papers	2,980 citations	218677 26 h-index	223800 46 g-index
71 all docs	71 docs citations	71 times ranked	3287 citing authors

#	Article	IF	Citations
1	Diabetes-Enhanced Tumor Necrosis Factor-Î± Production Promotes Apoptosis and the Loss of Retinal Microvascular Cells in Type 1 and Type 2 Models of Diabetic Retinopathy. American Journal of Pathology, 2008, 172, 1411-1418.	3.8	181
2	Mechanistic Insights into Pathological Changes in the Diabetic Retina. American Journal of Pathology, 2017, 187, 9-19.	3.8	157
3	Downregulation of Connexin 43 Expression by High Glucose Reduces Gap Junction Activity in Microvascular Endothelial Cells. Diabetes, 2002, 51, 1565-1571.	0.6	132
4	FOXO1 Plays an Important Role in Enhanced Microvascular Cell Apoptosis and Microvascular Cell Loss in Type 1 and Type 2 Diabetic Rats. Diabetes, 2009, 58, 917-925.	0.6	119
5	Vascular Basement Membrane Thickening in Diabetic Retinopathy. Current Eye Research, 2010, 35, 1045-1056.	1.5	109
6	High Glucose Disrupts Mitochondrial Morphology in Retinal Endothelial Cells. American Journal of Pathology, 2010, 177, 447-455.	3.8	108
7	Reduced Connexin 43 Expression and Its Effect on the Development of Vascular Lesions in Retinas of Diabetic Mice. , 2010, 51, 3758.		101
8	Downregulation of Fibronectin Overexpression Reduces Basement Membrane Thickening and Vascular Lesions in Retinas of Galactose-Fed Rats. Diabetes, 2003, 52, 1229-1234.	0.6	87
9	High Glucose Alters Connexin 43 Expression and Gap Junction Intercellular Communication Activity in Retinal Pericytes. , 2003, 44, 5376.		85
10	High Glucose Induces Mitochondrial Morphology and Metabolic Changes in Retinal Pericytes. , 2011, 52, 8657.		83
11	High Glucose Induces Mitochondrial Dysfunction in Retinal MÃ¼ller Cells: Implications for Diabetic Retinopathy. , 2017, 58, 2915.		83
12	Retinal fibrosis in diabetic retinopathy. Experimental Eye Research, 2016, 142, 71-75.	2.6	79
13	Effects of High Glucose-Induced Cx43 Downregulation on Occludin and ZO-1 Expression and Tight Junction Barrier Function in Retinal Endothelial Cells. , 2013, 54, 6518.		75
14	High Glucoseâ€"Induced Downregulation of Connexin 43 Expression Promotes Apoptosis in Microvascular Endothelial Cells. , 2009, 50, 1400.		66
15	High Glucose-induced Altered Basement Membrane Composition and Structure Increases Trans-endothelial Permeability: Implications for Diabetic Retinopathy. Current Eye Research, 2011, 36, 747-753.	1.5	66
16	High Glucose Increases Lysyl Oxidase Expression and Activity in Retinal Endothelial Cells: Mechanism for Compromised Extracellular Matrix Barrier Function. Diabetes, 2010, 59, 3159-3166.	0.6	61
17	Reduction of fibronectin expression by intravitreal administration of antisense oligonucleotides. Nature Biotechnology, 1999, 17, 476-479.	17.5	59
18	Diabetes: A potential enhancer of retinal injury in rat retinas. Neuroscience Letters, 2005, 390, 25-30.	2.1	58

#	ARTICLE	IF	CITATIONS
19	Fenofibric Acid Reduces Fibronectin and Collagen Type IV Overexpression in Human Retinal Pigment Epithelial Cells Grown in Conditions Mimicking the Diabetic Milieu: Functional Implications in Retinal Permeability. , 2011, 52, 6348.		58
20	Downregulation of Mitochondrial Connexin 43 by High Glucose Triggers Mitochondrial Shape Change and Cytochrome c Release in Retinal Endothelial Cells. , 2012, 53, 6675.		57
21	High Glucose Alters Cx43 Expression and Gap Junction Intercellular Communication in Retinal MÃ¼ller Cells: Promotes MÃ¼ller Cell and Pericyte Apoptosis. , 2014, 55, 4327.		52
22	FOXO1 plays an essential role in apoptosis of retinal pericytes. Molecular Vision, 2010, 16, 408-15.	1.1	50
23	Effect of high glucose on fibronectin expression and cell proliferation in trabecular meshwork cells. Investigative Ophthalmology and Visual Science, 2002, 43, 170-5.	3.3	48
24	Tight Glycemic Control Regulates Fibronectin Expression and Basement Membrane Thickening in Retinal and Glomerular Capillaries of Diabetic Rats. , 2009, 50, 943.		47
25	Effect of combined antisense oligonucleotides against high-glucose- and diabetes-induced overexpression of extracellular matrix components and increased vascular permeability. Diabetes, 2006, 55, 86-92.	0.6	46
26	Effect of excess synthesis of extracellular matrix components by trabecular meshwork cells: Possible consequence on aqueous outflow. Experimental Eye Research, 2007, 84, 832-842.	2.6	45
27	Retinal capillary basement membrane thickening: Role in the pathogenesis of diabetic retinopathy. Progress in Retinal and Eye Research, 2021, 82, 100903.	15.5	44
28	New Insights into Hyperglycemia-induced Molecular Changes in Microvascular Cells. Journal of Dental Research, 2010, 89, 116-127.	5.2	42
29	Mitochondrial Dysfunction and Endoplasmic Reticulum Stress in Diabetic Retinopathy: Mechanistic Insights into High Glucose-Induced Retinal Cell Death. Current Clinical Pharmacology, 2013, 8, 278-284.	0.6	42
30	Downregulation of Connexin 43 promotes vascular cell loss and excess permeability associated with the development of vascular lesions in the diabetic retina. Molecular Vision, 2014, 20, 732-41.	1.1	39
31	Cell-cell communication in diabetic retinopathy. Vision Research, 2017, 139, 115-122.	1.4	36
32	Fenofibrate: A New Treatment for Diabetic Retinopathy. Molecular Mechanisms and Future Perspectives. Current Medicinal Chemistry, 2013, 20, 3258-3266.	2.4	35
33	Extracellular matrix, gap junctions, and retinal vascular homeostasis in diabetic retinopathy. Experimental Eye Research, 2015, 133, 58-68.	2.6	33
34	Connexin channel and its role in diabetic retinopathy. Progress in Retinal and Eye Research, 2017, 61, 35-59.	15.5	32
35	Downregulation of Drp1 and Fis1 Inhibits Mitochondrial Fission and Prevents High Glucose-Induced Apoptosis in Retinal Endothelial Cells. Cells, 2020, 9, 1662.	4.1	30
36	Effect of Chronic Hyperglycemia on Intraocular Pressure in Patients With Diabetes. American Journal of Ophthalmology, 2007, 143, 363-365.	3.3	29

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37	Mitochondrial Structural Changes in the Pathogenesis of Diabetic Retinopathy. Journal of Clinical Medicine, 2019, 8, 1363.	2.4	29
38	Inhibition of Cx43 gap junction uncoupling prevents high glucose-induced apoptosis and reduces excess cell monolayer permeability in retinal vascular endothelial cells. Experimental Eye Research, 2018, 173, 85-90.	2.6	27
39	Fibronectin overexpression inhibits trabecular meshwork cell monolayer permeability. Molecular Vision, 2004, 10, 750-7.	1.1	27
40	Beneficial effects of fenofibric acid on overexpression of extracellular matrix components, COX-2, and impairment of endothelial permeability associated with diabetic retinopathy. Experimental Eye Research, 2015, 140, 124-129.	2.6	26
41	A long-term siRNA strategy regulates fibronectin overexpression and improves vascular lesions in retinas of diabetic rats. Molecular Vision, 2011, 17, 3166-74.	1.1	26
42	SiRNA strategy against overexpression of extracellular matrix in diabetic retinopathy. Experimental Eye Research, 2005, 81, 32-37.	2.6	25
43	Association of reduced Connexin 43 expression with retinal vascular lesions in human diabetic retinopathy. Experimental Eye Research, 2016, 146, 103-106.	2.6	25
44	Aging increases retinal vascular lesions characteristic of early diabetic retinopathy. Biogerontology, 2010, 11, 447-455.	3.9	22
45	Increased Intraocular Pressure and Hyperglycemic Level in Diabetic Patients. PLoS ONE, 2016, 11, e0151833.	2.5	22
46	High Glucoseâ€"Induced Downregulation of Connexin 30.2 Promotes Retinal Vascular Lesions: Implications for Diabetic Retinopathy. , 2013, 54, 2361.		20
47	Increased Expression of c-Fos, c-Jun and c-Jun N-Terminal Kinase Associated with Neuronal Cell Death in Retinas of Diabetic Patients. Current Eye Research, 2014, 39, 527-531.	1.5	19
48	Inhibition of Diabetes-Induced Lysyl Oxidase Overexpression Prevents Retinal Vascular Lesions Associated With Diabetic Retinopathy. , 2018, 59, 5965.		18
49	Volumetric fluorescence retinal imaging in vivo over a 30-degree field of view by oblique scanning laser ophthalmoscopy (oSLO). Biomedical Optics Express, 2018, 9, 25.	2.9	18
50	Hyperhexosemia-Induced Retinal Vascular Pathology in a Novel Primate Model of Diabetic Retinopathy. Diabetes, 2015, 64, 2603-2608.	0.6	16
51	Downregulation of Lysyl Oxidase Protects Retinal Endothelial Cells From High Glucoseâ€"Induced Apoptosis. , 2017, 58, 2725.		16
52	Common Therapeutic Strategies for Diabetic Retinopathy and Glaucoma. Current Drug Therapy, 2007, 2, 224-232.	0.3	14
53	Effects of Diabetes on Mitochondrial Morphology and Its Implications in Diabetic Retinopathy. , 2020, 61, 10.		14
54	Effects of High Glucoseâ€"Induced Lysyl Oxidase Propeptide on Retinal Endothelial Cell Survival. American Journal of Pathology, 2019, 189, 1945-1952.	3.8	13

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55	Upregulation of Lysyl Oxidase Expression in Vitreous of Diabetic Subjects: Implications for Diabetic Retinopathy. Cells, 2019, 8, 1122.	4.1	13
56	Decreased lysyl oxidase level protects against development of retinal vascular lesions in diabetic retinopathy. Experimental Eye Research, 2019, 184, 221-226.	2.6	13
57	Short-term effect of ÃŸ-adrenoreceptor blocking agents on ocular blood flow. Current Eye Research, 2001, 23, 298-306.	1.5	11
58	Impaired Gastric Hormone Regulation of Osteoblasts and Lysyl Oxidase Drives Bone Disease in Diabetes Mellitus. JBMR Plus, 2019, 3, e10212.	2.7	11
59	Effects of Diabetes on Microcirculation and Leukostasis in Retinal and Non-Ocular Tissues: Implications for Diabetic Retinopathy. Biomolecules, 2020, 10, 1583.	4.0	11
60	Antisense Oligonucleotides Modulate High Glucose-Induced Laminin Overexpression and Cell Proliferation: A Potential for Therapeutic Application in Diabetic Microangiopathy. Oligonucleotides, 2001, 11, 387-394.	4.3	10
61	Reduced Levels of Drp1 Protect against Development of Retinal Vascular Lesions in Diabetic Retinopathy. Cells, 2021, 10, 1379.	4.1	10
62	High-Glucose-Induced Rab20 Upregulation Disrupts Gap Junction Intercellular Communication and Promotes Apoptosis in Retinal Endothelial and MÃ¼ller Cells: Implications for Diabetic Retinopathy. Journal of Clinical Medicine, 2020, 9, 3710.	2.4	9
63	High Glucose-Induced Apoptosis Is Linked to Mitochondrial Connexin 43 Level in RRECs: Implications for Diabetic Retinopathy. Cells, 2021, 10, 3102.	4.1	9
64	Opa1 Deficiency Promotes Development of Retinal Vascular Lesions in Diabetic Retinopathy. International Journal of Molecular Sciences, 2021, 22, 5928.	4.1	7
65	High Glucose Increases Binding of Lysyl Oxidase to Extracellular Matrix Proteins: Implications for Diabetic Retinopathy. , 2020, 61, 40.		6
66	Density and distribution of connexin 43 in corpus cavernosum tissue from diabetic and hypogonadal patients with erectile dysfunction. Hormone Molecular Biology and Clinical Investigation, 2013, 13, 7-12.	0.7	4
67	Oral glucose tolerance test performance in olanzapine-treated schizophrenia-spectrum patients is predicted by BMI and triglycerides but not olanzapine dose or duration. Human Psychopharmacology, 2017, 32, e2604.	1.5	4
68	Vascular complications and gene therapy. Expert Opinion on Biological Therapy, 2003, 3, 71-83.	3.1	3
69	Functions and Mechanisms of Pro-Lysyl Oxidase Processing in Cancers and Eye Pathologies with a Focus on Diabetic Retinopathy. International Journal of Molecular Sciences, 2022, 23, 5088.	4.1	3
70	Vascular Basement Membrane Thickening: Basis of Disease Pathology in Diabetic Retinopathy. Essentials in Ophthalmology, 2021, , 275-287.	0.1	1