

# David E Birk

## List of Publications by Year in descending order

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171  
papers

11,580  
citations

27035

58  
h-index

42259

96  
g-index

174  
all docs

174  
docs citations

174  
times ranked

10995  
citing authors

#	ARTICLE	IF	CITATIONS
1	The molecular basis of corneal transparency. <i>Experimental Eye Research</i> , 2010, 91, 326-335.	1.2	449
2	Type V Collagen Controls the Initiation of Collagen Fibril Assembly. <i>Journal of Biological Chemistry</i> , 2004, 279, 53331-53337.	1.6	422
3	Decorin regulates assembly of collagen fibrils and acquisition of biomechanical properties during tendon development. <i>Journal of Cellular Biochemistry</i> , 2006, 98, 1436-1449.	1.2	361
4	Differential Expression of Lumican and Fibromodulin Regulate Collagen Fibrillogenesis in Developing Mouse Tendons. <i>Journal of Cell Biology</i> , 2000, 151, 779-788.	2.3	316
5	The regulatory roles of small leucine-rich proteoglycans in extracellular matrix assembly. <i>FEBS Journal</i> , 2013, 280, 2120-2137.	2.2	293
6	Collagen fibrillogenesis in situ: Fibril segments undergo post-depositional modifications resulting in linear and lateral growth during matrix development. <i>Developmental Dynamics</i> , 1995, 202, 229-243.	0.8	218
7	Reciprocal signalling by Notch-Collagen V-CALCR retains muscle stem cells in their niche. <i>Nature</i> , 2018, 557, 714-718.	13.7	203
8	Human limbal biopsy-derived stromal stem cells prevent corneal scarring. <i>Science Translational Medicine</i> , 2014, 6, 266ra172.	5.8	200
9	A Syndrome of Joint Laxity and Impaired Tendon Integrity in Lumican- and Fibromodulin-deficient Mice. <i>Journal of Biological Chemistry</i> , 2002, 277, 35532-35540.	1.6	199
10	Targeted Ablation of the Abcc6 Gene Results in Ectopic Mineralization of Connective Tissues. <i>Molecular and Cellular Biology</i> , 2005, 25, 8299-8310.	1.1	193
11	Genetic Evidence for the Coordinated Regulation of Collagen Fibrillogenesis in the Cornea by Decorin and Biglycan. <i>Journal of Biological Chemistry</i> , 2009, 284, 8888-8897.	1.6	192
12	Stem Cell Therapy Restores Transparency to Defective Murine Corneas. <i>Stem Cells</i> , 2009, 27, 1635-1642.	1.4	186
13	Decorin expression is important for age-related changes in tendon structure and mechanical properties. <i>Matrix Biology</i> , 2013, 32, 3-13.	1.5	169
14	Influence of Decorin and Biglycan on Mechanical Properties of Multiple Tendons in Knockout Mice. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 181-185.	0.6	167
15	Structure, Physiology, and Biochemistry of Collagens. <i>Advances in Experimental Medicine and Biology</i> , 2014, 802, 5-29.	0.8	167
16	Keratocan-deficient Mice Display Alterations in Corneal Structure. <i>Journal of Biological Chemistry</i> , 2003, 278, 21672-21677.	1.6	162
17	A role for MEK kinase 1 in TGF- $\beta$ /activin-induced epithelium movement and embryonic eyelid closure. <i>EMBO Journal</i> , 2003, 22, 4443-4454.	3.5	161
18	Type XIV Collagen Regulates Fibrillogenesis. <i>Journal of Biological Chemistry</i> , 2009, 284, 8427-8438.	1.6	161

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19	Decorin and biglycan are necessary for maintaining collagen fibril structure, fiber realignment, and mechanical properties of mature tendons. <i>Matrix Biology</i> , 2017, 64, 81-93.	1.5	159
20	Collagen fibrillogenesis in situ: Fibril segments become long fibrils as the developing tendon matures. , 1997, 208, 291-298.		150
21	Murine Model of the Ehlers-Danlos Syndrome. <i>Journal of Biological Chemistry</i> , 2006, 281, 12888-12895.	1.6	144
22	Collagen V is a dominant regulator of collagen fibrillogenesis: dysfunctional regulation of structure and function in a corneal-stroma-specific <i>Col5a1</i> -null mouse model. <i>Journal of Cell Science</i> , 2011, 124, 4096-4105.	1.2	137
23	Nuclear Ferritin Protects DNA From UV Damage in Corneal Epithelial Cells. <i>Molecular Biology of the Cell</i> , 1998, 9, 1037-1051.	0.9	130
24	Keratocan, a Cornea-specific Keratan Sulfate Proteoglycan, Is Regulated by Lumican. <i>Journal of Biological Chemistry</i> , 2005, 280, 25541-25547.	1.6	128
25	Collagen XII: Protecting bone and muscle integrity by organizing collagen fibrils. <i>International Journal of Biochemistry and Cell Biology</i> , 2014, 53, 51-54.	1.2	127
26	Regulation of Collagen Fibril Nucleation and Initial Fibril Assembly Involves Coordinate Interactions with Collagens V and XI in Developing Tendon. <i>Journal of Biological Chemistry</i> , 2011, 286, 20455-20465.	1.6	118
27	Regulation of corneal stroma extracellular matrix assembly. <i>Experimental Eye Research</i> , 2015, 133, 69-80.	1.2	117
28	Type XII collagen regulates osteoblast polarity and communication during bone formation. <i>Journal of Cell Biology</i> , 2011, 193, 1115-1130.	2.3	113
29	Type V Collagen in Scar Tissue Regulates the Size of Scar after Heart Injury. <i>Cell</i> , 2020, 182, 545-562.e23.	13.5	113
30	Secretion and Organization of a Cornea-like Tissue In Vitro by Stem Cells from Human Corneal Stroma. , 2007, 48, 5038.		111
31	Recessive and dominant mutations in COL12A1 cause a novel EDS/myopathy overlap syndrome in humans and mice. <i>Human Molecular Genetics</i> , 2014, 23, 2339-2352.	1.4	107
32	Ocular and Scleral Alterations in Gene-Targeted Lumican-Fibromodulin Double-Null Mice. , 2003, 44, 2422.		105
33	Structural Abnormalities of the Cornea and Lid Resulting from Collagen V Mutations. , 2006, 47, 565.		105
34	Biologically Active Decorin Is a Monomer in Solution. <i>Journal of Biological Chemistry</i> , 2004, 279, 6606-6612.	1.6	103
35	Regional Differences in Stem Cell/Progenitor Cell Populations from the Mouse Achilles Tendon. <i>Tissue Engineering - Part A</i> , 2013, 19, 199-210.	1.6	99
36	Composition, structure and function of the corneal stroma. <i>Experimental Eye Research</i> , 2020, 198, 108137.	1.2	97

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37	Collagen fibrillogenesis in vitro: Comparison of types I, II, and III. Archives of Biochemistry and Biophysics, 1984, 235, 178-185.	1.4	95
38	Functional Knockout of the Matrilin-3 Gene Causes Premature Chondrocyte Maturation to Hypertrophy and Increases Bone Mineral Density and Osteoarthritis. American Journal of Pathology, 2006, 169, 515-527.	1.9	95
39	Regulation of procollagen amino-propeptide processing during mouse embryogenesis by specialization of homologous ADAMTS proteases: insights on collagen biosynthesis and dermatosparaxis. Development (Cambridge), 2006, 133, 1587-1596.	1.2	94
40	The roles of types XII and XIV collagen in fibrillogenesis and matrix assembly in the developing cornea. Journal of Cellular Biochemistry, 2002, 87, 208-220.	1.2	90
41	Expression of type XIV collagen in developing chicken tendons: Association with assembly and growth of collagen fibrils. , 2000, 217, 430-439.		88
42	Thrombospondin 2 Modulates Collagen Fibrillogenesis and Angiogenesis. Journal of Investigative Dermatology Symposium Proceedings, 2000, 5, 61-66.	0.8	88
43	Dysfunctional tendon collagen fibrillogenesis in collagen VI null mice. Matrix Biology, 2011, 30, 53-61.	1.5	88
44	Heterotypic Collagen Fibrils and Stabilizing Collagens.. Annals of the New York Academy of Sciences, 1990, 580, 143-160.	1.8	87
45	Targeted Inactivation of Murine Laminin $\beta$ 2-Chain Gene Recapitulates Human Junctional Epidermolysis Bullosa. Journal of Investigative Dermatology, 2003, 121, 720-731.	0.3	85
46	Collagen Suprastructures. Topics in Current Chemistry, 0, , 185-205.	4.0	84
47	Mechanical, Compositional, and Structural Properties of the Post-natal Mouse Achilles Tendon. Annals of Biomedical Engineering, 2011, 39, 1904-1913.	1.3	83
48	Effect of Latanoprost on the Expression of Matrix Metalloproteinases and Their Tissue Inhibitors in Human Trabecular Meshwork Cells. , 2006, 47, 3887.		79
49	Influence of Decorin on the Mechanical, Compositional, and Structural Properties of the Mouse Patellar Tendon. Journal of Biomechanical Engineering, 2012, 134, 031005.	0.6	77
50	Interclass small leucine-rich repeat proteoglycan interactions regulate collagen fibrillogenesis and corneal stromal assembly. Matrix Biology, 2014, 35, 103-111.	1.5	76
51	Kinetic Analysis of Collagen Fibrillogenesis: I. Use of Turbidity-Time Data. Collagen and Related Research, 1983, 3, 393-405.	2.2	75
52	Effect of Age and Proteoglycan Deficiency on Collagen Fiber Re-Alignment and Mechanical Properties in Mouse Supraspinatus Tendon. Journal of Biomechanical Engineering, 2013, 135, 021019.	0.6	73
53	The injury response of aged tendons in the absence of biglycan and decorin. Matrix Biology, 2014, 35, 232-238.	1.5	73
54	Cornea organoids from human induced pluripotent stem cells. Scientific Reports, 2017, 7, 41286.	1.6	73

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55	Characterization of collagen fibril segments from chicken embryo cornea, dermis and tendon. <i>Matrix Biology</i> , 1996, 15, 111-118.	1.5	72
56	Molecular structure of collagen in solution: comparison of types I, II, III and V. <i>International Journal of Biological Macromolecules</i> , 1984, 6, 125-132.	3.6	71
57	Collagen fibril assembly during postnatal development and dysfunctional regulation in the lumican-deficient murine cornea. <i>Developmental Dynamics</i> , 2006, 235, 2493-2506.	0.8	71
58	Altered Corneal Stromal Matrix Organization is Associated with Mucopolysaccharidosis I, III and VI. <i>Experimental Eye Research</i> , 1999, 68, 523-530.	1.2	70
59	Corneal cell-matrix interactions: Type VI Collagen promotes adhesion and spreading of corneal fibroblasts. <i>Experimental Cell Research</i> , 1992, 200, 490-499.	1.2	69
60	Decorin Regulates the Aggrecan Network Integrity and Biomechanical Functions of Cartilage Extracellular Matrix. <i>ACS Nano</i> , 2019, 13, 11320-11333.	7.3	67
61	The Tendon Injury Response is Influenced by Decorin and Biglycan. <i>Annals of Biomedical Engineering</i> , 2014, 42, 619-630.	1.3	66
62	The Fibril-associated Collagen IX Provides a Novel Mechanism for Cell Adhesion to Cartilaginous Matrix. <i>Journal of Biological Chemistry</i> , 2004, 279, 51677-51687.	1.6	65
63	Fhit Interaction with Ferredoxin Reductase Triggers Generation of Reactive Oxygen Species and Apoptosis of Cancer Cells. <i>Journal of Biological Chemistry</i> , 2008, 283, 13736-13744.	1.6	64
64	Corneal and scleral collagen fiber formation in vitro. <i>Biochimica Et Biophysica Acta (BBA) - Protein Structure</i> , 1981, 670, 362-369.	1.7	63
65	Fibulin-2 Is Dispensable for Mouse Development and Elastic Fiber Formation. <i>Molecular and Cellular Biology</i> , 2008, 28, 1061-1067.	1.1	62
66	Mice lacking matrilin-1 (cartilage matrix protein) have alterations in type II collagen fibrillogenesis and fibril organization. <i>Developmental Dynamics</i> , 1999, 216, 434-441.	0.8	61
67	Mechanical, compositional, and structural properties of the mouse patellar tendon with changes in biglycan gene expression. <i>Journal of Orthopaedic Research</i> , 2013, 31, 1430-1437.	1.2	61
68	Collagen XIV is important for growth and structural integrity of the myocardium. <i>Journal of Molecular and Cellular Cardiology</i> , 2012, 53, 626-638.	0.9	60
69	Collagen Fibrillogenesis in Situ.. <i>Annals of the New York Academy of Sciences</i> , 1990, 580, 176-194.	1.8	58
70	Production of Human Type I Collagen in Yeast Reveals Unexpected New Insights into the Molecular Assembly of Collagen Trimers. <i>Journal of Biological Chemistry</i> , 2001, 276, 24038-24043.	1.6	58
71	COL6A3 Protein Deficiency in Mice Leads to Muscle and Tendon Defects Similar to Human Collagen VI Congenital Muscular Dystrophy. <i>Journal of Biological Chemistry</i> , 2013, 288, 14320-14331.	1.6	58
72	Induced ablation of Bmp1 and Tll1 produces osteogenesis imperfecta in mice. <i>Human Molecular Genetics</i> , 2014, 23, 3085-3101.	1.4	58

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73	Reduced type I collagen utilization: A pathogenic mechanism in COL5A1 haplo-insufficient Ehlers-Danlos syndrome. <i>Journal of Cellular Biochemistry</i> , 2004, 92, 113-124.	1.2	57
74	Non-enzymatic glycation of type I collagen diminishes collagen-proteoglycan binding and weakens cell adhesion. <i>Journal of Cellular Biochemistry</i> , 2008, 104, 1684-1698.	1.2	57
75	Partial restoration of the keratocyte phenotype to bovine keratocytes made fibroblastic by serum. <i>Investigative Ophthalmology and Visual Science</i> , 2002, 43, 3416-21.	3.3	55
76	Procollagen C Proteinase Enhancer 1 Genes Are Important Determinants of the Mechanical Properties and Geometry of Bone and the Ultrastructure of Connective Tissues. <i>Molecular and Cellular Biology</i> , 2006, 26, 238-249.	1.1	54
77	Niche stiffening compromises hair follicle stem cell potential during ageing by reducing bivalent promoter accessibility. <i>Nature Cell Biology</i> , 2021, 23, 771-781.	4.6	51
78	Collagens, Suprastructures, and Collagen Fibril Assembly. , 2011, , 77-115.		51
79	Ferritin Is a Developmentally Regulated Nuclear Protein of Avian Corneal Epithelial Cells. <i>Journal of Biological Chemistry</i> , 1997, 272, 12831-12839.	1.6	50
80	Fibroblasts Create Compartments in the Extracellular Space Where Collagen Polymerizes into Fibrils and Fibrils Associate into Bundles. <i>Annals of the New York Academy of Sciences</i> , 1985, 460, 258-266.	1.8	47
81	Turbidimetric and morphological studies of type I collagen fibre self assembly in vitro and the influence of fibronectin. <i>International Journal of Biological Macromolecules</i> , 1985, 7, 135-140.	3.6	47
82	Collagen fibril assembly by corneal fibroblasts in three-dimensional collagen gel cultures: Small-diameter heterotypic fibrils are deposited in the absence of keratan sulfate proteoglycan. <i>Experimental Cell Research</i> , 1992, 202, 113-124.	1.2	47
83	Tendon proper- and peritenon-derived progenitor cells have unique tenogenic properties. <i>Stem Cell Research and Therapy</i> , 2014, 5, 86.	2.4	47
84	Targeted Deletion of Collagen V in Tendons and Ligaments Results in a Classic Ehlers-Danlos Syndrome Joint Phenotype. <i>American Journal of Pathology</i> , 2015, 185, 1436-1447.	1.9	46
85	Analysis of Expression of Matrix Metalloproteinases and Tissue Inhibitors of Metalloproteinases in Human Ciliary Body after Latanoprost. , 2006, 47, 953.		45
86	Fibromodulin regulates collagen fibrillogenesis during peripheral corneal development. <i>Developmental Dynamics</i> , 2010, 239, 844-854.	0.8	45
87	Matrix Assembly. , 1991, , 221-254.		45
88	Collagens VI and XII form complexes mediating osteoblast interactions during osteogenesis. <i>Cell and Tissue Research</i> , 2016, 364, 623-635.	1.5	44
89	Fibulin-4 E57K Knock-in Mice Recapitulate Cutaneous, Vascular and Skeletal Defects of Recessive Cutis Laxa 1B with both Elastic Fiber and Collagen Fibril Abnormalities. <i>Journal of Biological Chemistry</i> , 2015, 290, 21443-21459.	1.6	42
90	Position of single amino acid substitutions in the collagen triple helix determines their effect on structure of collagen fibrils. <i>Journal of Structural Biology</i> , 2004, 148, 326-337.	1.3	41

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91	BMP1-like proteinases are essential to the structure and wound healing of skin. <i>Matrix Biology</i> , 2016, 56, 114-131.	1.5	41
92	Focus on Molecules: Collagens V and XI. <i>Experimental Eye Research</i> , 2012, 98, 105-106.	1.2	40
93	Stromal assemblies containing collagen types IV and VI and fibronectin in the developing embryonic avian cornea. <i>Developmental Biology</i> , 1991, 144, 379-391.	0.9	39
94	Type IIA procollagen: Expression in developing chicken limb cartilage and human osteoarthritic articular cartilage. <i>Developmental Dynamics</i> , 2001, 220, 307-322.	0.8	39
95	Abnormal Corneal Endothelial Maturation in Collagen XII and XIV Null Mice. , 2013, 54, 3297.		38
96	Deficits in Col5a2 Expression Result in Novel Skin and Adipose Abnormalities and Predisposition to Aortic Aneurysms and Dissections. <i>American Journal of Pathology</i> , 2017, 187, 2300-2311.	1.9	38
97	Collagen XI regulates the acquisition of collagen fibril structure, organization and functional properties in tendon. <i>Matrix Biology</i> , 2020, 94, 77-94.	1.5	38
98	Pathophysiological Mechanisms of Autosomal Dominant Congenital Stromal Corneal Dystrophy. <i>American Journal of Pathology</i> , 2011, 179, 2409-2419.	1.9	37
99	Mediation of Cartilage Matrix Degeneration and Fibrillation by Decorin in Post-traumatic Osteoarthritis. <i>Arthritis and Rheumatology</i> , 2020, 72, 1266-1277.	2.9	37
100	Decorin regulates cartilage pericellular matrix micromechanobiology. <i>Matrix Biology</i> , 2021, 96, 1-17.	1.5	37
101	Collagen Fibril Assembly, Deposition, and Organization into Tissue-Specific Matrices. , 1994, , 91-128.		36
102	The metalloproteinase-proteoglycans ADAMTS7 and ADAMTS12 provide an innate, tendon-specific protective mechanism against heterotopic ossification. <i>JCI Insight</i> , 2018, 3, .	2.3	36
103	Association of Type XII Collagen with Regions of Increased Stability and Keratocyte Density in the Cornea. <i>Experimental Eye Research</i> , 2002, 75, 683-694.	1.2	35
104	Procollagen VII Self-Assembly Depends on Site-Specific Interactions and Is Promoted by Cleavage of the NC2 Domain with Procollagen C-Proteinase. <i>Biochemistry</i> , 2003, 42, 11434-11442.	1.2	35
105	A Mouse Model for Dominant Collagen VI Disorders. <i>Journal of Biological Chemistry</i> , 2014, 289, 10293-10307.	1.6	35
106	Collagen XII mediated cellular and extracellular mechanisms regulate establishment of tendon structure and function. <i>Matrix Biology</i> , 2021, 95, 52-67.	1.5	35
107	Differential Expression of Genes Associated with Collagen Fibril Growth in the Chicken Tendon: Identification of Structural and Regulatory Genes by Subtractive Hybridization. <i>Archives of Biochemistry and Biophysics</i> , 1998, 350, 1-9.	1.4	34
108	Differential expression of type XII collagen in developing chicken metatarsal tendons. <i>Journal of Anatomy</i> , 2003, 202, 411-420.	0.9	34

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109	Collagen Fibril Formation in a Wound Healing Model. <i>Journal of Structural Biology</i> , 2002, 137, 23-30.	1.3	32
110	Regulatory role of collagen V in establishing mechanical properties of tendons and ligaments is tissue dependent. <i>Journal of Orthopaedic Research</i> , 2015, 33, 882-888.	1.2	32
111	Adipocyte-Derived Versican and Macrophage-Derived Biglycan Control Adipose Tissue Inflammation in Obesity. <i>Cell Reports</i> , 2020, 31, 107818.	2.9	32
112	Type V collagen regulates the assembly of collagen fibrils in cultures of bovine vascular smooth muscle cells. <i>Journal of Cellular Biochemistry</i> , 2001, 80, 146-155.	1.2	31
113	Collagen fibrillogenesis in vitro: evidence for pre-nucleation and nucleation steps. <i>International Journal of Biological Macromolecules</i> , 1986, 8, 37-42.	3.6	30
114	Spatial and Temporal Variations in Extracellular Matrix of Periocular and Corneal Regions During Corneal Stromal Development. <i>Experimental Eye Research</i> , 1996, 62, 285-292.	1.2	30
115	Recapitulation of the Achilles tendon mechanical properties during neonatal development: A Study of differential healing during two stages of development in a mouse model. <i>Journal of Orthopaedic Research</i> , 2012, 30, 448-456.	1.2	30
116	Single Amino Acid Substitutions in Procollagen VII Affect Early Stages of Assembly of Anchoring Fibrils. <i>Journal of Biological Chemistry</i> , 2005, 280, 191-198.	1.6	29
117	Organization of Fibrillar Collagen in the Human and Bovine Cornea. <i>Connective Tissue Research</i> , 1997, 36, 165-174.	1.1	28
118	Collagen fibril growth during chicken tendon development: matrix metalloproteinase-2 and its activation. <i>Cell and Tissue Research</i> , 2009, 336, 79-89.	1.5	27
119	Intracellularly-Retained Decorin Lacking the C-Terminal Ear Repeat Causes ER Stress. <i>American Journal of Pathology</i> , 2013, 183, 247-256.	1.9	27
120	Collagen Fibrillogenesis in Tissues, in Solution and from Modeling: A Synthesis.. <i>Journal of Investigative Dermatology</i> , 1982, 79, 109s-112s.	0.3	26
121	Focus on Molecules: Decorin. <i>Experimental Eye Research</i> , 2011, 92, 444-445.	1.2	26
122	Pericellular Proteins of the Developing Mouse Tendon: A Proteomic Analysis. <i>Connective Tissue Research</i> , 2012, 53, 2-13.	1.1	26
123	Increased stromal extracellular matrix synthesis and assembly by insulin activated bovine keratocytes cultured under agarose. <i>Experimental Eye Research</i> , 2008, 87, 604-611.	1.2	24
124	Existence of Corneal Endothelial Slow-Cycling Cells. , 2015, 56, 3827.		24
125	Differential expression of fibromodulin mRNA associated with tendon fibril growth: isolation and characterization of a chicken fibromodulin cDNA. <i>Biochemical Journal</i> , 1996, 317, 785-789.	1.7	23
126	Homozygosity and Heterozygosity for Null Col5a2 Alleles Produce Embryonic Lethality and a Novel Classic Ehlers-Danlos Syndrome-Related Phenotype. <i>American Journal of Pathology</i> , 2015, 185, 2000-2011.	1.9	22



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127	Injury response of geriatric mouse patellar tendons. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1256-1263.	1.2	22
128	Altered dermal fibroblast behavior in a collagen V haploinsufficient murine model of classic Ehlers-Danlos syndrome. <i>Connective Tissue Research</i> , 2016, 57, 1-9.	1.1	22
129	Collagen V localizes to pericellular sites during tendon collagen fibrillogenesis. <i>Matrix Biology</i> , 2014, 33, 47-53.	1.5	21
130	Limb- and tendon-specific <i>Adamtsl2</i> deletion identifies a role for <i>ADAMTSL2</i> in tendon growth in a mouse model for geleophysic dysplasia. <i>Matrix Biology</i> , 2019, 82, 38-53.	1.5	21
131	Collagen XII Is a Regulator of Corneal Stroma Structure and Function. , 2020, 61, 61.		21
132	Collagen V haploinsufficiency in a murine model of classic Ehlers-Danlos syndrome is associated with deficient structural and mechanical healing in tendons. <i>Journal of Orthopaedic Research</i> , 2017, 35, 2707-2715.	1.2	20
133	Kinetic Analysis of Collagen Fibrillogenesis: II. Corneal and Scleral Type I Collagen. <i>Collagen and Related Research</i> , 1984, 4, 265-277.	2.2	19
134	Physical characterization of type I procollagen in solution: evidence that the propeptides limit self-assembly. <i>International Journal of Biological Macromolecules</i> , 1986, 8, 177-182.	3.6	19
135	Enhanced cell accumulation and collagen processing by keratocytes cultured under agarose and in media containing IGF-I, TGF- $\beta^2$ or PDGF. <i>Matrix Biology</i> , 2010, 29, 519-524.	1.5	19
136	Mechanical property changes during neonatal development and healing using a multiple regression model. <i>Journal of Biomechanics</i> , 2012, 45, 1288-1292.	0.9	19
137	Collagen V-heterozygous and -null supraspinatus tendons exhibit altered dynamic mechanical behaviour at multiple hierarchical scales. <i>Interface Focus</i> , 2016, 6, 20150043.	1.5	19
138	Characterization and Developmental Regulation of Avian Corneal $\beta^2$ -1,4-galactosyltransferase mRNA. <i>Experimental Eye Research</i> , 1996, 63, 193-200.	1.2	18
139	Proteome profiling of wild type and lumican-deficient mouse corneas. <i>Journal of Proteomics</i> , 2011, 74, 1895-1905.	1.2	18
140	Topographies of extracytoplasmic compartments in developing chick tendon fibroblasts. <i>Journal of Structural Biology</i> , 1986, 97, 238-248.	0.9	17
141	Collagen and glycosaminoglycan synthesis in aging human keratocyte cultures. <i>Experimental Eye Research</i> , 1981, 32, 331-339.	1.2	16
142	Cellular invasion and collagen type IX in the primary corneal stroma in vitro. <i>Developmental Dynamics</i> , 1994, 201, 206-215.	0.8	16
143	Complete primary structure and genomic organization of the mouse <i>Col14a1</i> gene. <i>Matrix Biology</i> , 2003, 22, 209-216.	1.5	16
144	Role of Cys41 in the N-terminal domain of lumican in ex vivo collagen fibrillogenesis by cultured corneal stromal cells. <i>Biochemical Journal</i> , 2003, 369, 461-468.	1.7	15

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145	Complete primary structure and genomic organization of the mouse Col14a1 gene. <i>Matrix Biology</i> , 2004, 22, 595-601.	1.5	15
146	Mouse Models in Tendon and Ligament Research. <i>Advances in Experimental Medicine and Biology</i> , 2014, 802, 201-230.	0.8	15
147	Corneal and scleral type I collagens: analyses of physical properties and molecular flexibility. <i>International Journal of Biological Macromolecules</i> , 1983, 5, 209-214.	3.6	13
148	Collagen Dysregulation in the Dermis of the Sagg/+ Mouse: A Loose Skin Model. <i>Journal of Investigative Dermatology</i> , 2006, 126, 595-602.	0.3	12
149	Collagen V expression is crucial in regional development of the supraspinatus tendon. <i>Journal of Orthopaedic Research</i> , 2016, 34, 2154-2161.	1.2	12
150	Type V collagen regulates the structure and biomechanics of TMJ condylar cartilage: A fibrous-hyaline hybrid. <i>Matrix Biology</i> , 2021, 102, 1-19.	1.5	10
151	Attachment to and Degradation of Collagen Substrata by Adenovirus-Transformed Cells of Varying Tumorigenicity. <i>Collagen and Related Research</i> , 1984, 4, 49-61.	2.2	9
152	The location-specific role of proteoglycans in the flexor carpi ulnaris tendon. <i>Connective Tissue Research</i> , 2013, 54, 367-373.	1.1	9
153	Validation of an Empirical Damage Model for Aging and in Vivo Injury of the Murine Patellar Tendon. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 041005.	0.6	8
154	Multiscale regression modeling in mouse supraspinatus tendons reveals that dynamic processes act as mediators in structure–function relationships. <i>Journal of Biomechanics</i> , 2016, 49, 1649-1657.	0.9	7
155	Coordinate roles for collagen VI and biglycan in regulating tendon collagen fibril structure and function. <i>Matrix Biology Plus</i> , 2022, 13, 100099.	1.9	7
156	Positive Regulation of Corneal Type V Collagen mRNA: Analysis by Chicken–Human Heterokaryon Formation. <i>Experimental Cell Research</i> , 1996, 228, 36-43.	1.2	6
157	Therapeutic efficacy of mesenchymal stem cells for the treatment of congenital and acquired corneal opacity. <i>Molecular Vision</i> , 2019, 25, 415-426.	1.1	6
158	Biglycan has a major role in maintenance of mature tendon mechanics. <i>Journal of Orthopaedic Research</i> , 2022, 40, 2546-2556.	1.2	6
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