Amanda J Fosang

List of Publications by Year
in descending order

68	5,865	94433 37	102487 66
papers	citations	h-index	g-index

87	87	87	5365
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Proteoglycans: many forms and many functions. FASEB Journal, 1992, 6, 861-870.	0.5	1,101
2	ADAMTS5 is the major aggrecanase in mouse cartilage in vivo and in vitro. Nature, 2005, 434, 648-652.	27.8	826
3	Altered endochondral bone development in matrix metalloproteinase 13-deficient mice. Development (Cambridge), 2004, 131, 5883-5895.	2.5	521
4	Degradation of cartilage aggrecan by collagenase-3 (MMP-13). FEBS Letters, 1996, 380, 17-20.	2.8	326
5	Blocking aggrecanase cleavage in the aggrecan interglobular domain abrogates cartilage erosion and promotes cartilage repair. Journal of Clinical Investigation, 2007, 117, 1627-1636.	8.2	171
6	Hyaluronan synthesis and degradation in cartilage and bone. Cellular and Molecular Life Sciences, 2008, 65, 395-413.	5.4	164
7	Cartilage degradation is fully reversible in the presence of aggrecanase but not matrix metalloproteinase activity. Arthritis Research and Therapy, 2008, 10, R63.	3.5	161
8	Proteoglycan degradation by the ADAMTS family of proteinases. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2011, 1812, 1616-1629.	3.8	148
9	Matrix metalloproteinases 19 and 20 cleave aggrecan and cartilage oligomeric matrix protein (COMP). FEBS Letters, 2000, 478, 52-56.	2.8	110
10	The 45ÂkDa collagen-binding fragment of fibronectin induces matrix metalloproteinase-13 synthesis by chondrocytes and aggrecan degradation by aggrecanases. Biochemical Journal, 2002, 364, 181-190.	3.7	107
11	ADAMTS-1-Knockout mice do not exhibit abnormalities in aggrecan turnover in vitro or in vivo. Arthritis and Rheumatism, 2005, 52, 1461-1472.	6.7	100
12	Effect of Interleukin-1 and Insulin Like Growth Factor-1 on the Release of Proteoglycan Components and Hyaluronan from Pig Articular Cartilage in Explant Culture. Matrix Biology, 1991, 11, 17-24.	1.7	99
13	Drug Insight: aggrecanases as therapeutic targets for osteoarthritis. Nature Clinical Practice Rheumatology, 2008, 4, 420-427.	3.2	89
14	Transparency Is the Key to Quality. Journal of Biological Chemistry, 2015, 290, 29692-29694.	3.4	84
15	ADAMTS4 Cleaves at the Aggrecanase Site (Glu373-Ala374) and Secondarily at the Matrix Metalloproteinase Site (Asn341-Phe342) in the Aggrecan Interglobular Domain. Journal of Biological Chemistry, 2002, 277, 16059-16066.	3.4	81
16	Bioactivity in an Aggrecan 32â€mer Fragment Is Mediated via Tollâ€like Receptor 2. Arthritis and Rheumatology, 2015, 67, 1240-1249.	5.6	76
17	An aggrecan fragment drives osteoarthritis pain through Toll-like receptor 2. JCI Insight, 2018, 3, .	5.0	72
18	Generation and Novel Distribution of Matrix Metalloproteinase-derived Aggrecan Fragments in Porcine Cartilage Explants. Journal of Biological Chemistry, 2000, 275, 33027-33037.	3.4	68

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19	Is Cartilage Matrix Breakdown an Appropriate Therapeutic Target in Osteoarthritis â€“ Insights from Studies of Aggrecan and Collagen Proteolysis?. Current Drug Targets, 2010, 11, 561-575.	2.1	65
20	Emerging Frontiers in cartilage and chondrocyte biology. Best Practice and Research in Clinical Rheumatology, 2011, 25, 751-766.	3.3	64
21	Investigating ADAMTS-mediated aggrecanolysis in mouse cartilage. Nature Protocols, 2011, 6, 388-404.	12.0	63
22	Induction of increased cAMP levels in articular chondrocytes blocks matrix metalloproteinaseâ€“mediated cartilage degradation, but not aggrecanase-mediated cartilage degradation. Arthritis and Rheumatism, 2007, 56, 1549-1558.	6.7	62
23	Proteomic characterization of mouse cartilage degradation in vitro. Arthritis and Rheumatism, 2008, 58, 3120-3131.	6.7	58
24	Immunolocalization of Matrix Metalloproteinases in Partial-Thickness Defects in Pig Articular Cartilage. Journal of Bone and Joint Surgery - Series A, 2001, 83, 826-838.	3.0	58
25	Evidence of a novel aggrecanâ€degrading activity in cartilage: Studies of mice deficient in both ADAMTSâ€4 and ADAMTSâ€5. Arthritis and Rheumatism, 2008, 58, 1664-1673.	6.7	57
26	Transcriptomics of Wildâ€Type Mice and Mice Lacking ADAMTSâ€5 Activity Identifies Genes Involved in Osteoarthritis Initiation and Cartilage Destruction. Arthritis and Rheumatism, 2013, 65, 1547-1560.	6.7	56
27	Reduction of arthritis severity in protease-activated receptor-deficient mice. Arthritis and Rheumatism, 2005, 52, 1325-1332.	6.7	54
28	ADAMTS-5 Deficiency Does Not Block Aggrecanolysis at Preferred Cleavage Sites in the Chondroitin Sulfate-rich Region of Aggrecan. Journal of Biological Chemistry, 2007, 282, 8632-8640.	3.4	54
29	Membrane-type 1 MMP (MMP-14) cleaves at three sites in the aggrecan interglobular domain. FEBS Letters, 1998, 430, 186-190.	2.8	52
30	Identifying the human aggrecanase. Osteoarthritis and Cartilage, 2010, 18, 1109-1116.	1.3	51
31	Brief Report: JNKâ€2 Controls Aggrecan Degradation in Murine Articular Cartilage and the Development of Experimental Osteoarthritis. Arthritis and Rheumatology, 2016, 68, 1165-1171.	5.6	49
32	Matrix Metalloproteinases Are Not Essential for Aggrecan Turnover during Normal Skeletal Growth and Development. Molecular and Cellular Biology, 2005, 25, 3388-3399.	2.3	48
33	Mutations in the Interglobular Domain of Aggrecan Alter Matrix Metalloproteinase and Aggrecanase Cleavage Patterns. Journal of Biological Chemistry, 2000, 275, 33038-33045.	3.4	47
34	Gelatinase A possesses a Î²-secretase-like activity in cleaving the amyloid protein precursor of Alzheimer's disease. FEBS Letters, 1995, 377, 267-270.	2.8	43
35	Employing molecular genetics of chondrodysplasias to inform the study of osteoarthritis. Arthritis and Rheumatism, 2009, 60, 325-334.	6.7	43
36	Cytokineâ€induced increases in ADAMTSâ€4 messenger RNA expression do not lead to increased aggrecanase activity in ADAMTSâ€5â€“deficient mice. Arthritis and Rheumatism, 2010, 62, 3365-3373.	6.7	42

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37	High-bandwidth AFM-based rheology is a sensitive indicator of early cartilage aggrecan degradation relevant to mouse models of osteoarthritis. Journal of Biomechanics, 2015, 48, 162-165.	2.1	40
38	Recombinant Human Aggrecan G1-G2 Exhibits Native Binding Properties and Substrate Specificity for Matrix Metalloproteinases and Aggrecanase. Journal of Biological Chemistry, 1999, 274, 32387-32395.	3.4	35
39	Mast Cellâ€“Restricted, Tetramer-Forming Tryptases Induce Aggrecanolysis in Articular Cartilage by Activating Matrix Metalloproteinase-3 and -13 Zymogens. Journal of Immunology, 2013, 191, 1404-1412.	0.8	32
40	Adamts5 â^'/â^' Mice Exhibit Altered Aggrecan Proteolytic Profiles That Correlate With Ascending Aortic Anomalies. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 2067-2081.	2.4	32
41	N-Linked Keratan Sulfate in the Aggrecan Interglobular Domain Potentiates Aggrecanase Activity. Journal of Biological Chemistry, 2005, 280, 23615-23621.	3.4	28
42	Distinguishing Aggrecan Loss from Aggrecan Proteolysis in ADAMTS-4 and ADAMTS-5 Single and Double Deficient Mice. Journal of Biological Chemistry, 2007, 282, 37420-37428.	3.4	28
43	The accumulation of intracellular ITEGE and DIPEN neoepitopes in bovine articular chondrocytes is mediated by CD44 internalization of hyaluronan. Arthritis and Rheumatism, 2006, 54, 443-454.	6.7	27
44	Novel Elements of the Chondrocyte Stress Response Identified Using an in Vitro Model of Mouse Cartilage Degradation. Journal of Proteome Research, 2016, 15, 1033-1050.	3.7	27
45	The sulphation pattern in chondroitin sulphate chains investigated by chondroitinase ABC and ACII digestion and reactivity with monoclonal antibodies. Carbohydrate Research, 1994, 255, 241-254.	2.3	26
46	Changes in versican and chondroitin sulfate proteoglycans during structural development of the lung. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R784-R792.	1.8	26
47	Cortisol enhances structural maturation of the hypoplastic fetal lung in sheep. Journal of Physiology, 2004, 554, 505-517.	2.9	25
48	To clot or not. Nature, 2001, 413, 475-476.	27.8	24
49	Internalization of Aggrecan G1 Domain Neoepitope ITEGE in Chondrocytes Requires CD44. Journal of Biological Chemistry, 2010, 285, 36216-36224.	3.4	24
50	Cartilage MicroRNA Dysregulation During the Onset and Progression of Mouse Osteoarthritis Is Independent of Aggrecanolysis and Overlaps With Candidates From Endâ€Stage Human Disease. Arthritis and Rheumatology, 2018, 70, 383-395.	5.6	21
51	Neoepitope Antibodies Against MMP-Cleaved and Aggrecanase-Cleaved Aggrecan. Methods in Molecular Biology, 2010, 622, 305-340.	0.9	21
52	Wide bandwidth nanomechanical assessment of murine cartilage reveals protection of aggrecan knock-in mice from joint-overuse. Journal of Biomechanics, 2016, 49, 1634-1640.	2.1	20
53	Metalloprotease inhibitor TIMP proteins control FGF-2 bioavailability and regulate skeletal growth. Journal of Cell Biology, 2019, 218, 3134-3152.	5.2	16
54	Abundant LacZ activity in the absence of Cre expression in the normal and inflamed synovium of adult Col2a1-Cre; ROSA26RLacZ reporter mice. Osteoarthritis and Cartilage, 2013, 21, 401-404.	1.3	14

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55	Connective Tissue Remodelling in the Ovine Cervix During Pregnancy and at Term. Connective Tissue Research, 1988, 17, 277-285.	2.3	13
56	Matrix metalloproteinases are active following guanidine hydrochloride extraction of cartilage: generation of DIPEN neoepitope during dialysis. Matrix Biology, 2002, 21, 425-428.	3.6	13
57	Keratan sulphate in the interglobular domain has a microstructure that is distinct from keratan sulphate elsewhere on pig aggrecan. Matrix Biology, 2009, 28, 53-61.	3.6	12
58	Aggrecanase cleavage in juvenile idiopathic arthritis patients is minimally detected in the aggrecan interglobular domain but robust at the aggrecan Câ€terminus. Arthritis and Rheumatism, 2012, 64, 4151-4161.	6.7	12
59	A Disintegrin and Metalloproteinase with Thrombospondin Motifs-5 (ADAMTS-5) Forms Catalytically Active Oligomers. Journal of Biological Chemistry, 2016, 291, 3197-3208.	3.4	12
60	ADAMTS-9 in Mouse Cartilage Has Aggrecanase Activity That Is Distinct from ADAMTS-4 and ADAMTS-5. International Journal of Molecular Sciences, 2019, 20, 573.	4.1	12
61	The role of hepatocyte growth factor in the humoral regulation of inguinal hernia closure. Journal of Pediatric Surgery, 2005, 40, 1865-1868.	1.6	11
62	Evidence for lysosomal exocytosis and release of aggrecan-degrading hydrolases from hypertrophic chondrocytes, in vitro and in vivo. Biology Open, 2012, 1, 318-328.	1.2	11
63	Matrilin-4 is processed by ADAMTS-5 in late Golgi vesicles present in growth plate chondrocytes of defined differentiation state. Matrix Biology, 2011, 30, 275-280.	3.6	10
64	ADAMTS-5 takes centre stage in new developments for aggrecanase inhibitors. Osteoarthritis and Cartilage, 2015, 23, 1231-1232.	1.3	7
65	Proteoglycan and Collagen Degradation in Osteoarthritis. , 2017, , 41-61.		6
66	Glucocorticoids influence versican and chondroitin sulphate proteoglycan levels in the fetal sheep lung. Respiratory Research, 2018, 19, 155.	3.6	5
67	Blocking aggrecanase cleavage in the aggrecan interglobular domain abrogates cartilage erosion and promotes cartilage repair. Journal of Clinical Investigation, 2008, 118, 3812-3812.	8.2	4
68	Aggrecanase and cartilage proteoglycan degradation. , 1999, , 117-143.		1