Jianhai Du

List of Publications by Year in Descending Order

45 papers	1,344 citations	20 h-index	36 g-index
54 ext. papers	1,879 ext. citations	6.8 avg, IF	4.44 L-index

#	Paper	IF	Citations
45	A highly conserved zebrafish IMPDH retinal isoform produces the majority of guanine and forms dynamic protein filaments in photoreceptor cells. *Journal of Biological Chemistry*, **2021**, 101441	5.4	1
44	Extracellular matrix dysfunction in Sorsby patient-derived retinal pigment epithelium.. *Experimental Eye Research*, **2021**, 215, 108899	3.7	0
43	Mutant Nmnat1 leads to a retina-specific decrease of NAD+ accompanied by increased poly(ADP-ribose) in a mouse model of NMNAT1-associated retinal degeneration. *Human Molecular Genetics*, **2021**, 30, 644-657	5.6	4
42	Effect of selectively knocking down key metabolic genes in M□ler glia on photoreceptor health. *Glia*, **2021**, 69, 1966-1986	9	5
41	Proline metabolism and transport in retinal health and disease. *Amino Acids*, **2021**, 53, 1789-1806	3.5	4
40	Xanthine Oxidase Drives Hemolysis and Vascular Malfunction in Sickle Cell Disease. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2021**, 41, 769-782	9.4	6
39	Inhibition of Mitochondrial Respiration Impairs Nutrient Consumption and Metabolite Transport in Human Retinal Pigment Epithelium. *Journal of Proteome Research*, **2021**, 20, 909-922	5.6	1
38	Tracing Nitrogen Metabolism in Mouse Tissues with Gas Chromatography-Mass Spectrometry. *Bio-protocol*, **2021**, 11, e3925	0.9	0
37	Absence of retbindin blocks glycolytic flux, disrupts metabolic homeostasis, and leads to photoreceptor degeneration. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
36	Nuclear NAD-biosynthetic enzyme NMNAT1 facilitates development and early survival of retinal neurons. *ELife*, **2021**, 10,	8.9	3
35	Metabolic Features of Mouse and Human Retinas: Rods versus Cones, Macula versus Periphery, Retina versus RPE. *IScience*, **2020**, 23, 101672	6.1	10
34	The retina and retinal pigment epithelium differ in nitrogen metabolism and are metabolically connected. *Journal of Biological Chemistry*, **2020**, 295, 2324-2335	5.4	10
33	Selective knockdown of hexokinase 2 in rods leads to age-related photoreceptor degeneration and retinal metabolic remodeling. *Cell Death and Disease*, **2020**, 11, 885	9.8	9
32	Metabolic signature of eyelid basal cell carcinoma. *Experimental Eye Research*, **2020**, 198, 108140	3.7	2
31	Proline mediates metabolic communication between retinal pigment epithelial cells and the retina. *Journal of Biological Chemistry*, **2019**, 294, 10278-10289	5.4	36
30	Abnormal mTORC1 signaling leads to retinal pigment epithelium degeneration. *Theranostics*, **2019**, 9, 1170-1180	12.1	22
29	Hepatocyte-Specific Ablation or Whole-Body Inhibition of Xanthine Oxidoreductase in Mice Corrects Obesity-Induced Systemic Hyperuricemia Without Improving Metabolic Abnormalities. *Diabetes*, **2019**, 68, 1221-1229	0.9	15

28	Metabolic Deregulation of the Blood-Outer Retinal Barrier in Retinitis Pigmentosa. *Cell Reports*, **2019**, 28, 1323-1334.e4	10.6	30
27	Human macular Müller cells rely more on serine biosynthesis to combat oxidative stress than those from the periphery. *ELife*, **2019**, 8,	8.9	18
26	Loss of MPC1 reprograms retinal metabolism to impair visual function. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3530-3535	11.5	43
25	Modulating GLUT1 expression in retinal pigment epithelium decreases glucose levels in the retina: impact on photoreceptors and Müller glial cells. *American Journal of Physiology - Cell Physiology*, **2019**, 316, C121-C133	5.4	41
24	How Excessive cGMP Impacts Metabolic Proteins in Retinas at the Onset of Degeneration. *Advances in Experimental Medicine and Biology*, **2018**, 1074, 289-295	3.6	6
23	Deletion of GLUT1 in mouse lens epithelium leads to cataract formation. *Experimental Eye Research*, **2018**, 172, 45-53	3.7	10
22	Metabolic signature of the aging eye in mice. *Neurobiology of Aging*, **2018**, 71, 223-233	5.6	30
21	Impact of euthanasia, dissection and postmortem delay on metabolic profile in mouse retina and RPE/choroid. *Experimental Eye Research*, **2018**, 174, 113-120	3.7	15
20	Flavin homeostasis in the mouse retina during aging and degeneration. *Journal of Nutritional Biochemistry*, **2018**, 62, 123-133	6.3	8
19	Human retinal pigment epithelial cells prefer proline as a nutrient and transport metabolic intermediates to the retinal side. *Journal of Biological Chemistry*, **2017**, 292, 12895-12905	5.4	48
18	Biochemical adaptations of the retina and retinal pigment epithelium support a metabolic ecosystem in the vertebrate eye. *ELife*, **2017**, 6,	8.9	146
17	Quantitative Method to Investigate the Balance between Metabolism and Proteome Biomass: Starting from Glycine. *Angewandte Chemie - International Edition*, **2016**, 55, 15646-15650	16.4	33
16	Phototransduction Influences Metabolic Flux and Nucleotide Metabolism in Mouse Retina. *Journal of Biological Chemistry*, **2016**, 291, 4698-710	5.4	58
15	Reprogramming metabolism by targeting sirtuin 6 attenuates retinal degeneration. *Journal of Clinical Investigation*, **2016**, 126, 4659-4673	15.9	52
14	Deficient glucose and glutamine metabolism in knockout mice contributes to altered visual function. *Molecular Vision*, **2016**, 22, 1198-1212	2.3	9
13	Reductive carboxylation is a major metabolic pathway in the retinal pigment epithelium. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14710-14715	11.5	59
12	Quantitative Method to Investigate the Balance between Metabolism and Proteome Biomass: Starting from Glycine. *Angewandte Chemie*, **2016**, 128, 15875-15879	3.6	
11	Cardiomyocyte GTP Cyclohydrolase 1 Protects the Heart Against Diabetic Cardiomyopathy. *Scientific Reports*, **2016**, 6, 27925	4.9	17

10	Probing Metabolism in the Intact Retina Using Stable Isotope Tracers. *Methods in Enzymology*, **2015**, 561, 149-70	1.7	45
9	Metabolomics method to comprehensively analyze amino acids in different domains. *Analyst, The*, **2015**, 140, 2726-34	5	31
8	Glucose, lactate, and shuttling of metabolites in vertebrate retinas. *Journal of Neuroscience Research*, **2015**, 93, 1079-92	4.4	127
7	Deregulated Myc requires MondoA/Mlx for metabolic reprogramming and tumorigenesis. *Cancer Cell*, **2015**, 27, 271-85	24.3	124
6	Pyruvate kinase and aspartate-glutamate carrier distributions reveal key metabolic links between neurons and glia in retina. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 15579-84	11.5	83
5	The retinal pigment epithelium utilizes fatty acids for ketogenesis. *Journal of Biological Chemistry*, **2014**, 289, 20570-82	5.4	81
4	Inhibition of mitochondrial pyruvate transport by zaprinast causes massive accumulation of aspartate at the expense of glutamate in the retina. *Journal of Biological Chemistry*, **2013**, 288, 36129-40	5.4	51
3	Cytosolic reducing power preserves glutamate in retina. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 18501-6	11.5	41
2	Metabolic features of mouse and human retinas: rods vs. cones, macula vs. periphery, retina vs. RPE		1
1	AMP-activated-protein kinase (AMPK) is an essential sensor and metabolic regulator of retinal neurons and their integrated metabolism with RPE		2