Roman J Krawetz

List of Publications by Year in descending order

84 papers	2,152 citations	218677 26 h-index	276875 41 g-index
96 all docs	96 docs citations	96 times ranked	2920 citing authors

#	Article	IF	Citations
1	Production of Mesenchymal Progenitor Cell-Derived Extracellular Vesicles in Suspension Bioreactors for Use in Articular Cartilage Repair. Stem Cells Translational Medicine, 2022, 11, 73-87.	3.3	16
2	Prx1 Â+ and Hic1+ Mesenchymal Progenitors Are Present Within the Epidural Fat and Dura Mater and Participate in Dural Injury Repair. Stem Cells Translational Medicine, 2022, 11, 200-212.	3.3	5
3	Synovial mesenchymal progenitor derived aggrecan regulates cartilage homeostasis and endogenous repair capacity. Cell Death and Disease, 2022, 13, 470.	6.3	10
4	Proteoglycan 4 (PRG4) treatment enhances wound closure and tissue regeneration. Npj Regenerative Medicine, 2022, 7, .	5.2	8
5	Proteoglycan 4 is present within the dura mater and produced by mesenchymal progenitor cells. Cell and Tissue Research, 2022, 389, 483-499.	2.9	3
6	p21^{â^'/â^'} Mice Exhibit Spontaneous Articular Cartilage Regeneration Post-Injury. Cartilage, 2021, 13, 1608S-1617S.	2.7	11
7	MicroRNAâ€34aâ€5p Promotes Joint Destruction During Osteoarthritis. Arthritis and Rheumatology, 2021, 73, 426-439.	5.6	56
8	Epidural fat mesenchymal stem cells: Important microenvironmental regulators in health, disease, and regeneration. BioEssays, 2021, 43, e2000215.	2.5	4
9	CCL22 induces pro-inflammatory changes in fibroblast-like synoviocytes. IScience, 2021, 24, 101943.	4.1	9
10	The genomics of ecological flexibility, large brains, and long lives in capuchin monkeys revealed with fecalFACS. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	34
11	A non-immunological role for Î³-interferonâ€“inducible lysosomal thiol reductase (GILT) in osteoclastic bone resorption. Science Advances, 2021, 7, .	10.3	4
12	Excessive downhill training leads to early onset of knee osteoarthritis. Osteoarthritis and Cartilage, 2021, 29, 870-881.	1.3	8
13	Proteoglycan 4 (PRG4) expression and function in dry eye associated inflammation. Experimental Eye Research, 2021, 208, 108628.	2.6	22
14	A Na+/K+ ATPase Pump Regulates Chondrocyte Differentiation and Bone Length Variation in Mice. Frontiers in Cell and Developmental Biology, 2021, 9, 708384.	3.7	1
15	Proteomics Analysis of Tears and Saliva From Sjogrenâ€™s Syndrome Patients. Frontiers in Pharmacology, 2021, 12, 787193.	3.5	23
16	Decrease of core 2 O-glycans on synovial lubricin in osteoarthritis reduces galectin-3 mediated crosslinking. Journal of Biological Chemistry, 2020, 295, 16023-16036.	3.4	7
17	Cathepsin g Degrades Both Glycosylated and Unglycosylated Regions of Lubricin, a Synovial Mucin. Scientific Reports, 2020, 10, 4215.	3.3	14
18	Evolutionary Selection and Constraint on Human Knee Chondrocyte Regulation Impacts Osteoarthritis Risk. Cell, 2020, 181, 362-381.e28.	28.9	64

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19	The influence of maximal and submaximal cyclic concentric and eccentric exercise on chondrocyte death and synovial fluid proteins in the rabbit knee. Clinical Biomechanics, 2020, 78, 105095.	1.2	0
20	Understanding cartilage protection in OA and injury: a spectrum of possibilities. BMC Musculoskeletal Disorders, 2020, 21, 432.	1.9	21
21	Largeâ€scale expansion of feederâ€free mouse embryonic stem cells serially passaged in stirred suspension bioreactors at low inoculation densities directly from cryopreservation. Biotechnology and Bioengineering, 2020, 117, 1316-1328.	3.3	3
22	Optimized serial expansion of human induced pluripotent stem cells using low-density inoculation to generate clinically relevant quantities in vertical-wheel bioreactors. Stem Cells Translational Medicine, 2020, 9, 1036-1052.	3.3	40
23	CCL2 But Not CCR2 Is Required for Spontaneous Articular Cartilage Regeneration Postâ€Injury. Journal of Orthopaedic Research, 2019, 37, 2561-2574.	2.3	22
24	Recapitulating bone development events in a customised bioreactor through interplay of oxygen tension, medium pH, and systematic differentiation approaches. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1672-1684.	2.7	1
25	Post-Passage rock inhibition induces cytoskeletal aberrations and apoptosis in Human embryonic stem cells. Stem Cell Research, 2019, 41, 101641.	0.7	17
26	Absence of Proteoglycan 4 (Prg4) Leads to Increased Subchondral Bone Porosity Which Can Be Mitigated Through Intraâ€Articular Injection of PRG4. Journal of Orthopaedic Research, 2019, 37, 2077-2088.	2.3	16
27	Multiple mesenchymal progenitor cell subtypes with distinct functional potential are present within the intimal layer of the hip synovium. BMC Musculoskeletal Disorders, 2019, 20, 125.	1.9	12
28	Isolation and Characterization of an Adult Stem Cell Population from Human Epidural Fat. Stem Cells International, 2019, 2019, 1-12.	2.5	11
29	Absence of p21(WAF1/CIP1/SDI1) protects against osteopenia and minimizes bone loss after ovariectomy in a mouse model. PLoS ONE, 2019, 14, e0215018.	2.5	4
30	Resetting the clock on arthritis. Arthritis Research and Therapy, 2019, 21, 37.	3.5	3
31	Proteoglycan 4: From Mere Lubricant to Regulator of Tissue Homeostasis and Inflammation. BioEssays, 2019, 41, e1800166.	2.5	49
32	CCL22 is a biomarker of cartilage injury and plays a functional role in chondrocyte apoptosis. Cytokine, 2019, 115, 32-44.	3.2	12
33	Serum cartilage oligomeric matrix protein (COMP) expression in individuals who sustained a youth sport-related intra-articular knee injury 3â€“10 years previously and uninjured matched controls. Osteoarthritis and Cartilage, 2019, 27, 286-293.	1.3	6
34	microRNA-181a-5p antisense oligonucleotides attenuate osteoarthritis in facet and knee joints. Annals of the Rheumatic Diseases, 2019, 78, 111-121.	0.9	83
35	Effect of mechanical strain on the pluripotency of murine embryonic stem cells seeded in a collagenâ€I scaffold. Journal of Orthopaedic Research, 2018, 36, 799-807.	2.3	5
36	17-DMAG regulates p21 expression to induce chondrogenesis in vitro and in vivo. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	9

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37	Biochemical Markers for the Early Identification of Osteoarthritis: Systematic Review and Meta-Analysis. Molecular Diagnosis and Therapy, 2018, 22, 671-682.	3.8	5
38	Production of Adult Human Synovial Fluid-Derived Mesenchymal Stem Cells in Stirred-Suspension Culture. Stem Cells International, 2018, 2018, 1-16.	2.5	15
39	Serum and synovial fluid cytokine profiling in hip osteoarthritis: distinct from knee osteoarthritis and correlated with pain. BMC Musculoskeletal Disorders, 2018, 19, 39.	1.9	51
40	Developing a Customized Perfusion Bioreactor Prototype with Controlled Positional Variability in Oxygen Partial Pressure for Bone and Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2017, 23, 286-297.	2.1	17
41	Reduction of pluripotent gene expression in murine embryonic stem cells exposed to mechanical loading or Cyclo RGD peptide. BMC Cell Biology, 2017, 18, 32.	3.0	9
42	p21â^'/â^' mice exhibit enhanced bone regeneration after injury. BMC Musculoskeletal Disorders, 2017, 18, 435.	1.9	21
43	Enumeration and Localization of Mesenchymal Progenitor Cells and Macrophages in Synovium from Normal Individuals and Patients with Pre-Osteoarthritis or Clinically Diagnosed Osteoarthritis. International Journal of Molecular Sciences, 2017, 18, 774.	4.1	31
44	Characterizing heterogeneity in the response of synovial mesenchymal progenitor cells to synovial macrophages in normal individuals and patients with osteoarthritis. Journal of Inflammation, 2016, 13, 12.	3.4	19
45	Ion channel expression and function in normal and osteoarthritic human synovial fluid progenitor cells. Channels, 2016, 10, 148-157.	2.8	16
46	Applying computation biology and â€œbig dataâ€•to develop multiplex diagnostics for complex chronic diseases such as osteoarthritis. Biomarkers, 2015, 20, 533-539.	1.9	16
47	Allogeneic Bone Marrow Transplant from MRL/MpJ Super-Healer Mice Does Not Improve Articular Cartilage Repair in the C57Bl/6 Strain. PLoS ONE, 2015, 10, e0131661.	2.5	15
48	Increased levels of p21(CIP1/WAF1) correlate with decreased chondrogenic differentiation potential in synovial membrane progenitor cells.. Mechanisms of Ageing and Development, 2015, 149, 31-40.	4.6	15
49	Evaluating endogenous repair of focal cartilage defects in C57BL/6 and MRL/MpJ mice using 9.4T magnetic resonance imaging: A pilot study. Magnetic Resonance Imaging, 2015, 33, 690-694.	1.8	16
50	Shear stress influences the pluripotency of murine embryonic stem cells in stirred suspension bioreactors. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 268-278.	2.7	53
51	Embryonic stem cell therapy improves bone quality in a model of impaired fracture healing in the mouse; tracked temporally using in vivo micro-CT. Bone, 2014, 64, 263-272.	2.9	29
52	Invariant natural killer T cells act as an extravascular cytotoxic barrier for joint-invading Lyme Borrelia. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13936-13941.	7.1	54
53	Clonal analysis of synovial fluid stem cells to characterize and identify stable mesenchymal stromal cell/mesenchymal progenitor cell phenotypes in a porcine model: a cell source with enhanced commitment to the chondrogenic lineage. Cytotherapy, 2014, 16, 776-788.	0.7	58
54	A computational method to differentiate normal individuals, osteoarthritis and rheumatoid arthritis patients using serum biomarkers. Journal of the Royal Society Interface, 2014, 11, 20140428.	3.4	35

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55	Effect of basic fibroblast growth factor in mouse embryonic stem cell culture and osteogenic differentiation. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 371-382.	2.7	14
56	Monocyte chemotactic protein-1 inhibits chondrogenesis of synovial mesenchymal progenitor cells: An in vitro study. Stem Cells, 2013, 31, 2253-2265.	3.2	53
57	Intraarticular and Systemic Inflammatory Profiles May Identify Patients with Osteoarthritis. Journal of Rheumatology, 2013, 40, 1379-1387.	2.0	35
58	Assessment of the efficacy of MRI for detection of changes in bone morphology in a mouse model of bone injury. Journal of Magnetic Resonance Imaging, 2013, 38, 231-237.	3.4	11
59	Would the real human embryonic stem cell please stand up?. BioEssays, 2013, 35, 632-638.	2.5	10
60	Embryonic Stem Cells Incorporate into Newly Formed Bone and do Not Form Tumors in an Immunocompetent Mouse Fracture Model. Cell Transplantation, 2013, 22, 1453-1462.	2.5	12
61	Derivation of iPSCs in stirred suspension bioreactors. Nature Methods, 2012, 9, 465-466.	19.0	45
62	Suspension Bioreactor Expansion of Undifferentiated Human Embryonic Stem Cells. Methods in Molecular Biology, 2012, 873, 227-235.	0.9	4
63	Osmolarity regulates chondrogenic differentiation potential of synovial fluid derived mesenchymal progenitor cells. Biochemical and Biophysical Research Communications, 2012, 422, 455-461.	2.1	32
64	Matrix metalloproteinase protein expression profiles cannot distinguish between normal and early osteoarthritic synovial fluid. BMC Musculoskeletal Disorders, 2012, 13, 126.	1.9	51
65	Collagen I Scaffolds Cross-Linked with Beta-Glycerol Phosphate Induce Osteogenic Differentiation of Embryonic Stem Cells In Vitro and Regulate Their Tumorigenic Potential In Vivo. Tissue Engineering - Part A, 2012, 18, 1014-1024.	3.1	26
66	Synovial Fluid Progenitors Expressing CD90+ from Normal but Not Osteoarthritic Joints Undergo Chondrogenic Differentiation without Micro-Mass Culture. PLoS ONE, 2012, 7, e43616.	2.5	49
67	Inhibition of Rho Kinase Regulates Specification of Early Differentiation Events in P19 Embryonal Carcinoma Stem Cells. PLoS ONE, 2011, 6, e26484.	2.5	15
68	Efficient suspension bioreactor expansion of murine embryonic stem cells on microcarriers in serumâ€free medium. Biotechnology Progress, 2011, 27, 811-823.	2.6	39
69	Large-scale production of murine embryonic stem cell-derived osteoblasts and chondrocytes on microcarriers in serum-free media. Biomaterials, 2011, 32, 6006-6016.	11.4	39
70	Returning to the stem state: Epigenetics of recapitulating preâ€differentiation chromatin structure. BioEssays, 2010, 32, 791-799.	2.5	27
71	Serumâ€free scaled up expansion and differentiation of murine embryonic stem cells to osteoblasts in suspension bioreactors. Biotechnology and Bioengineering, 2010, 106, 829-840.	3.3	20
72	Reduced Differentiation Efficiency of Murine Embryonic Stem Cells in Stirred Suspension Bioreactors. Stem Cells and Development, 2010, 19, 989-998.	2.1	55

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73	Large-Scale Expansion of Pluripotent Human Embryonic Stem Cells in Stirred-Suspension Bioreactors. Tissue Engineering - Part C: Methods, 2010, 16, 573-582.	2.1	145
74	Derivation of human embryonic stem cell lines after blastocyst microsurgery. Biochemistry and Cell Biology, 2010, 88, 479-490.	2.0	16
75	Osteoblasts suppress high bone turnover caused by osteolytic breast cancer in-vitro. Experimental Cell Research, 2009, 315, 2333-2342.	2.6	20
76	Human embryonic stem cells: caught between a ROCK inhibitor and a hard place. BioEssays, 2009, 31, 336-343.	2.5	58
77	Coordinate GÎ±13 and Wnt6-Î²-catenin signaling in F9 embryonal carcinoma cells is required for primitive endoderm differentiation. Biochemistry and Cell Biology, 2009, 87, 567-580.	2.0	11
78	Moesin signalling induces F9 teratocarcinoma cells to differentiate into primitive extraembryonic endoderm. Cellular Signalling, 2008, 20, 163-175.	3.6	13
79	Wnt6 induces the specification and epithelialization of F9 embryonal carcinoma cells to primitive endoderm. Cellular Signalling, 2008, 20, 506-517.	3.6	44
80	ROCK inhibitor improves survival of cryopreserved serum/feeder-free single human embryonic stem cells. Human Reproduction, 2008, 24, 580-589.	0.9	149
81	GÎ±13 activation rescues moesin-depletion induced apoptosis in F9 teratocarcinoma cells. Experimental Cell Research, 2006, 312, 3224-3240.	2.6	17
82	Differential distribution of the G protein Î³3 subunit in the developing zebrafish nervous system. International Journal of Developmental Neuroscience, 2001, 19, 455-467.	1.6	6
83	Ran binding protein RanBP1 in zebrafish embryonic development. Molecular Reproduction and Development, 2001, 59, 235-248.	2.0	19
84	The Translocon-Associated Protein beta (TRAPbeta) in zebrafish embryogenesis. I. Enhanced expression of transcripts in notochord and hatching gland precursors. Molecular and Cellular Biochemistry, 2000, 215, 93-101.	3.1	9