Nathaniel A Dyment

List of Publications by Year
in descending order

51 papers	2,178 citations	257450 24 h-index	254184 43 g-index
56 all docs	56 docs citations	56 times ranked	2821 citing authors

#	Article	IF	Citations
1	Pegylated insulinâ€like growth factorâ€1 biotherapeutic delivery promotes rotator cuff regeneration in a rat model. Journal of Biomedical Materials Research - Part A, 2022, 110, 1356-1371.	4.0	8
2	Bone marrow adipogenic lineage precursors promote osteoclastogenesis in bone remodeling and pathologic bone loss. Journal of Clinical Investigation, 2021, 131, .	8.2	101
3	Nuclear envelope wrinkling predicts mesenchymal progenitor cell mechano-response in 2D and 3D microenvironments. Biomaterials, 2021, 270, 120662.	11.4	33
4	Reticulocalbin 3 is involved in postnatal tendon development by regulating collagen fibrillogenesis and cellular maturation. Scientific Reports, 2021, 11, 10868.	3.3	11
5	The critical role of Hedgehog-responsive mesenchymal progenitors in meniscus development and injury repair. ELife, 2021, 10, .	6.0	14
6	Intrinsic and growthâ€mediated cell and matrix specialization during murine meniscus tissue assembly. FASEB Journal, 2021, 35, e21779.	0.5	11
7	Type V collagen regulates the structure and biomechanics of TMJ condylar cartilage: A fibrous-hyaline hybrid. Matrix Biology, 2021, 102, 1-19.	3.6	10
8	Activation, development, and attenuation of modeling- and remodeling-based bone formation in adult rats. Biomaterials, 2021, 276, 121015.	11.4	4
9	Amplifying Bone Marrow Progenitors Expressing Î±â€Smooth Muscle Actin Produce Zonal Insertion Sites During Tendonâ€toâ€Bone Repair. Journal of Orthopaedic Research, 2020, 38, 105-116.	2.3	13
10	American Society for Bone and Mineral Researchâ€Orthopaedic Research Society Joint Task Force Report on Cellâ€Based Therapies. Journal of Bone and Mineral Research, 2020, 35, 3-17.	2.8	11
11	Cells from a GDF5 origin produce zonal tendonâ€toâ€bone attachments following anterior cruciate ligament reconstruction. Annals of the New York Academy of Sciences, 2020, 1460, 57-67.	3.8	10
12	A brief history of tendon and ligament bioreactors: Impact and future prospects. Journal of Orthopaedic Research, 2020, 38, 2318-2330.	2.3	25
13	Comparison of inbred mouse strains shows diverse phenotypic outcomes of intervertebral disc aging. Aging Cell, 2020, 19, e13148.	6.7	35
14	American Society for Bone and Mineral Researchâ€Orthopaedic Research Society Joint Task Force Report on Cellâ€Based Therapies â€" Secondary Publication. Journal of Orthopaedic Research, 2020, 38, 485-502.	2.3	7
15	Induced Knockdown of Decorin, Alone and in Tandem With Biglycan Knockdown, Directly Increases Aged Murine Patellar Tendon Viscoelastic Properties. Journal of Biomechanical Engineering, 2020, 142, .	1.3	9
16	Single cell transcriptomics identifies a unique adipose lineage cell population that regulates bone marrow environment. ELife, 2020, 9, .	6.0	191
17	Human Subacromial Bursal Cells Display Superior Engraftment Versus Bone Marrow Stromal Cells in Murine Tendon Repair. American Journal of Sports Medicine, 2018, 46, 3511-3520.	4.2	43
18	Intravenously-injected gold nanoparticles (AuNPs) access intracerebral F98 rat gliomas better than AuNPs infused directly into the tumor site by convection enhanced delivery. International Journal of Nanomedicine, 2018, Volume 13, 3937-3948.	6.7	19

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19	Cell origin, volume and arrangement are drivers of articular cartilage formation, morphogenesis and response to injury in mouse limbs. Developmental Biology, 2017, 426, 56-68.	2.0	117
20	Î±SMA-Expressing Perivascular Cells Represent Dental Pulp Progenitors In Vivo. Journal of Dental Research, 2017, 96, 323-330.	5.2	52
21	Biodistribution of gold nanoparticles in BBN-induced muscle-invasive bladder cancer in mice. International Journal of Nanomedicine, 2017, Volume 12, 7937-7946.	6.7	9
22	Murine supraspinatus tendon injury model to identify the cellular origins of rotator cuff healing. Connective Tissue Research, 2016, 57, 507-515.	2.3	35
23	The LG/J murine strain exhibits near-normal tendon biomechanical properties following a full-length central patellar tendon defect. Connective Tissue Research, 2016, 57, 496-506.	2.3	6
24	Cell Signaling in Tenocytes: Response to Load and Ligands in Health and Disease. Advances in Experimental Medicine and Biology, 2016, 920, 79-95.	1.6	26
25	Quiescent Bone Lining Cells Are a Major Source of Osteoblasts During Adulthood. Stem Cells, 2016, 34, 2930-2942.	3.2	142
26	High-Throughput, Multi-Image Cryohistology of Mineralized Tissues. Journal of Visualized Experiments, 2016, , .	0.3	78
27	Cell and matrix response of temporomandibular cartilage to mechanical loading. Osteoarthritis and Cartilage, 2016, 24, 335-344.	1.3	70
28	Ectopic mineralization of cartilage and collagen-rich tendons and ligaments in<i>Enpp1asj-2J</i>mice. Oncotarget, 2016, 7, 12000-12009.	1.8	17
29	Variable patterns of ectopic mineralization in <i>Enpp1</i>asj-2J mice, a model for generalized arterial calcification of infancy. Oncotarget, 2016, 7, 83837-83842.	1.8	3
30	Ablating hedgehog signaling in tenocytes during development impairs biomechanics and matrix organization of the adult murine patellar tendon enthesis. Journal of Orthopaedic Research, 2015, 33, 1142-1151.	2.3	33
31	Improved biomechanical and biological outcomes in the MRL/MpJ murine strain following a fullâ€length patellar tendon injury. Journal of Orthopaedic Research, 2015, 33, 1693-1703.	2.3	30
32	Fixation stability dictates the differentiation pathway of periosteal progenitor cells in fracture repair. Journal of Orthopaedic Research, 2015, 33, 948-956.	2.3	19
33	Scaffolds for Tendon and Ligament Repair and Regeneration. Annals of Biomedical Engineering, 2015, 43, 819-831.	2.5	69
34	Gdf5 progenitors give rise to fibrocartilage cells that mineralize via hedgehog signaling to form the zonal enthesis. Developmental Biology, 2015, 405, 96-107.	2.0	96
35	Regenerative Biology of Tendon: Mechanisms for Renewal and Repair. Current Molecular Biology Reports, 2015, 1, 124-131.	1.6	43
36	Fibrin Gels Exhibit Improved Biological, Structural, and Mechanical Properties Compared with Collagen Gels in Cell-Based Tendon Tissue-Engineered Constructs. Tissue Engineering - Part A, 2015, 21, 438-450.	3.1	46

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37	Lineage Tracing of Resident Tendon Progenitor Cells during Growth and Natural Healing. PLoS ONE, 2014, 9, e96113.	2.5	137
38	Effect of cyclical forces on the periodontal ligament and alveolar bone remodeling during orthodontic tooth movement. Angle Orthodontist, 2014, 84, 297-303.	2.4	53
39	Local transplantation is an effective method for cell delivery in the osteogenesis imperfecta murine model. International Orthopaedics, 2014, 38, 1955-1962.	1.9	20
40	Functional tissue engineering of tendon: Establishing biological success criteria for improving tendon repair. Journal of Biomechanics, 2014, 47, 1941-1948.	2.1	44
41	Mesenchymal stem cell response to growth factor treatment and low oxygen tension in 3-dimensional construct environment. Muscles, Ligaments and Tendons Journal, 2014, 4, 46-51.	0.3	10
42	Structural and biomechanical responses of osseous healing: a novel murine nonunion model. Journal of Orthopaedics and Traumatology, 2013, 14, 247-257.	2.3	8
43	Evolving Strategies in Mechanobiology to More Effectively Treat Damaged Musculoskeletal Tissues. Journal of Biomechanical Engineering, 2013, 135, 020301.	1.3	5
44	The Paratenon Contributes to Scleraxis-Expressing Cells during Patellar Tendon Healing. PLoS ONE, 2013, 8, e59944.	2.5	124
45	Spatial and Temporal Expression of Molecular Markers and Cell Signals During Normal Development of the Mouse Patellar Tendon. Tissue Engineering - Part A, 2012, 18, 598-608.	3.1	60
46	The relationships among spatiotemporal collagen gene expression, histology, and biomechanics following fullâ€length injury in the murine patellar tendon. Journal of Orthopaedic Research, 2012, 30, 28-36.	2.3	43
47	What We Should Know Before Using Tissue Engineering Techniques to Repair Injured Tendons: A Developmental Biology Perspective. Tissue Engineering - Part B: Reviews, 2011, 17, 165-176.	4.8	143
48	The use of mesenchymal stem cells in collagen-based scaffolds for tissue-engineered repair of tendons. Nature Protocols, 2010, 5, 849-863.	12.0	81
49	Effects of Tensile Stimulation on Gene Expression and In Vitro Stiffness of Murine Tissue Engineered Constructs. , 2010, , .		0
50	Comparative Histological and Biomechanical Effects of Prostaglandin-E2 and Bacterial Collagenase on the Rabbit Patellar Tendon. , 2008, , .		0
51	Biomechanical Comparison of Abdominal Wall Hernia Repair Materials. , 2008, , .		1