Richard F Loeser

List of Publications by Year
in descending order

97 papers	13,260 citations	34016 52 h-index	39575 94 g-index
101 all docs	101 docs citations	101 times ranked	11464 citing authors

#	Article	IF	Citations
1	Osteoarthritis: A disease of the joint as an organ. Arthritis and Rheumatism, 2012, 64, 1697-1707.	6.7	2,055
2	Exercise and dietary weight loss in overweight and obese older adults with knee osteoarthritis: The arthritis, diet, and activity promotion trial. Arthritis and Rheumatism, 2004, 50, 1501-1510.	6.7	932
3	Diagnosis and Treatment of Hip and Knee Osteoarthritis. JAMA - Journal of the American Medical Association, 2021, 325, 568.	3.8	779
4	Ageing and the pathogenesis of osteoarthritis. Nature Reviews Rheumatology, 2016, 12, 412-420.	3.5	745
5	Effects of Intensive Diet and Exercise on Knee Joint Loads, Inflammation, and Clinical Outcomes Among Overweight and Obese Adults With Knee Osteoarthritis. JAMA - Journal of the American Medical Association, 2013, 310, 1263.	3.8	607
6	Why is osteoarthritis an age-related disease?. Best Practice and Research in Clinical Rheumatology, 2010, 24, 15-26.	1.4	436
7	Age-Related Changes in the Musculoskeletal System and the Development of Osteoarthritis. Clinics in Geriatric Medicine, 2010, 26, 371-386.	1.0	343
8	Reactive oxygen species, aging and articular cartilage homeostasis. Free Radical Biology and Medicine, 2019, 132, 73-82.	1.3	337
9	Effects of aging on articular cartilage homeostasis. Bone, 2012, 51, 241-248.	1.4	301
10	Mechanisms and therapeutic implications of cellular senescence in osteoarthritis. Nature Reviews Rheumatology, 2021, 17, 47-57.	3.5	284
11	Increased oxidative stress with aging reduces chondrocyte survival: Correlation with intracellular glutathione levels. Arthritis and Rheumatism, 2003, 48, 3419-3430.	6.7	227
12	Detection of nitrotyrosine in aging and osteoarthritic cartilage: Correlation of oxidative damage with the presence of interleukin-1? and with chondrocyte resistance to insulin-like growth factor 1. Arthritis and Rheumatism, 2002, 46, 2349-2357.	6.7	226
13	Nitric oxide-mediated chondrocyte cell death requires the generation of additional reactive oxygen species. Arthritis and Rheumatism, 2002, 46, 394-403.	6.7	223
14	Aging and osteoarthritis. Current Opinion in Rheumatology, 2011, 23, 492-496.	2.0	212
15	Articular chondrocytes express the receptor for advanced glycation end products: Potential role in osteoarthritis. Arthritis and Rheumatism, 2005, 52, 2376-2385.	6.7	206
16	Integrins and chondrocyteâ€“matrix interactions in articular cartilage. Matrix Biology, 2014, 39, 11-16.	1.5	196
17	NF-Î°B Mediates the Stimulation of Cytokine and Chemokine Expression by Human Articular Chondrocytes in Response to Fibronectin Fragments. Journal of Immunology, 2005, 174, 5781-5788.	0.4	193
18	Microarray analysis reveals ageâ€related differences in gene expression during the development of osteoarthritis in mice. Arthritis and Rheumatism, 2012, 64, 705-717.	6.7	190

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19	Fibronectin fragments and blocking antibodies to ?2?1 and ?5?1 integrins stimulate mitogen-activated protein kinase signaling and increase collagenase 3 (matrix metalloproteinase 13) production by human articular chondrocytes. Arthritis and Rheumatism, 2002, 46, 2368-2376.	6.7	189
20	Integrin-mediated attachment of articular chondrocytes to extracellular matrix proteins. Arthritis and Rheumatism, 1993, 36, 1103-1110.	6.7	179
21	Reduction in the chondrocyte response to insulinâ€like growth factor 1 in aging and osteoarthritis: Studies in a nonâ€human primate model of naturally occurring disease. Arthritis and Rheumatism, 2000, 43, 2110-2120.	6.7	179
22	The combination of insulin-like growth factor 1 and osteogenic protein 1 promotes increased survival of and matrix synthesis by normal and osteoarthritic human articular chondrocytes. Arthritis and Rheumatism, 2003, 48, 2188-2196.	6.7	170
23	Expression of Î²1 Integrins by Cultured Articular Chondrocytes and in Osteoarthritic Cartilage. Experimental Cell Research, 1995, 217, 248-257.	1.2	166
24	IGF-I stimulation of proteoglycan synthesis by chondrocytes requires activation of the PI 3-kinase pathway but not ERK MAPK. Biochemical Journal, 2005, 389, 723-729.	1.7	155
25	Oxidative Stress Inhibits Insulin-like Growth Factor-I Induction of Chondrocyte Proteoglycan Synthesis through Differential Regulation of Phosphatidylinositol 3-Kinase-Akt and MEK-ERK MAPK Signaling Pathways. Journal of Biological Chemistry, 2009, 284, 31972-31981.	1.6	153
26	Aging processes and the development of osteoarthritis. Current Opinion in Rheumatology, 2013, 25, 108-113.	2.0	148
27	Osteoarthritis in cynomolgus macaques: A primate model of naturally occurring disease. Journal of Orthopaedic Research, 1994, 12, 331-339.	1.2	133
28	Growth factor regulation of chondrocyte integrins. Differential effects of insulin-like growth factor 1 and transforming growth factor Î² on Î±1Î²1 integrin expression and chondrocyte adhesion to type VI collagen. Arthritis and Rheumatism, 1997, 40, 270-276.	6.7	127
29	Inhibitory Effects of Insulin-like Growth Factor-1 and Osteogenic Protein-1 on Fibronectin Fragment- and Interleukin-1Î²-stimulated Matrix Metalloproteinase-13 Expression in Human Chondrocytes. Journal of Biological Chemistry, 2003, 278, 25386-25394.	1.6	126
30	Fibronectin Fragment Activation of Proline-rich Tyrosine Kinase PYK2 Mediates Integrin Signals Regulating Collagenase-3 Expression by Human Chondrocytes through a Protein Kinase C-dependent Pathway. Journal of Biological Chemistry, 2003, 278, 24577-24585.	1.6	126
31	Biology and pathology of Rho GTPase, Plâ€3 kinaseâ€Akt, and MAP kinase signaling pathways in chondrocytes. Journal of Cellular Biochemistry, 2010, 110, 573-580.	1.2	121
32	Mitogen-activated protein kinases as therapeutic targets in osteoarthritis. Current Opinion in Rheumatology, 2008, 20, 581-586.	2.0	114
33	Expression of p16<scp>^{INK}</scp>^{4a} is a biomarker of chondrocyte aging but does not cause osteoarthritis. Aging Cell, 2018, 17, e12771.	3.0	111
34	Oxidative Stress Promotes Peroxiredoxin Hyperoxidation and Attenuates Pro-survival Signaling in Aging Chondrocytes. Journal of Biological Chemistry, 2016, 291, 6641-6654.	1.6	105
35	Increased Matrix Metalloproteinase-13 Production With Aging by Human Articular Chondrocytes in Response to Catabolic Stimuli. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2005, 60, 1118-1124.	1.7	104
36	Disease Progression and Phasic Changes in Gene Expression in a Mouse Model of Osteoarthritis. PLoS ONE, 2013, 8, e54633.	1.1	103

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37	Intentional Weight Loss in Overweight and Obese Patients With Knee Osteoarthritis: Is More Better?. Arthritis Care and Research, 2018, 70, 1569-1575.	1.5	102
38	Modifiers of change in physical functioning in older adults with knee pain: the Observational Arthritis Study in Seniors (OASIS). Arthritis and Rheumatism, 2001, 45, 331-339.	6.7	99
39	Basic fibroblast growth factor inhibits the anabolic activity of insulin-like growth factor 1 and osteogenic protein 1 in adult human articular chondrocytes. Arthritis and Rheumatism, 2005, 52, 3910-3917.	6.7	98
40	The ?5?1 integrin provides matrix survival signals for normal and osteoarthritic human articular chondrocytes in vitro. Arthritis and Rheumatism, 2002, 46, 1528-1535.	6.7	93
41	Targeting aging for disease modification in osteoarthritis. Current Opinion in Rheumatology, 2018, 30, 101-107.	2.0	87
42	Is osteoarthritis one disease or a collection of many?. Rheumatology, 2018, 57, iv34-iv42.	0.9	85
43	Aging and Oxidative Stress Reduce the Response of Human Articular Chondrocytes to Insulinâ€like Growth Factor 1 and Osteogenic Protein 1. Arthritis and Rheumatology, 2014, 66, 2201-2209.	2.9	78
44	Effect of High-Intensity Strength Training on Knee Pain and Knee Joint Compressive Forces Among Adults With Knee Osteoarthritis. JAMA - Journal of the American Medical Association, 2021, 325, 646.	3.8	75
45	Human articular chondrocytes produce IL-7 and respond to IL-7 with increased production of matrix metalloproteinase-13. Arthritis Research and Therapy, 2008, 10, R23.	1.6	74
46	Integrin-mediated adhesion of human articular chondrocytes to cartilage. Arthritis and Rheumatism, 2003, 48, 110-118.	6.7	73
47	The Intensive Diet and Exercise for Arthritis (IDEA) trial: design and rationale. BMC Musculoskeletal Disorders, 2009, 10, 93.	0.8	70
48	Human chondrocyte expression of growth-arrest-specific gene 6 and the tyrosine kinase receptor axl. Potential role in autocrine signaling in cartilage. Arthritis and Rheumatism, 1997, 40, 1455-1465.	6.7	69
49	Endogenous production of reactive oxygen species is required for stimulation of human articular chondrocyte matrix metalloproteinase production by fibronectin fragments. Free Radical Biology and Medicine, 2007, 42, 1350-1358.	1.3	69
50	A Comprehensive Histological Assessment of Osteoarthritis Lesions in Mice. Cartilage, 2011, 2, 354-363.	1.4	64
51	The Role of Aging in the Development of Osteoarthritis. Transactions of the American Clinical and Climatological Association, 2017, 128, 44-54.	0.9	60
52	Aging or osteoarthritis: which is the problem?. Rheumatic Disease Clinics of North America, 2003, 29, 653-673.	0.8	57
53	Reduced Osteoarthritis Severity in Aged Mice With Deletion of Macrophage Migration Inhibitory Factor. Arthritis and Rheumatology, 2017, 69, 352-361.	2.9	49
54	TGF-Î² type 2 receptorâ€“mediated modulation of the IL-36 family can be therapeutically targeted in osteoarthritis. Science Translational Medicine, 2019, 11, .	5.8	49

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55	Mechanisms of chondrocyte adhesion to cartilage: role of Î²1-integrins, CD44, and annexin V. Journal of Orthopaedic Research, 2001, 19, 1122-1130.	1.2	48
56	Integration of gene expression data with network-based analysis to identify signaling and metabolic pathways regulated during the development of osteoarthritis. Gene, 2014, 542, 38-45.	1.0	47
57	Strength Training for Arthritis Trial (START): design and rationale. BMC Musculoskeletal Disorders, 2013, 14, 208.	0.8	45
58	Chondrocyte cell death mediated by reactive oxygen species-dependent activation of PKC-Î²I. American Journal of Physiology - Cell Physiology, 2006, 290, C802-C811.	2.1	44
59	Immunolocalization of noncollagenous bone matrix proteins in lumbar vertebrae from intact and surgically menopausal cynomolgus monkeys. Journal of Bone and Mineral Research, 1993, 8, 71-81.	3.1	44
60	Rac1 Is Required for Matrix Metalloproteinase 13 Production by Chondrocytes in Response to Fibronectin Fragments. Arthritis and Rheumatism, 2013, 65, 1561-1568.	6.7	38
61	Cysteineâ€Mediated Redox Regulation of Cell Signaling in Chondrocytes Stimulated With Fibronectin Fragments. Arthritis and Rheumatology, 2016, 68, 117-126.	2.9	36
62	Estrogen replacement therapy modulation of the insulin-like growth factor system in monkey knee joints. Arthritis and Rheumatism, 1999, 42, 2103-2111.	6.7	35
63	Editorial: Inflammatory Activity in Symptomatic Knee Osteoarthritis: Not All Inflammation Is Local. Arthritis and Rheumatology, 2015, 67, 2797-2800.	2.9	35
64	Redox regulation of Rac1 by thiol oxidation. Free Radical Biology and Medicine, 2015, 79, 237-250.	1.3	34
65	Relationship of Objectively-Measured Habitual Physical Activity to Chronic Inflammation and Fatigue in Middle-Aged and Older Adults. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 1437-1443.	1.7	33
66	Vitamin K Status and Lower Extremity Function in Older Adults: The Health Aging and Body Composition Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 1348-1355.	1.7	32
67	Effect of intensive diet and exercise on self-efficacy in overweight and obese adults with knee osteoarthritis: The IDEA randomized clinical trial. Translational Behavioral Medicine, 2019, 9, 227-235.	1.2	30
68	Sirtuin 6 (SIRT6) regulates redox homeostasis and signaling events in human articular chondrocytes. Free Radical Biology and Medicine, 2021, 166, 90-103.	1.3	30
69	Regulation of chondrocyte gene expression by osteogenic protein-1. Arthritis Research and Therapy, 2011, 13, R55.	1.6	27
70	The effects of intensive dietary weight loss and exercise on gait in overweight and obese adults with knee osteoarthritis. The Intensive Diet and Exercise for Arthritis (IDEA) trial. Journal of Biomechanics, 2020, 98, 109477.	0.9	26
71	Phenotypes of osteoarthritis: current state and future implications. Clinical and Experimental Rheumatology, 2019, 37 Suppl 120, 64-72.	0.4	26
72	Aging Cartilage and Osteoarthritis--What's the Link?. Science of Aging Knowledge Environment: SAGE KE, 2004, 2004, pe31-pe31.	0.9	25

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73	Fecal metabolomics reveals products of dysregulated proteolysis and altered microbial metabolism in obesity-related osteoarthritis. Osteoarthritis and Cartilage, 2022, 30, 81-91.	0.6	25
74	H2O2 oxidation of cysteine residues in c-Jun N-terminal kinase 2 (JNK2) contributes to redox regulation in human articular chondrocytes. Journal of Biological Chemistry, 2018, 293, 16376-16389.	1.6	24
75	Arp2/3 inactivation causes intervertebral disc and cartilage degeneration with dysregulated TonEBP-mediated osmoadaptation. JCI Insight, 2020, 5, .	2.3	23
76	Deletion of JNK Enhances Senescence in Joint Tissues and Increases the Severity of Ageâ€Related Osteoarthritis in Mice. Arthritis and Rheumatology, 2020, 72, 1679-1688.	2.9	21
77	Association of Increased Serum Lipopolysaccharide, But Not Microbial Dysbiosis, With <scp>Obesityâ€Related</scp> Osteoarthritis. Arthritis and Rheumatology, 2022, 74, 227-236.	2.9	21
78	The Effects of Aging on the Development of Osteoarthritis. HSS Journal, 2012, 8, 18-19.	0.7	18
79	Differential peroxiredoxin hyperoxidation regulates MAP kinase signaling in human articular chondrocytes. Free Radical Biology and Medicine, 2019, 134, 139-152.	1.3	18
80	Precision Medicine Approach to Develop and Internally Validate Optimal Exercise and Weightâ€Loss Treatments for Overweight and Obese Adults With Knee Osteoarthritis: Data From a Singleâ€Center Randomized Trial. Arthritis Care and Research, 2021, 73, 693-701.	1.5	18
81	Osteoarthritis Pathophysiology. Clinics in Geriatric Medicine, 2022, 38, 193-219.	1.0	17
82	Targeting cellular senescence as a novel treatment for osteoarthritis. Current Opinion in Pharmacology, 2022, 64, 102213.	1.7	12
83	Articular chondrocytes isolated from the knee and ankle joints of human tissue donors demonstrate similar redox-regulated MAP kinase and Akt signaling. Osteoarthritis and Cartilage, 2019, 27, 703-711.	0.6	11
84	Vitamin K Status and Mobility Limitation and Disability in Older Adults: The Health, Aging, and Body Composition Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 792-797.	1.7	11
85	Naturally occurring osteoarthritis in male mice with an extended lifespan. Connective Tissue Research, 2020, 61, 95-103.	1.1	11
86	Impaired Annulus Fibrosus Development and Vertebral Fusion Cause Severe Scoliosis in Mice with Deficiency of c-Jun NH2-Terminal Kinases 1 and 2. American Journal of Pathology, 2019, 189, 868-885.	1.9	9
87	Changes in Body Weight and Knee Pain in Adults With Knee Osteoarthritis <scp>Threeâ€andâ€aâ€Half</scp> Years After Completing Diet and Exercise Interventions: Followâ€Up Study for a <scp>Singleâ€Blind</scp>, <scp>Singleâ€Center</scp>, Randomized Controlled Trial. Arthritis Care and Research, 2022, 74, 607-616.	1.5	6
88	Does Joint Injury Make Young Joints Old?. Journal of the American Academy of Orthopaedic Surgeons, The, 2018, 26, e455-e456.	1.1	5
89	Overexpression of Peroxiredoxin 3 in Cartilage Reduces the Severity of <scp>Ageâ€Related</scp> Osteoarthritis But Not Surgically Induced Osteoarthritis in Mice. ACR Open Rheumatology, 2022, 4, 441-446.	0.9	5
90	The effect of vitamin K insufficiency on histological and structural properties of knee joints in aging mice. Osteoarthritis and Cartilage Open, 2020, 2, 100078.	0.9	4

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91	CCL2 induces articular chondrocyte MMP expression through ERK and p38 signaling pathways. Osteoarthritis and Cartilage Open, 2021, 3, 100136.	0.9	4
92	Vitamin K and osteoarthritis: is there a link?. Annals of the Rheumatic Diseases, 2021, 80, 547-549.	0.5	4
93	Role of the Hypoxia-Inducible Factor Pathway in Normal and Osteoarthritic Meniscus and in Mice after Destabilization of the Medial Meniscus. Cartilage, 2021, 13, 1442S-1455S.	1.4	2
94	Osteoarthritis in the Elderly. , 2016, , 309-353.		2
95	Review of Hip and Knee Osteoarthritisâ€"Reply. JAMA - Journal of the American Medical Association, 2021, 325, 2505.	3.8	1
96	Reply. Arthritis and Rheumatology, 2020, 72, 2162-2163.	2.9	0
97	Correspondence on â€˜Mechanical overloading promotes chondrocyte senescence and osteoarthritis development through downregulating FBXW7â€™ by Zhang et al. Annals of the Rheumatic Diseases, 0, , annrheumdis-2022-222597.	0.5	0