Melinda K Duncan

List of Publications by Year
in descending order

89 papers	4,001 citations	136950 32 h-index	133252 59 g-index
90 all docs	90 docs citations	90 times ranked	3423 citing authors

#	Article	IF	Citations
1	The lens capsule. Experimental Eye Research, 2009, 88, 151-164.	2.6	206
2	Genetic and epigenetic mechanisms of gene regulation during lens development. Progress in Retinal and Eye Research, 2007, 26, 555-597.	15.5	143
3	Requirement for Pax6 in corneal morphogenesis: a role in adhesion. Journal of Cell Science, 2003, 116, 2157-2167.	2.0	141
4	A simple method for quantitating confocal fluorescent images. Biochemistry and Biophysics Reports, 2021, 25, 100916.	1.3	141
5	Dual Roles for Pax-6: a Transcriptional Repressor of Lens Fiber Cell-Specific Î²-Crystallin Genes. Molecular and Cellular Biology, 1998, 18, 5579-5586.	2.3	132
6	Lens proteomics: the accumulation of crystallin modifications in the mouse lens with age. Investigative Ophthalmology and Visual Science, 2002, 43, 205-15.	3.3	130
7	aV integrins and TGFâ€Î²â€induced EMT: a circle of regulation. Journal of Cellular and Molecular Medicine, 2012, 16, 445-455.	3.6	127
8	Attenuation of Junctional Adhesion Molecule-A Is a Contributing Factor for Breast Cancer Cell Invasion. Cancer Research, 2008, 68, 2194-2203.	0.9	123
9	Chicken homeobox gene prox 1 related toDrosophila prospero is expressed in the developing lens and retina. Developmental Dynamics, 1996, 206, 354-367.	1.8	121
10	The gene for the helix-loop-helix protein, Id, is specifically expressed in neural precursors. Developmental Biology, 1992, 154, 1-10.	2.0	117
11	Characterization and Expression of Calpain 10. Journal of Biological Chemistry, 2001, 276, 28525-28531.	3.4	97
12	Prox1 is differentially localized during lens development. Mechanisms of Development, 2002, 112, 195-198.	1.7	95
13	Regulation of Î±A-crystallin via Pax6, c-Maf, CREB and a broad domain of lens-specific chromatin. EMBO Journal, 2006, 25, 2107-2118.	7.8	93
14	Mafs, Prox1, and Pax6 Can Regulate Chicken Î²B1-Crystallin Gene Expression. Journal of Biological Chemistry, 2004, 279, 11088-11095.	3.4	89
15	Structure and Chromosomal Localization of the Human Homeobox Gene Prox 1. Genomics, 1996, 35, 517-522.	2.9	81
16	Abnormal Expression of Collagen IV in Lens Activates Unfolded Protein Response Resulting in Cataract. Journal of Biological Chemistry, 2009, 284, 35872-35884.	3.4	80
17	Identification of Genes Downstream of Pax6 in the Mouse Lens Using cDNA Microarrays. Journal of Biological Chemistry, 2002, 277, 11539-11548.	3.4	77
18	Collagen IV in the developing lens capsule. Matrix Biology, 2002, 21, 415-423.	3.6	73

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19	The roles of Î±_V integrins in lens <scp>EMT</scp> and posterior capsular opacification. Journal of Cellular and Molecular Medicine, 2014, 18, 656-670.	3.6	71
20	Lens Epithelial Cells Initiate an Inflammatory Response Following Cataract Surgery. , 2018, 59, 4986.		68
21	Spatial and temporal activity of the Î±B-crystallin/small heat shock protein gene promoter in transgenic mice. Developmental Dynamics, 1996, 207, 75-88.	1.8	67
22	Conditional deletion of Î²1-integrin from the developing lens leads to loss of the lens epithelial phenotype. Developmental Biology, 2007, 306, 658-668.	2.0	65
23	Eyes absent: A gene family found in several metazoan phyla. Mammalian Genome, 1997, 8, 479-485.	2.2	63
24	A comparative cDNA microarray analysis reveals a spectrum of genes regulated by Pax6 in mouse lens. Genes To Cells, 2002, 7, 1267-1283.	1.2	61
25	Prox1 and fibroblast growth factor receptors form a novel regulatory loop controlling lens fiber differentiation and gene expression. Development (Cambridge), 2015, 143, 318-28.	2.5	59
26	Developmental regulation of the chicken Î²B1-crystallin promoter in transgenic mice. Mechanisms of Development, 1996, 57, 79-89.	1.7	55
27	An immunohistochemical method for the detection of proteins in the vertebrate lens. Journal of Immunological Methods, 2001, 253, 243-252.	1.4	54
28	Inbred FVB/N Mice Are Mutant at thecp49/Bfsp2Locus and Lack Beaded Filament Proteins in the Lens. , 2006, 47, 4931.		53
29	Truncated forms of Pax-6 disrupt lens morphology in transgenic mice. Investigative Ophthalmology and Visual Science, 2000, 41, 464-73.	3.3	51
30	Chromosomal Proteins HMGN3a and HMGN3b Regulate the Expression of Glycine Transporter 1. Molecular and Cellular Biology, 2004, 24, 3747-3756.	2.3	47
31	Ectopic Pax6 Expression Disturbs Lens Fiber Cell Differentiation. , 2004, 45, 3589.		45
32	Loss of Sip1 leads to migration defects and retention of ectodermal markers during lens development. Mechanisms of Development, 2014, 131, 86-110.	1.7	45
33	Developmental Expression of Pop1/Bves. Journal of Histochemistry and Cytochemistry, 2004, 52, 371-377.	2.5	43
34	Convergent evolution of crystallin gene regulation in squid and chicken: The AP-1/ARE connection. Journal of Molecular Evolution, 1994, 39, 134-143.	1.8	42
35	Chicken Î² B1 crystallin: gene sequence and evidence for functional conservation of promoter activity between chicken and mouse. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1995, 1261, 68-76.	2.4	35
36	Differential expression of the HMGN family of chromatin proteins during ocular development. Gene Expression Patterns, 2008, 8, 433-437.	0.8	35

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37	Characterizing molecular diffusion in the lens capsule. Matrix Biology, 2010, 29, 228-236.	3.6	35
38	The chicken Î²A4- and Î²B1-crystallin-encoding genes are tightly linked. Gene, 1995, 162, 189-196.	2.2	32
39	Unfolded Protein Response (UPR) is activated during normal lens development. Gene Expression Patterns, 2011, 11, 135-143.	0.8	32
40	Fibronectin has multifunctional roles in posterior capsular opacification (PCO). Matrix Biology, 2020, 90, 79-108.	3.6	32
41	Expression of the helix-loop-helix genes Id-1 and NSCL-1 during cerebellar development. , 1997, 208, 107-114.		31
42	The mouse Î²B1-crystallin promoter: strict regulation of lens fiber cell specificity. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2001, 1519, 30-38.	2.4	30
43	The unfolded protein response is activated in connexin 50 mutant mouse lenses. Experimental Eye Research, 2012, 102, 28-37.	2.6	29
44	The molecular mechanisms underlying lens fiber elongation. Experimental Eye Research, 2017, 156, 41-49.	2.6	29
45	Germ Cell Deficient (gcd) Mouse as a Model of Premature Ovarian Failure1. Biology of Reproduction, 1993, 49, 221-227.	2.7	28
46	Proteomic and Sequence Analysis of Chicken Lens Crystallins Reveals Alternate Splicing and Translational Forms of Î²B2 and Î²A2 Crystallins. , 2004, 45, 2705.		28
47	OptiRNAi, an RNAi design tool. Computer Methods and Programs in Biomedicine, 2004, 75, 67-73.	4.7	28
48	Contributions of Mouse Genetic Background and Age on Anterior Lens Capsule Thickness. Anatomical Record, 2008, 291, 1619-1627.	1.4	28
49	Unfoldedâ€protein responseâ€associated stabilization of p27(Cdkn1b) interferes with lens fiber cell denucleation, leading to cataract. FASEB Journal, 2016, 30, 1087-1095.	0.5	28
50	Bin3 Deletion Causes Cataracts and Increased Susceptibility to Lymphoma during Aging. Cancer Research, 2008, 68, 1683-1690.	0.9	27
51	Protein expression patterns for ubiquitous and tissue specific calpains in the developing mouse lens. Experimental Eye Research, 2003, 76, 433-443.	2.6	26
52	CD44 expression is developmentally regulated in the mouse lens and increases in the lens epithelium after injury. Differentiation, 2010, 79, 111-119.	1.9	26
53	Expression of Î²A3/A1-crystallin in the developing and adult rat eye. Journal of Molecular Histology, 2011, 42, 59-69.	2.2	26
54	Sequence and Expression of Chicken Î²A2- and Î²B3-crystallins. Experimental Eye Research, 1996, 62, 111-120.	2.6	25

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55	General utility of the chicken betaB1-crystallin promoter to drive protein expression in lens fiber cells of transgenic mice. Transgenic Research, 2002, 11, 397-410.	2.4	25
56	Xcat, a novel mouse model for Nanceâ€“Horan syndrome inhibits expression of the cytoplasmic-targeted Nhs1 isoform. Human Molecular Genetics, 2006, 15, 319-327.	2.9	24
57	Lipids in fed and starved Biomphalaria glabrata (gastropoda). Comparative Biochemistry and Physiology A, Comparative Physiology, 1987, 86, 663-665.	0.6	22
58	Subfertility in mice harboring a mutation in betaB2-crystallin. Molecular Vision, 2007, 13, 366-73.	1.1	22
59	Deletion of JAM-A causes morphological defects in the corneal epithelium. International Journal of Biochemistry and Cell Biology, 2007, 39, 576-585.	2.8	21
60	Production of Monoclonal Antibodies Against Chicken Pop1 (BVES). Hybridoma, 2001, 20, 377-381.	0.4	20
61	Development of novel filtering criteria to analyze RNA-sequencing data obtained from the murine ocular lens during embryogenesis. Genomics Data, 2014, 2, 369-374.	1.3	20
62	Î²1-Integrin Deletion From the Lens Activates Cellular Stress Responses Leading to Apoptosis and Fibrosis. , 2017, 58, 3896.		19
63	Dual Roles for Prox1 in the Regulation of the Chicken Î²B1-Crystallin Promoter. , 2008, 49, 1542.		18
64	Spatiotemporal dynamics of canonical Wnt signaling during embryonic eye development and posterior capsular opacification (PCO). Experimental Eye Research, 2018, 175, 148-158.	2.6	18
65	Differential influence of proteolysis by calpain 2 and Lp82 on in vitro precipitation of mouse lens crystallins. Biochemical and Biophysical Research Communications, 2003, 307, 558-563.	2.1	17
66	Beta-1 integrin is important for the structural maintenance and homeostasis of differentiating fiber cells. International Journal of Biochemistry and Cell Biology, 2014, 50, 132-145.	2.8	17
67	JAM-A expression during embryonic development. Developmental Dynamics, 2005, 233, 1517-1524.	1.8	16
68	Cataract surgeon viewpoints on the need for novel preventative anti-inflammatory and anti-posterior capsular opacification therapies. Current Medical Research and Opinion, 2019, 35, 1971-1981.	1.9	16
69	Î²1â€integrin controls cell fate specification in early lens development. Differentiation, 2016, 92, 133-147.	1.9	15
70	A new transgenic reporter line reveals Wnt-dependent Snai2 re-expression and cranial neural crest differentiation in Xenopus. Scientific Reports, 2019, 9, 11191.	3.3	14
71	Expression of the helix-loop-helix protein, Id, during branching morphogenesis in the kidney. Kidney International, 1994, 46, 324-332.	5.2	13
72	Junctional Adhesion Molecule-A Regulates Vascular Endothelial Growth Factor Receptor-2 Signaling-Dependent Mouse Corneal Wound Healing. PLoS ONE, 2013, 8, e63674.	2.5	13

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73	Focus on Molecules: Smad Interacting Protein 1 (Sip1, ZEB2, ZFHX1B). Experimental Eye Research, 2012, 101, 105-106.	2.6	12
74	Lens Extrusion fromLaminin Alpha 1Mutant Zebrafish. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	12
75	The aging mouse lens transcriptome. Experimental Eye Research, 2021, 209, 108663.	2.6	11
76	Lens Crystallins. , 2004, , 119-150.		10
77	The Zeb Proteins ÎEF1 and Sip1 May Have Distinct Functions in Lens Cells Following Cataract Surgery. , 2014, 55, 5445.		10
78	PCNA interacts with Prox1 and represses its transcriptional activity. Molecular Vision, 2008, 14, 2076-86.	1.1	10
79	Palm is expressed in both developing and adult mouse lens and retina. BMC Ophthalmology, 2005, 5, 14.	1.4	9
80	Expression of tissue plasminogen activator during eye development. Experimental Eye Research, 2005, 81, 90-96.	2.6	9
81	Î±VÎ²8 integrin targeting to prevent posterior capsular opacification. JCI Insight, 2021, 6, .	5.0	9
82	Letter to the Editor: The Transcription Factor, Kid-1, is Highly Expressed in Both Eye and Kidney of the Mouse. Experimental Eye Research, 1997, 64, 287-290.	2.6	7
83	Morphometric analysis of the lens in human aniridia and mouse Small eye. Experimental Eye Research, 2021, 203, 108371.	2.6	7
84	The effect of sex on the mouse lens transcriptome. Experimental Eye Research, 2021, 209, 108676.	2.6	7
85	Growth Factor Signaling in Lens Fiber Differentiation. , 2014, , 81-104.		4
86	Production of Monoclonal Antibodies Against Prox1. Hybridoma, 2006, 25, 27-33.	0.4	3
87	Determination of Sulfanilamide and Sulfisoxazole in Drug Preparations by Quantitative High Performance TLC. Journal of Liquid Chromatography and Related Technologies, 1986, 9, 1861-1868.	1.0	2
88	Lipids and sterols in Corbicula fluminea (bivalvia). Comparative Biochemistry and Physiology Part B: Comparative Biochemistry, 1987, 87, 881-883.	0.2	2
89	A New Focus on RNA in the Lens. Science, 2011, 331, 1523-1524.	12.6	2