

Richard F Loeser

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

13,260
citations

34105

52
h-index

39675

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. <i>Arthritis and Rheumatism</i> , 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. <i>Arthritis and Rheumatism</i> , 2004, 50, 1501-1510.	6.7	932
3	Diagnosis and Treatment of Hip and Knee Osteoarthritis. <i>JAMA - Journal of the American Medical Association</i> , 2021, 325, 568.	7.4	779
4	Ageing and the pathogenesis of osteoarthritis. <i>Nature Reviews Rheumatology</i> , 2016, 12, 412-420.	8.0	745
5	Effects of Intensive Diet and Exercise on Knee Joint Loads, Inflammation, and Clinical Outcomes Among Overweight and Obese Adults With Knee Osteoarthritis. <i>JAMA - Journal of the American Medical Association</i> , 2013, 310, 1263.	7.4	607
6	Why is osteoarthritis an age-related disease?. <i>Best Practice and Research in Clinical Rheumatology</i> , 2010, 24, 15-26.	3.3	436
7	Age-Related Changes in the Musculoskeletal System and the Development of Osteoarthritis. <i>Clinics in Geriatric Medicine</i> , 2010, 26, 371-386.	2.6	343
8	Reactive oxygen species, aging and articular cartilage homeostasis. <i>Free Radical Biology and Medicine</i> , 2019, 132, 73-82.	2.9	337
9	Effects of aging on articular cartilage homeostasis. <i>Bone</i> , 2012, 51, 241-248.	2.9	301
10	Mechanisms and therapeutic implications of cellular senescence in osteoarthritis. <i>Nature Reviews Rheumatology</i> , 2021, 17, 47-57.	8.0	284
11	Increased oxidative stress with aging reduces chondrocyte survival: Correlation with intracellular glutathione levels. <i>Arthritis and Rheumatism</i> , 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 β and with chondrocyte resistance to insulin-like growth factor 1. <i>Arthritis and Rheumatism</i> , 2002, 46, 2349-2357.	6.7	226
13	Nitric oxide-mediated chondrocyte cell death requires the generation of additional reactive oxygen species. <i>Arthritis and Rheumatism</i> , 2002, 46, 394-403.	6.7	223
14	Aging and osteoarthritis. <i>Current Opinion in Rheumatology</i> , 2011, 23, 492-496.	4.3	212
15	Articular chondrocytes express the receptor for advanced glycation end products: Potential role in osteoarthritis. <i>Arthritis and Rheumatism</i> , 2005, 52, 2376-2385.	6.7	206
16	Integrins and chondrocyte-matrix interactions in articular cartilage. <i>Matrix Biology</i> , 2014, 39, 11-16.	3.6	196
17	NF- κ B Mediates the Stimulation of Cytokine and Chemokine Expression by Human Articular Chondrocytes in Response to Fibronectin Fragments. <i>Journal of Immunology</i> , 2005, 174, 5781-5788.	0.8	193
18	Microarray analysis reveals age-related differences in gene expression during the development of osteoarthritis in mice. <i>Arthritis and Rheumatism</i> , 2012, 64, 705-717.	6.7	190

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19	Fibronectin fragments and blocking antibodies to $\alpha 2 \beta 1$ and $\alpha 5 \beta 1$ integrins stimulate mitogen-activated protein kinase signaling and increase collagenase 3 (matrix metalloproteinase 13) production by human articular chondrocytes. <i>Arthritis and Rheumatism</i> , 2002, 46, 2368-2376.	6.7	189
20	Integrin-mediated attachment of articular chondrocytes to extracellular matrix proteins. <i>Arthritis and Rheumatism</i> , 1993, 36, 1103-1110.	6.7	179
21	Reduction in the chondrocyte response to insulin-like growth factor 1 in aging and osteoarthritis: Studies in a non-human primate model of naturally occurring disease. <i>Arthritis and Rheumatism</i> , 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. <i>Arthritis and Rheumatism</i> , 2003, 48, 2188-2196.	6.7	170
23	Expression of $\beta 1$ Integrins by Cultured Articular Chondrocytes and in Osteoarthritic Cartilage. <i>Experimental Cell Research</i> , 1995, 217, 248-257.	2.6	166
24	IGF-I stimulation of proteoglycan synthesis by chondrocytes requires activation of the PI 3-kinase pathway but not ERK MAPK. <i>Biochemical Journal</i> , 2005, 389, 723-729.	3.7	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. <i>Journal of Biological Chemistry</i> , 2009, 284, 31972-31981.	3.4	153
26	Ageing processes and the development of osteoarthritis. <i>Current Opinion in Rheumatology</i> , 2013, 25, 108-113.	4.3	148
27	Osteoarthritis in cynomolgus macaques: A primate model of naturally occurring disease. <i>Journal of Orthopaedic Research</i> , 1994, 12, 331-339.	2.3	133
28	Growth factor regulation of chondrocyte integrins. Differential effects of insulin-like growth factor 1 and transforming growth factor $\beta 2$ on $\alpha 1 \beta 1$ integrin expression and chondrocyte adhesion to type VI collagen. <i>Arthritis and Rheumatism</i> , 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-1 β -stimulated Matrix Metalloproteinase-13 Expression in Human Chondrocytes. <i>Journal of Biological Chemistry</i> , 2003, 278, 25386-25394.	3.4	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. <i>Journal of Biological Chemistry</i> , 2003, 278, 24577-24585.	3.4	126
31	Biology and pathology of Rho GTPase, PI3 kinase-Akt, and MAP kinase signaling pathways in chondrocytes. <i>Journal of Cellular Biochemistry</i> , 2010, 110, 573-580.	2.6	121
32	Mitogen-activated protein kinases as therapeutic targets in osteoarthritis. <i>Current Opinion in Rheumatology</i> , 2008, 20, 581-586.	4.3	114
33	Expression of p16 ^{INK4a} is a biomarker of chondrocyte aging but does not cause osteoarthritis. <i>Aging Cell</i> , 2018, 17, e12771.	6.7	111
34	Oxidative Stress Promotes Peroxiredoxin Hyperoxidation and Attenuates Pro-survival Signaling in Aging Chondrocytes. <i>Journal of Biological Chemistry</i> , 2016, 291, 6641-6654.	3.4	105
35	Increased Matrix Metalloproteinase-13 Production With Aging by Human Articular Chondrocytes in Response to Catabolic Stimuli. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2005, 60, 1118-1124.	3.6	104
36	Disease Progression and Phasic Changes in Gene Expression in a Mouse Model of Osteoarthritis. <i>PLoS ONE</i> , 2013, 8, e54633.	2.5	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.	3.4	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 $\alpha 2 \beta 1$ 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.	4.3	87
42	Is osteoarthritis one disease or a collection of many?. Rheumatology, 2018, 57, iv34-iv42.	1.9	85
43	Aging and Oxidative Stress Reduce the Response of Human Articular Chondrocytes to Insulin-like Growth Factor 1 and Osteogenic Protein 1. Arthritis and Rheumatology, 2014, 66, 2201-2209.	5.6	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.	7.4	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.	3.5	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.	1.9	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.	2.9	69
50	A Comprehensive Histological Assessment of Osteoarthritis Lesions in Mice. Cartilage, 2011, 2, 354-363.	2.7	64
51	The Role of Aging in the Development of Osteoarthritis. Transactions of the American Clinical and Climatological Association, 2017, 128, 44-54.	0.5	60
52	Aging or osteoarthritis: which is the problem?. Rheumatic Disease Clinics of North America, 2003, 29, 653-673.	1.9	57
53	Reduced Osteoarthritis Severity in Aged Mice With Deletion of Macrophage Migration Inhibitory Factor. Arthritis and Rheumatology, 2017, 69, 352-361.	5.6	49
54	TGF- $\beta 2$ type 2 receptor-mediated modulation of the IL-36 family can be therapeutically targeted in osteoarthritis. Science Translational Medicine, 2019, 11, .	12.4	49

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55	Mechanisms of chondrocyte adhesion to cartilage: role of β 1-integrins, CD44, and annexin V. <i>Journal of Orthopaedic Research</i> , 2001, 19, 1122-1130.	2.3	48
56	Integration of gene expression data with network-based analysis to identify signaling and metabolic pathways regulated during the development of osteoarthritis. <i>Gene</i> , 2014, 542, 38-45.	2.2	47
57	Strength Training for Arthritis Trial (START): design and rationale. <i>BMC Musculoskeletal Disorders</i> , 2013, 14, 208.	1.9	45
58	Chondrocyte cell death mediated by reactive oxygen species-dependent activation of PKC- β 1. <i>American Journal of Physiology - Cell Physiology</i> , 2006, 290, C802-C811.	4.6	44
59	Immunolocalization of noncollagenous bone matrix proteins in lumbar vertebrae from intact and surgically menopausal cynomolgus monkeys. <i>Journal of Bone and Mineral Research</i> , 1993, 8, 71-81.	2.8	44
60	Rac1 Is Required for Matrix Metalloproteinase 13 Production by Chondrocytes in Response to Fibronectin Fragments. <i>Arthritis and Rheumatism</i> , 2013, 65, 1561-1568.	6.7	38
61	Cysteine-Mediated Redox Regulation of Cell Signaling in Chondrocytes Stimulated With Fibronectin Fragments. <i>Arthritis and Rheumatology</i> , 2016, 68, 117-126.	5.6	36
62	Estrogen replacement therapy modulation of the insulin-like growth factor system in monkey knee joints. <i>Arthritis and Rheumatism</i> , 1999, 42, 2103-2111.	6.7	35
63	Editorial: Inflammatory Activity in Symptomatic Knee Osteoarthritis: Not All Inflammation Is Local. <i>Arthritis and Rheumatology</i> , 2015, 67, 2797-2800.	5.6	35
64	Redox regulation of Rac1 by thiol oxidation. <i>Free Radical Biology and Medicine</i> , 2015, 79, 237-250.	2.9	34
65	Relationship of Objectively-Measured Habitual Physical Activity to Chronic Inflammation and Fatigue in Middle-Aged and Older Adults. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2016, 71, 1437-1443.	3.6	33
66	Vitamin K Status and Lower Extremity Function in Older Adults: The Health Aging and Body Composition Study. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2016, 71, 1348-1355.	3.6	32
67	Effect of intensive diet and exercise on self-efficacy in overweight and obese adults with knee osteoarthritis: The IDEA randomized clinical trial. <i>Translational Behavioral Medicine</i> , 2019, 9, 227-235.	2.4	30
68	Sirtuin 6 (SIRT6) regulates redox homeostasis and signaling events in human articular chondrocytes. <i>Free Radical Biology and Medicine</i> , 2021, 166, 90-103.	2.9	30
69	Regulation of chondrocyte gene expression by osteogenic protein-1. <i>Arthritis Research and Therapy</i> , 2011, 13, R55.	3.5	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. <i>Journal of Biomechanics</i> , 2020, 98, 109477.	2.1	26
71	Phenotypes of osteoarthritis: current state and future implications. <i>Clinical and Experimental Rheumatology</i> , 2019, 37 Suppl 120, 64-72.	0.8	26
72	Ageing Cartilage and Osteoarthritis--What's the Link?. <i>Science of Aging Knowledge Environment: SAGE KE</i> , 2004, 2004, pe31-pe31.	0.8	25

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73	Fecal metabolomics reveals products of dysregulated proteolysis and altered microbial metabolism in obesity-related osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2022, 30, 81-91.	1.3	25
74	H ₂ O ₂ oxidation of cysteine residues in c-Jun N-terminal kinase 2 (JNK2) contributes to redox regulation in human articular chondrocytes. <i>Journal of Biological Chemistry</i> , 2018, 293, 16376-16389.	3.4	24
75	Arp2/3 inactivation causes intervertebral disc and cartilage degeneration with dysregulated TonEBP-mediated osmoadaptation. <i>JCI Insight</i> , 2020, 5, .	5.0	23
76	Deletion of JNK Enhances Senescence in Joint Tissues and Increases the Severity of Age-Related Osteoarthritis in Mice. <i>Arthritis and Rheumatology</i> , 2020, 72, 1679-1688.	5.6	21
77	Association of Increased Serum Lipopolysaccharide, But Not Microbial Dysbiosis, With Obesity-Related Osteoarthritis. <i>Arthritis and Rheumatology</i> , 2022, 74, 227-236.	5.6	21
78	The Effects of Aging on the Development of Osteoarthritis. <i>HSS Journal</i> , 2012, 8, 18-19.	1.7	18
79	Differential peroxiredoxin hyperoxidation regulates MAP kinase signaling in human articular chondrocytes. <i>Free Radical Biology and Medicine</i> , 2019, 134, 139-152.	2.9	18
80	Precision Medicine Approach to Develop and Internally Validate Optimal Exercise and Weight Loss Treatments for Overweight and Obese Adults With Knee Osteoarthritis: Data From a Single-Center Randomized Trial. <i>Arthritis Care and Research</i> , 2021, 73, 693-701.	3.4	18
81	Osteoarthritis Pathophysiology. <i>Clinics in Geriatric Medicine</i> , 2022, 38, 193-219.	2.6	17
82	Targeting cellular senescence as a novel treatment for osteoarthritis. <i>Current Opinion in Pharmacology</i> , 2022, 64, 102213.	3.5	12
83	Articular chondrocytes isolated from the knee and ankle joints of human tissue donors demonstrate similar redox-regulated MAP kinase and Akt signaling. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 703-711.	1.3	11
84	Vitamin K Status and Mobility Limitation and Disability in Older Adults: The Health, Aging, and Body Composition Study. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2020, 75, 792-797.	3.6	11
85	Naturally occurring osteoarthritis in male mice with an extended lifespan. <i>Connective Tissue Research</i> , 2020, 61, 95-103.	2.3	11
86	Impaired Annulus Fibrosus Development and Vertebral Fusion Cause Severe Scoliosis in Mice with Deficiency of c-Jun NH ₂ -Terminal Kinases 1 and 2. <i>American Journal of Pathology</i> , 2019, 189, 868-885.	3.8	9
87	Changes in Body Weight and Knee Pain in Adults With Knee Osteoarthritis Three and a Half Years After Completing Diet and Exercise Interventions: Follow-Up Study for a Single-Blind, Single-Center, Randomized Controlled Trial. <i>Arthritis Care and Research</i> , 2022, 74, 607-616.	3.4	6
88	Does Joint Injury Make Young Joints Old?. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2018, 26, e455-e456.	2.5	5
89	Overexpression of Peroxiredoxin 3 in Cartilage Reduces the Severity of Age-Related Osteoarthritis But Not Surgically Induced Osteoarthritis in Mice. <i>ACR Open Rheumatology</i> , 2022, 4, 441-446.	2.1	5
90	The effect of vitamin K insufficiency on histological and structural properties of knee joints in aging mice. <i>Osteoarthritis and Cartilage Open</i> , 2020, 2, 100078.	2.0	4

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91	CCL2 induces articular chondrocyte MMP expression through ERK and p38 signaling pathways. <i>Osteoarthritis and Cartilage Open</i> , 2021, 3, 100136.	2.0	4
92	Vitamin K and osteoarthritis: is there a link?. <i>Annals of the Rheumatic Diseases</i> , 2021, 80, 547-549.	0.9	4
93	Role of the Hypoxia-Inducible Factor Pathway in Normal and Osteoarthritic Meniscus and in Mice after Destabilization of the Medial Meniscus. <i>Cartilage</i> , 2021, 13, 1442S-1455S.	2.7	2
94	Osteoarthritis in the Elderly. , 2016, , 309-353.		2
95	Review of Hip and Knee Osteoarthritisâ€™Reply. <i>JAMA - Journal of the American Medical Association</i> , 2021, 325, 2505.	7.4	1
96	Reply. <i>Arthritis and Rheumatology</i> , 2020, 72, 2162-2163.	5.6	0
97	Correspondence on â€œMechanical overloading promotes chondrocyte senescence and osteoarthritis development through downregulating FBXW7â€™ by Zhang <i>et al</i> . <i>Annals of the Rheumatic Diseases</i> , 0, , annrhumdis-2022-222597.	0.9	0