

# Dale R Sumner

## List of Publications by Year in descending order

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117  
papers

4,418  
citations

81434

41  
h-index

134545

62  
g-index

118  
all docs

118  
docs citations

118  
times ranked

5157  
citing authors

#	ARTICLE	IF	CITATIONS
1	The relative contribution of bone microarchitecture and matrix composition to implant fixation strength in rats. <i>Journal of Orthopaedic Research</i> , 2022, 40, 862-870.	1.2	2
2	Alcohol and Circadian Disruption Minimally Impact Bone Properties in Two Cohorts of Male Mice While Betweenâ€Cohort Differences Predominate: Association With Season of Birth?. <i>JBMR Plus</i> , 2022, 6, e10591.	1.3	0
3	Racism, structural racism, and the American Association for Anatomy: Initial report from a task force. <i>Anatomical Record</i> , 2022, 305, 772-787.	0.8	8
4	Comparison of Bone Turnover Biomarkers in Serum and Urine Measured on an Automated Analytical Platform. <i>Journal of applied laboratory medicine, The</i> , 2021, 6, 750-755.	0.6	0
5	How faithfully does intramembranous bone regeneration recapitulate embryonic skeletal development?. <i>Developmental Dynamics</i> , 2021, 250, 377-392.	0.8	27
6	In-vitro trabecular bone damage following mono- and bicortical mini implants anchorage in mini-implant assisted rapid palatal expansion (MARPE). <i>International Orthodontics</i> , 2021, 19, 243-251.	0.6	3
7	The risk of revision following total hip arthroplasty in patients with inflammatory bowel disease, a registry based study. <i>PLoS ONE</i> , 2021, 16, e0257310.	1.1	7
8	Activation of canonical Wnt signaling accelerates intramembranous bone regeneration in male mice. <i>Journal of Orthopaedic Research</i> , 2021, , .	1.2	1
9	Early changes in serum osteocalcin and body weight are predictive of implant fixation in a rat model of implant loosening. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1216-1227.	1.2	2
10	Implant surface alters compartmentalâ€specific contributions to fixation strength in rats. <i>Journal of Orthopaedic Research</i> , 2020, 38, 1208-1215.	1.2	4
11	CHIP regulates skeletal development and postnatal bone growth. <i>Journal of Cellular Physiology</i> , 2020, 235, 5378-5385.	2.0	6
12	The gut microbiota may be a novel pathogenic mechanism in loosening of orthopedic implants in rats. <i>FASEB Journal</i> , 2020, 34, 14302-14317.	0.2	6
13	Biomechanics of Implant Fixation in Osteoporotic Bone. <i>Current Osteoporosis Reports</i> , 2020, 18, 577-586.	1.5	11
14	Osteoporosis Treatments Affect Bone Matrix Maturation in a Rat Model of Induced Cortical Remodeling. <i>JBMR Plus</i> , 2020, 4, e10344.	1.3	3
15	Bone Biology of Implant Failure. , 2020, , 136-145.		1
16	Wnt signaling in bone, kidney, intestine, and adipose tissue and interorgan interaction in aging. <i>Annals of the New York Academy of Sciences</i> , 2019, 1442, 48-60.	1.8	49
17	Calcium restriction during lactation has minimal effects on post-weaning mineral metabolism and bone recovery. <i>Journal of Bone and Mineral Metabolism</i> , 2019, 37, 648-657.	1.3	5
18	Optimizing a microâ€computed tomographyâ€based surrogate measurement of boneâ€implant contact. <i>Journal of Orthopaedic Research</i> , 2018, 36, 979-986.	1.2	11

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19	Circulating Dkk1 and TRAIL Are Associated With Cognitive Decline in Community-Dwelling, Older Adults With Cognitive Concerns. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 1688-1694.	1.7	23
20	Discovery of biomarkers to identify peri-implant osteolysis before radiographic diagnosis. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2754-2761.	1.2	13
21	A Novel Model to Assess the Effects of Osteoporosis Medications on Bone Quality. <i>FASEB Journal</i> , 2018, 32, 365.1.	0.2	0
22	Murine articular cartilage morphology and compositional quantification with high resolution cationic contrast-enhanced $\mu$ CT. <i>Journal of Orthopaedic Research</i> , 2017, 35, 2740-2748.	1.2	17
23	Arthrotomy-based preclinical models of particle-induced osteolysis: A systematic review. <i>Journal of Orthopaedic Research</i> , 2017, 35, 2595-2605.	1.2	16
24	Bone Matrix Maturation in a Rat Model of Intra-Cortical Bone Remodeling. <i>Calcified Tissue International</i> , 2017, 101, 193-203.	1.5	13
25	Validation of cortical bone mineral density distribution using micro-computed tomography. <i>Bone</i> , 2017, 99, 53-61.	1.4	30
26	HBM Mice Have Altered Bone Matrix Composition and Improved Material Toughness. <i>Calcified Tissue International</i> , 2016, 99, 384-395.	1.5	5
27	Bone Matrix Composition Following PTH Treatment is Not Dependent on Sclerostin Status. <i>Calcified Tissue International</i> , 2016, 98, 149-157.	1.5	8
28	Intramembranous bone regeneration differs among common inbred mouse strains following marrow ablation. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1374-1381.	1.2	9
29	Long-term implant fixation and stress-shielding in total hip replacement. <i>Journal of Biomechanics</i> , 2015, 48, 797-800.	0.9	218
30	Sclerostin Antibody Treatment Improves Implant Fixation in a Model of Severe Osteoporosis. <i>Journal of Bone and Joint Surgery - Series A</i> , 2015, 97, 133-140.	1.4	51
31	Assessment of glenoid chondral healing: comparison of microfracture to autologous matrix-induced chondrogenesis in a novel rabbit shoulder model. <i>Journal of Shoulder and Elbow Surgery</i> , 2015, 24, 1789-1800.	1.2	11
32	Incorporation of copper into chitosan scaffolds promotes bone regeneration in rat calvarial defects. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015, 103, 1044-1049.	1.6	56
33	Cytotoxic effects of cobalt and nickel ions on osteocytes in vitro. <i>Journal of Orthopaedic Surgery and Research</i> , 2014, 9, 91.	0.9	36
34	Bone Matrix Quality After Sclerostin Antibody Treatment. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 1597-1607.	3.1	38
35	Particle-induced osteolysis is not accompanied by systemic remodeling but is reflected by systemic bone biomarkers. <i>Journal of Orthopaedic Research</i> , 2014, 32, 967-973.	1.2	20
36	Combined Use of Low-Intensity Pulsed Ultrasound and rhBMP-2 to Enhance Bone Formation in a Rat Model of Critical Size Defect. <i>Journal of Orthopaedic Trauma</i> , 2014, 28, 605-611.	0.7	19

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37	Pharmacologic Augmentation of Implant Fixation in Osteopenic Bone. <i>Current Osteoporosis Reports</i> , 2014, 12, 55-64.	1.5	18
38	The enhancement of bone regeneration by gene activated matrix encoding for platelet derived growth factor. <i>Biomaterials</i> , 2014, 35, 737-747.	5.7	123
39	Dopamine Receptors and the Persistent Neurovascular Dysregulation Induced by Methamphetamine Self-Administration in Rats. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2014, 351, 432-439.	1.3	14
40	Are There Biological Markers for Wear or Corrosion? A Systematic Review. <i>Clinical Orthopaedics and Related Research</i> , 2014, 472, 3728-3739.	0.7	25
41	Biological control of peri-implant bone remodeling and implant loosening (Sun Valley 2012). <i>IBMS BoneKEy</i> , 2013, 10, .	0.1	0
42	Implant placement increases bone remodeling transiently in a rat model. <i>Journal of Orthopaedic Research</i> , 2013, 31, 800-806.	1.2	16
43	Sclerostin Antibody Increases Bone Volume and Enhances Implant Fixation in a Rat Model. <i>Journal of Bone and Joint Surgery - Series A</i> , 2012, 94, 1670-1680.	1.4	53
44	Modulation of Stromal Cell-Derived Factor-1/CXC Chemokine Receptor 4 Axis Enhances rhBMP-2-Induced Ectopic Bone Formation. <i>Tissue Engineering - Part A</i> , 2012, 18, 860-869.	1.6	26
45	Effects of <i>TGF-<math>\beta</math>1</i> and <i>VEGF-A</i> transgenes on the osteogenic potential of bone marrow stromal cells in vitro and in vivo. <i>Journal of Tissue Engineering</i> , 2012, 3, 204173141245974.	2.3	15
46	Sclerostin antibody prevents particle-induced implant loosening by stimulating bone formation and inhibiting bone resorption in a rat model. <i>Arthritis and Rheumatism</i> , 2012, 64, 4012-4020.	6.7	53
47	Adult Stem Cell Mobilization Enhances Intramembranous Bone Regeneration: A Pilot Study. <i>Clinical Orthopaedics and Related Research</i> , 2012, 470, 2503-2512.	0.7	14
48	Overexpression of DMP1 accelerates mineralization and alters cortical bone biomechanical properties in vivo. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 5, 1-8.	1.5	28
49	Bone turnover markers correlate with implant fixation in a rat model using LPS-doped particles to induced implant loosening. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 918-928.	2.1	25
50	Calcineurin/nuclear factor of activated T cells (NFAT) signaling in cobalt-chromium-molybdenum (CoCrMo) particles-induced tumor necrosis factor- $\alpha$ (TNF $\alpha$ ) secretion in MLO-2 osteocytes. <i>Journal of Orthopaedic Research</i> , 2011, 29, 1867-1873.	1.2	7
51	Low-intensity pulsed ultrasound (LIPUS) and cell-to-cell communication in bone marrow stromal cells. <i>Ultrasonics</i> , 2011, 51, 639-644.	2.1	43
52	Effect of recombinant human transforming growth factor- $\beta$ 2 dose on bone formation in rat femur titanium implant model. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 92A, 1210-1217.	2.1	10
53	Alteration of sensory neurons and spinal response to an experimental osteoarthritis pain model. <i>Arthritis and Rheumatism</i> , 2010, 62, 2995-3005.	6.7	149
54	Temporal Gene Expression Profiling during Rat Femoral Marrow Ablation-Induced Intramembranous Bone Regeneration. <i>PLoS ONE</i> , 2010, 5, e12987.	1.1	45

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55	Ultrasound Enhances Recombinant Human BMP-2 Induced Ectopic Bone Formation in a Rat Model. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 1629-1637.	0.7	20
56	Coâ€“Crâ€“Mo alloy particles induce tumor necrosis factor alpha production in MLO-Y4 osteocytes: A role for osteocytes in particle-induced inflammation. <i>Bone</i> , 2009, 45, 528-533.	1.4	67
57	Autologous stem cell regeneration in craniosynostosis. <i>Bone</i> , 2008, 42, 332-340.	1.4	28
58	Porous implants as drug delivery vehicles to augment host tissue integration. <i>FASEB Journal</i> , 2008, 22, 1684-1693.	0.2	23
59	Effects of Age on the Development of Arthropathy in Mice with Hemophilia.. <i>Blood</i> , 2008, 112, 3393-3393.	0.6	0
60	Modulation of VEGF Expression in Rat Bone Marrow Stromal Cells by GDF-5. <i>Connective Tissue Research</i> , 2007, 48, 324-331.	1.1	17
61	Relationship between pain and medial knee joint loading in mild radiographic knee osteoarthritis. <i>Arthritis and Rheumatism</i> , 2007, 57, 1254-1260.	6.7	174
62	Peri-implant bone formation and implant integration strength of peptide-modified p(AAM-co-EG/AAC) interpenetrating polymer network-coated titanium implants. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 80A, 306-320.	2.1	46
63	The effect of enzymatically degradable IPN coatings on peri-implant bone formation and implant fixation. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 720-727.	2.1	22
64	Letter to the Editor Regarding â€œBone mineral density of the proximal femur is not related to dynamic joint loading during locomotion in young women.â€•by Bareither et al.. <i>Bone</i> , 2006, 38, 954-955.	1.4	1
65	Bone mineral density in the proximal tibia varies as a function of static alignment and knee adduction angular momentum in individuals with medial knee osteoarthritis. <i>Bone</i> , 2006, 39, 1116-1122.	1.4	87
66	Micro-Computed Tomography Evaluation of the Glenoid Fossa and Mandibular Condyle Bone After Bilateral Vertical Ramus Mandibular Distraction in a Canine Model. <i>Journal of Craniofacial Surgery</i> , 2006, 17, 611-619.	0.3	8
67	Micro-Computed Tomography Evaluation of the Glenoid Fossa and Mandibular Condyle Bone After Bilateral Vertical Ramus Mandibular Distraction in a Canine Model. <i>Journal of Craniofacial Surgery</i> , 2006, 17, 111-119.	0.3	7
68	Biomimetic artificial ECMs stimulate bone regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 79A, 815-826.	2.1	63
69	Additive Enhancement of Implant Fixation Following Combined Treatment with rhTGF-âˆ2 and rhBMP-2 in a Canine Model. <i>Journal of Bone and Joint Surgery - Series A</i> , 2006, 88, 806-817.	1.4	53
70	Microstructural and Strength Evaluation of Regenerate Tissue during the Consolidation Period after Vertical Mandibular Ramus Distraction. <i>Journal of Craniofacial Surgery</i> , 2005, 16, 805-811.	0.3	12
71	Early gene response to low-intensity pulsed ultrasound in rat osteoblastic cells. <i>Ultrasound in Medicine and Biology</i> , 2005, 31, 703-708.	0.7	121
72	Saline irrigation does not affect bone formation or fixation strength of hydroxyapatite/tricalcium phosphate-coated implants in a rat model. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005, 74B, 712-717.	1.6	21

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73	Patterns and Localization of Gene Expression During Intramembranous Bone Regeneration in the Rat Femoral Marrow Ablation Model. <i>Calcified Tissue International</i> , 2005, 77, 212-225.	1.5	47
74	Effect of Hip Hemiarthroplasty on Articular Cartilage and Bone in a Canine Model. <i>Clinical Orthopaedics and Related Research</i> , 2005, &NA;, 157-163.	0.7	15
75	Modulation of bone ingrowth of rabbit femur titanium implants by in vivo axial micromechanical loading. <i>Journal of Applied Physiology</i> , 2005, 98, 1922-1929.	1.2	27
76	Local application of rhTGF- $\beta$ 2 modulates dynamic gene expression in a rat implant model. <i>Bone</i> , 2005, 36, 931-940.	1.4	15
77	Local application of rhTGF- $\beta$ 2 enhances peri-implant bone volume and bone-implant contact in a rat model. <i>Bone</i> , 2005, 37, 55-62.	1.4	51
78	Locally delivered rhBMP-2 enhances bone ingrowth and gap healing in a canine model. <i>Journal of Orthopaedic Research</i> , 2004, 22, 58-65.	1.2	90
79	MRI heterogeneity of articular cartilage in strong magnetic fields: Dependence on proteoglycan content. <i>Concepts in Magnetic Resonance</i> , 2004, 23B, 33-43.	1.3	2
80	A low-temperature biomimetic calcium phosphate surface enhances early implant fixation in a rat model. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 70A, 66-73.	3.0	51
81	Patterns of gene expression in rat bone marrow stromal cells cultured on titanium alloy discs of different roughness. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 70A, 391-401.	3.0	27
82	Dynamic loads are determinants of peak bone mass. <i>Journal of Orthopaedic Research</i> , 2004, 22, 339-345.	1.2	30
83	Refraction Effects of Diffraction-Enhanced Radiographic Imaging. <i>Journal of the American Podiatric Medical Association</i> , 2004, 94, 453-455.	0.2	11
84	Aging Does Not Lessen the Effectiveness of TGF $\beta$ 2-Enhanced Bone Regeneration. <i>Journal of Bone and Mineral Research</i> , 2003, 18, 730-736.	3.1	26
85	The use of intra-articular Na-hyaluronate as a potential chondroprotective device in experimentally induced acute articular cartilage injury and repair in rabbits. <i>Journal of Orthopaedic Research</i> , 2003, 21, 305-311.	1.2	26
86	Spontaneous and experimental osteoarthritis in dog: Similarities and differences in proteoglycan levels. <i>Journal of Orthopaedic Research</i> , 2003, 21, 730-737.	1.2	58
87	Normalization of joint moments during gait: a comparison of two techniques. <i>Journal of Biomechanics</i> , 2003, 36, 599-603.	0.9	228
88	The efficacy of 500 centigray radiation in the prevention of heterotopic ossification after total hip arthroplasty: a prospective, randomized, pilot study. <i>Journal of Arthroplasty</i> , 2003, 18, 677-686.	1.5	55
89	Subchondral Thickness Does Not Vary with Cartilage Degeneration on the Metatarsal. <i>Journal of the American Podiatric Medical Association</i> , 2003, 93, 104-110.	0.2	8
90	Implant Design Affects Markers of Bone Resorption and Formation in Total Hip Replacement. <i>Journal of Bone and Mineral Research</i> , 2002, 17, 800-807.	3.1	14

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91	Bone graft harvesting from the distal radius, olecranon, and iliac crest: A quantitative analysis. <i>Journal of Hand Surgery</i> , 2001, 26, 135-141.	0.7	57
92	Accuracy and precision of radiostereometric analysis in the measurement of THR femoral component translations: human and canine in vitro models. <i>Journal of Orthopaedic Research</i> , 2001, 19, 1162-1167.	1.2	55
93	Bone Density, Dynamic Joint Loading and Joint Degeneration. <i>Cells Tissues Organs</i> , 2001, 169, 201-209.	1.3	47
94	Sensitivity of periprosthetic stress-shielding to load and the bone densityâ€“modulus relationship in subject-specific finite element models. <i>Journal of Biomechanics</i> , 2000, 33, 809-817.	0.9	109
95	Implant Pushout and Pullout Tests. , 1999, , 463-476.		6
96	Dynamic knee loads during gait predict proximal tibial bone distribution. <i>Journal of Biomechanics</i> , 1998, 31, 423-430.	0.9	262
97	Hip motion and moments during gait relate directly to proximal femoral bone mineral density in patients with hip osteoarthritis. <i>Journal of Biomechanics</i> , 1998, 31, 919-925.	0.9	52
98	Relationship between articular cartilage damage and bone density in the first metatarsal. <i>Journal of Foot and Ankle Surgery</i> , 1998, 37, 401-409.	0.5	4
99	Dimensional characteristics of uncomplicated autopsy-retrieved acetabular polyethylene liners by ultrasound. , 1998, 39, 120-129.		12
100	Use of Bone Morphogenetic Protein 2 on Ectopic Porous Coated Implants in the Rat. <i>Clinical Orthopaedics and Related Research</i> , 1997, 345, 219-228.	0.7	42
101	Impacted particulate allograft for femoral revision total hip arthroplasty. <i>Journal of Arthroplasty</i> , 1996, 11, 500-506.	1.5	33
102	PARTICULATE-INDUCED, PROSTAGLANDIN- AND CYTOKINE-MEDIATED BONE RESORPTION IN AN EXPERIMENTAL SYSTEM AND IN FAILED JOINT REPLACEMENTS. <i>American Journal of Therapeutics</i> , 1996, 3, 27-41.	0.5	49
103	Unilateral hip replacement causes bilateral changes in tibial bone mineral content in a canine model. <i>Journal of Bone and Mineral Research</i> , 1996, 11, 693-696.	3.1	5
104	The Bone-Implant Interface of Femoral Stems with Non-Circumferential Porous Coating. A Study of Specimens Retrieved at Autopsy*. <i>Journal of Bone and Joint Surgery - Series A</i> , 1996, 78, 1068-81.	1.4	114
105	Bone ingrowth and wear debris in well-fixed cementless porous-coated tibial components removed from patients. <i>Journal of Arthroplasty</i> , 1995, 10, 157-167.	1.5	63
106	Effects of fixation technique on displacement incompatibilities at the bone-implant interface in cementless total knee replacement in a canine model. <i>Journal of Applied Biomaterials: an Official Journal of the Society for Biomaterials</i> , 1994, 5, 349-352.	1.1	12
107	Stem curvature and load angle influence the initial relative bone-implant motion of cementless femoral stems. <i>Journal of Orthopaedic Research</i> , 1993, 11, 758-769.	1.2	53
108	Histology of porous-coated acetabular components: 25 cementless cups retrieved after arthroplasty. <i>Acta Orthopaedica</i> , 1993, 64, 619-626.	1.4	75

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109	A quantitative study of bone and soft tissues in cementless porous-coated acetabular components retrieved at autopsy. <i>Journal of Arthroplasty</i> , 1993, 8, 213-225.	1.5	150
110	Measuring the volume fraction of bone ingrowth: A comparison of three techniques. <i>Journal of Orthopaedic Research</i> , 1990, 8, 448-452.	1.2	62
111	The geometry of the adult canine proximal femur. <i>Journal of Orthopaedic Research</i> , 1990, 8, 671-677.	1.2	28
112	Bone ingrowth into the tibial component of a canine total condylar knee replacement prosthesis. <i>Journal of Orthopaedic Research</i> , 1989, 7, 893-901.	1.2	38
113	Apparent age-related bone loss among adult female Gombe chimpanzees. <i>American Journal of Physical Anthropology</i> , 1989, 79, 225-234.	2.1	52
114	Symmetry of the canine femur: Implications for experimental sample size requirements. <i>Journal of Orthopaedic Research</i> , 1988, 6, 758-765.	1.2	42
115	Computed tomography and automated image analysis of prehistoric femora. <i>American Journal of Physical Anthropology</i> , 1985, 68, 225-232.	2.1	42
116	Postembryonic dimensional allometry of the human femur. <i>American Journal of Physical Anthropology</i> , 1984, 64, 69-74.	2.1	9
117	Contrast-enhanced micro-computed tomography of compartment and time-dependent changes in femoral cartilage and subchondral plate in a murine model of osteoarthritis. <i>Anatomical Record</i> , 0, , .	0.8	1