# Edward M Schwarz

List of Publications by Year
in descending order



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|---|---|---|---|
| 322 papers | 20,530 citations | 6613 79 h-index | 15732 125 g-index |
| 327 all docs | 327 docs citations | 327 times ranked | 19070 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 3D printing of composite calcium phosphate and collagen scaffolds for bone regeneration. Biomaterials, 2014, 35, 4026-4034. | 11.4 | 710 |
| 2 | Osteoblastâ€“osteoclast interactions. Connective Tissue Research, 2018, 59, 99-107. | 2.3 | 575 |
| 3 | Cyclooxygenase-2 regulates mesenchymal cell differentiation into the osteoblast lineage and is critically involved in bone repair. Journal of Clinical Investigation, 2002, 109, 1405-1415. | 8.2 | 514 |
| 4 | Mechanisms of TNF-Î±â€“ and RANKL-mediated osteoclastogenesis and bone resorption in psoriatic arthritis. Journal of Clinical Investigation, 2003, 111, 821-831. | 8.2 | 489 |
| 5 | NF-ÎºB p50 and p52 Regulate Receptor Activator of NF-ÎºB Ligand (RANKL) and Tumor Necrosis Factor-induced Osteoclast Precursor Differentiation by Activating c-Fos and NFATc1. Journal of Biological Chemistry, 2007, 282, 18245-18253. | 3.4 | 364 |
| 6 | Cyclooxygenase-2 regulates mesenchymal cell differentiation into the osteoblast lineage and is critically involved in bone repair. Journal of Clinical Investigation, 2002, 109, 1405-1415. | 8.2 | 303 |
| 7 | Evolving concepts in bone infection: redefining â€œbiofilmâ€, â€œacute vs. chronic osteomyelitisâ€, â€œthe immune proteomeâ€•and â€œlocal antibiotic therapyâ€• Bone Research, 2019, 7, 20. | 11.4 | 300 |
| 8 | Periosteal Progenitor Cell Fate in Segmental Cortical Bone Graft Transplantations: Implications for Functional Tissue Engineering. Journal of Bone and Mineral Research, 2005, 20, 2124-2137. | 2.8 | 294 |
| 9 | Runx2-mediated regulation of the zinc finger Osterix/Sp7 gene. Gene, 2006, 372, 62-70. | 2.2 | 288 |
| 10 | 3D Printing of Calcium Phosphate Ceramics for Bone Tissue Engineering and Drug Delivery. Annals of Biomedical Engineering, 2017, 45, 23-44. | 2.5 | 271 |
| 11 | Mechanisms of TNF-Î±â€“ and RANKL-mediated osteoclastogenesis and bone resorption in psoriatic arthritis. Journal of Clinical Investigation, 2003, 111, 821-831. | 8.2 | 271 |
| 12 | Tumor Necrosis Factor Promotes Runx2 Degradation through Up-regulation of Smurf1 and Smurf2 in Osteoblasts. Journal of Biological Chemistry, 2006, 281, 4326-4333. | 3.4 | 261 |
| 13 | Remodeling of cortical bone allografts mediated by adherent rAAV-RANKL and VEGF gene therapy. Nature Medicine, 2005, 11, 291-297. | 30.7 | 258 |
| 14 | Biomaterials approaches to treating implant-associated osteomyelitis. Biomaterials, 2016, 81, 58-71. | 11.4 | 248 |
| 15 | Osteoclast precursors, RANKL/RANK, and immunology. Immunological Reviews, 2005, 208, 19-29. | 6.0 | 205 |
| 16 | RANK Signaling Is Not Required for TNFÎ±-Mediated Increase in CD11bhi Osteoclast Precursors but Is Essential for Mature Osteoclast Formation in TNFÎ±-Mediated Inflammatory Arthritis. Journal of Bone and Mineral Research, 2003, 19, 207-213. | 2.8 | 200 |
| 17 | Systemic tumor necrosis factor ? mediates an increase in peripheral CD11bhigh osteoclast precursors in tumor necrosis factor ?-transgenic mice. Arthritis and Rheumatism, 2004, 50, 265-276. | 6.7 | 198 |
| 18 | Wnt induction of chondrocyte hypertrophy through the Runx2 transcription factor. Journal of Cellular Physiology, 2006, 208, 77-86. | 4.1 | 195 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A Perspective: Engineering Periosteum for Structural Bone Graft Healing. Clinical Orthopaedics and Related Research, 2008, 466, 1777-1787. | 1.5 | 194 |
| 20 | Evidence of Staphylococcus Aureus Deformation, Proliferation, and Migration in Canaliculi of Live Cortical Bone in Murine Models of Osteomyelitis. Journal of Bone and Mineral Research, 2017, 32, 985-990. | 2.8 | 193 |
| 21 | 2018 International Consensus Meeting on Musculoskeletal Infection: Research Priorities from the General Assembly Questions. Journal of Orthopaedic Research, 2019, 37, 997-1006. | 2.3 | 189 |
| 22 | TNF.ALPHA. and pathologic bone resorption. Keio Journal of Medicine, 2005, 54, 127-131. | 1.1 | 188 |
| 23 | Tumor necrosis factor-?/nuclear transcription factor-?B signaling in periprosthetic osteolysis. Journal of Orthopaedic Research, 2000, 18, 472-480. | 2.3 | 181 |
| 24 | Tumor Necrosis Factor-Î± Increases Circulating Osteoclast Precursor Numbers by Promoting Their Proliferation and Differentiation in the Bone Marrow through Up-regulation of c-Fms Expression. Journal of Biological Chemistry, 2006, 281, 11846-11855. | 3.4 | 177 |
| 25 | Skeletal infections: microbial pathogenesis, immunity and clinical management. Nature Reviews Microbiology, 2022, 20, 385-400. | 28.6 | 165 |
| 26 | Inhibition of lymphangiogenesis and lymphatic drainage via vascular endothelial growth factor receptor 3 blockade increases the severity of inflammation in a mouse model of chronic inflammatory arthritis. Arthritis and Rheumatism, 2009, 60, 2666-2676. | 6.7 | 155 |
| 27 | The TNF-? transgenic mouse model of inflammatory arthritis. Seminars in Immunopathology, 2003, 25, 19-33. | 4.0 | 153 |
| 28 | Review: Gene- and Stem Cellâ€"Based Therapeutics for Bone Regeneration and Repair. Tissue Engineering, 2007, 13, 1135-1150. | 4.6 | 148 |
| 29 | Quantifying the natural history of biofilm formation in vivo during the establishment of chronic implantâ€associated Staphylococcus aureus osteomyelitis in mice to identify critical pathogen and host factors. Journal of Orthopaedic Research, 2015, 33, 1311-1319. | 2.3 | 147 |
| 30 | Efficacy of Etanercept for Wear Debris-Induced Osteolysis. Journal of Bone and Mineral Research, 2001, 16, 338-347. | 2.8 | 145 |
| 31 | Reduced COX-2 Expression in Aged Mice Is Associated With Impaired Fracture Healing. Journal of Bone and Mineral Research, 2009, 24, 251-264. | 2.8 | 145 |
| 32 | Teriparatide as a Chondroregenerative Therapy for Injury-Induced Osteoarthritis. Science Translational Medicine, 2011, 3, 101ra93. | 12.4 | 145 |
| 33 | Smad2 and 3 Mediate Transforming Growth Factor-Î²1-Induced Inhibition of Chondrocyte Maturation**The work was supported by National Health Services Grant AR-38945 (to R.J.O.) and an Orthopaedic Research Education Foundation Award (to C.M.F.).. Endocrinology, 2000, 141, 4728-4735. | 2.8 | 141 |
| 34 | In Vivo RANK Signaling Blockade Using the Receptor Activator of NF-Î°B:Fc Effectively Prevents and Ameliorates Wear Debris-Induced Osteolysis via Osteoclast Depletion Without Inhibiting Osteogenesis. Journal of Bone and Mineral Research, 2002, 17, 192-199. | 2.8 | 139 |
| 35 | Overexpression of noggin inhibits BMP-mediated growth of osteolytic prostate cancer lesions. Bone, 2006, 38, 154-166. | 2.9 | 138 |
| 36 | Increased lymphangiogenesis in joints of mice with inflammatory arthritis. Arthritis Research and Therapy, 2007, 9, R118. | 3.5 | 134 |

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| 37 | Quantitative mouse model of implantâ€associated osteomyelitis and the kinetics of microbial growth, osteolysis, and humoral immunity. Journal of Orthopaedic Research, 2008, 26, 96-105. | 2.3 | 131 |
| 38 | Orthopaedic device-related infection: current and future interventions for improved prevention and treatment. EFORT Open Reviews, 2016, 1, 89-99. | 4.1 | 131 |
| 39 | Clinical development of anti-RANKL therapy. Arthritis Research and Therapy, 2007, 9, S7. | 3.5 | 127 |
| 40 | Smad3-Deficient Chondrocytes Have Enhanced BMP Signaling and Accelerated Differentiation. Journal of Bone and Mineral Research, 2005, 21, 4-16. | 2.8 | 121 |
| 41 | Ubiquitin Ligase Smurf1 Mediates Tumor Necrosis Factor-induced Systemic Bone Loss by Promoting Proteasomal Degradation of Bone Morphogenetic Signaling Proteins. Journal of Biological Chemistry, 2008, 283, 23084-23092. | 3.4 | 121 |
| 42 | COX-1 and COX-2 expression in osteoid osteomas. Journal of Orthopaedic Research, 2002, 20, 159-162. | 2.3 | 120 |
| 43 | Runx1/AML1/Cbfa2 Mediates Onset of Mesenchymal Cell Differentiation Toward Chondrogenesis. Journal of Bone and Mineral Research, 2005, 20, 1624-1636. | 2.8 | 115 |
| 44 | Lead Exposure Inhibits Fracture Healing and Is Associated with Increased Chondrogenesis, Delay in Cartilage Mineralization, and a Decrease in Osteoprogenitor Frequency. Environmental Health Perspectives, 2005, 113, 749-755. | 6.0 | 114 |
| 45 | Endostatin Gene Transfer Inhibits Joint Angiogenesis and Pannus Formation in Inflammatory Arthritis. Molecular Therapy, 2002, 5, 547-554. | 8.2 | 113 |
| 46 | Microarray Analyses of Peripheral Blood Cells Identifies Unique Gene Expression Signature in Psoriatic Arthritis. Molecular Medicine, 2005, 11, 21-29. | 4.4 | 113 |
| 47 | 2018 international consensus meeting on musculoskeletal infection: Summary from the biofilm workgroup and consensus on biofilm related musculoskeletal infections. Journal of Orthopaedic Research, 2019, 37, 1007-1017. | 2.3 | 113 |
| 48 | ALK2 Functions as a BMP Type I Receptor and Induces Indian Hedgehog in Chondrocytes During Skeletal Development. Journal of Bone and Mineral Research, 2003, 18, 1593-1604. | 2.8 | 112 |
| 49 | Primary murine limb bud mesenchymal cells in long-term culture complete chondrocyte differentiation: TGF-Î² delays hypertrophy and PGE2 inhibits terminal differentiation. Bone, 2004, 34, 809-817. | 2.9 | 109 |
| 50 | Osteoclast precursors: cytokine-stimulated immunomodulators of inflammatory bone disease. Current Opinion in Rheumatology, 2006, 18, 427-432. | 4.3 | 109 |
| 51 | Vascular endothelial growth factor C attenuates joint damage in chronic inflammatory arthritis by accelerating local lymphatic drainage in mice. Arthritis and Rheumatism, 2011, 63, 2318-2328. | 6.7 | 109 |
| 52 | PTHrP Modulates Chondrocyte Differentiation through AP-1 and CREB Signaling. Journal of Biological Chemistry, 2001, 276, 11639-11647. | 3.4 | 107 |
| 53 | Osterix/Sp7 regulates mesenchymal stem cell mediated endochondral ossification. Journal of Cellular Physiology, 2008, 214, 173-182. | 4.1 | 107 |
| 54 | Staphylococcus aureus Evasion of Host Immunity in the Setting of Prosthetic Joint Infection: Biofilm and Beyond. Current Reviews in Musculoskeletal Medicine, 2018, 11, 389-400. | 3.5 | 107 |

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| 55 | Quantitative small-animal surrogate to evaluate drug efficacy in preventing wear debris-induced osteolysis. Journal of Orthopaedic Research, 2000, 18, 849-855. | 2.3 | 104 |
| 56 | Structural Bone Allograft Combined with Genetically Engineered Mesenchymal Stem Cells as a Novel Platform for Bone Tissue Engineering. Tissue Engineering, 2007, 13, 435-445. | 4.6 | 103 |
| 57 | CD16 (FcRÎ³III) as a potential marker of osteoclast precursors in psoriatic arthritis. Arthritis Research and Therapy, 2010, 12, R14. | 3.5 | 103 |
| 58 | Evidence for a Direct Role of Cyclo-Oxygenase 2 in Implant Wear Debris-Induced Osteolysis. Journal of Bone and Mineral Research, 2001, 16, 660-670. | 2.8 | 99 |
| 59 | Efficacy of ex vivo OPG gene therapy in preventing wear debris induced osteolysis. Journal of Orthopaedic Research, 2002, 20, 169-173. | 2.3 | 99 |
| 60 | Targeting lymphatic function as a novel therapeutic intervention for rheumatoid arthritis. Nature Reviews Rheumatology, 2018, 14, 94-106. | 8.0 | 99 |
| 61 | BMP signaling stimulates chondrocyte maturation and the expression of Indian hedgehog. Journal of Orthopaedic Research, 2001, 19, 18-25. | 2.3 | 98 |
| 62 | Overlapping expression of Runx1(Cbfa2) and Runx2(Cbfa1) transcription factors supports cooperative induction of skeletal development. Journal of Cellular Physiology, 2005, 203, 133-143. | 4.1 | 98 |
| 63 | Osteoclast Precursor Interaction with Bone Matrix Induces Osteoclast Formation Directly by an Interleukin-1-mediated Autocrine Mechanism. Journal of Biological Chemistry, 2008, 283, 9917-9924. | 3.4 | 97 |
| 64 | Rescue of Impaired Fracture Healing in COX-2â^'/â^' Mice via Activation of Prostaglandin E2 Receptor Subtype 4. American Journal of Pathology, 2009, 175, 772-785. | 3.8 | 95 |
| 65 | Remodeling of murine intrasynovial tendon adhesions following injury: MMP and neotendon gene expression. Journal of Orthopaedic Research, 2009, 27, 833-840. | 2.3 | 94 |
| 66 | Mechanisms of Immune Evasion and Bone Tissue Colonization That Make Staphylococcus aureus the Primary Pathogen in Osteomyelitis. Current Osteoporosis Reports, 2019, 17, 395-404. | 3.6 | 94 |
| 67 | Biological Effects of rAAV-caAlk2 Coating on Structural Allograft healing. Molecular Therapy, 2005, 12, 212-218. | 8.2 | 93 |
| 68 | Conditional activation of Î²â€catenin signaling in mice leads to severe defects in intervertebral disc tissue. Arthritis and Rheumatism, 2012, 64, 2611-2623. | 6.7 | 92 |
| 69 | Cellular and Molecular Factors in Flexor Tendon Repair and Adhesions: A Histological and Gene Expression Analysis. Connective Tissue Research, 2013, 54, 218-226. | 2.3 | 91 |
| 70 | Effect of Anti-Tumor Necrosis Factor-Î± Gene Therapy on Wear Debris-Induced Osteolysis. Journal of Bone and Joint Surgery - Series A, 2001, 83, 1789-1797. | 3.0 | 91 |
| 71 | RANKL induces heterogeneous DCâ€STAMP<sup>lo</sup> and DCâ€STAMP<sup>hi</sup> osteoclast precursors of which the DCâ€STAMP<sup>lo</sup> precursors are the master fusogens. Journal of Cellular Physiology, 2010, 223, 76-83. | 4.1 | 90 |
| 72 | Regulation of human osteoclast development by dendritic cell-specific transmembrane protein (DC-STAMP). Journal of Bone and Mineral Research, 2012, 27, 79-92. | 2.8 | 89 |

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| 73 | The effect of mesenchymal stem cell sheets on structural allograft healing of critical sized femoral defects in mice. Biomaterials, 2014, 35, 2752-2759. | 11.4 | 89 |
| 74 | Volumetric computerized tomography as a measurement of periprosthetic acetabular osteolysis and its correlation with wear. Arthritis Research, 2002, 4, 59. | 2.0 | 88 |
| 75 | Runx2/Cbfa1 stimulation by retinoic acid is potentiated by BMP2 signaling through interaction with Smad1 on the collagen X promoter in chondrocytes. Journal of Cellular Biochemistry, 2003, 90, 1287-1298. | 2.6 | 88 |
| 76 | Fibroblasts Express RANKL and Support Osteoclastogenesis in a COX-2-Dependent Manner After Stimulation With Titanium Particles. Journal of Bone and Mineral Research, 2005, 20, 1136-1148. | 2.8 | 86 |
| 77 | Adhesions in a murine flexor tendon graft model: Autograft versus allograft reconstruction. Journal of Orthopaedic Research, 2008, 26, 824-833. | 2.3 | 83 |
| 78 | Validation of GAITRite and PROMIS as highâ€throughput physical function outcome measures following ACL reconstruction. Journal of Orthopaedic Research, 2014, 32, 793-801. | 2.3 | 83 |
| 79 | Parathyroid hormone-related peptide (PTHrP) inhibits Runx2 expression through the PKA signaling pathway. Experimental Cell Research, 2004, 299, 128-136. | 2.6 | 82 |
| 80 | Freeze-dried Tendon Allografts as Tissue-engineering Scaffolds for Gdf5 Gene Delivery. Molecular Therapy, 2008, 16, 466-473. | 8.2 | 82 |
| 81 | Adeno-associated virus-mediated osteoprotegerin gene transfer protects against particulate polyethylene-induced osteolysis in a murine model. Arthritis and Rheumatism, 2002, 46, 2514-2523. | 6.7 | 81 |
| 82 | Teriparatide (1â€34 human PTH) regulation of osterix during fracture repair. Journal of Cellular Biochemistry, 2008, 105, 219-226. | 2.6 | 81 |
| 83 | A novel murine segmental femoral graft model. Journal of Orthopaedic Research, 2004, 22, 1254-1260. | 2.3 | 79 |
| 84 | PGE2 inhibits chondrocyte differentiation through PKA and PKC signaling. Experimental Cell Research, 2004, 300, 159-169. | 2.6 | 79 |
| 85 | Longitudinal assessment of synovial, lymph node, and bone volumes in inflammatory arthritis in mice by in vivo magnetic resonance imaging and microfocal computed tomography. Arthritis and Rheumatism, 2007, 56, 4024-4037. | 6.7 | 79 |
| 86 | TAK1 regulates cartilage and joint development via the MAPK and BMP signaling pathways. Journal of Bone and Mineral Research, 2010, 25, 1784-1797. | 2.8 | 79 |
| 87 | Nearâ€infrared lymphatic imaging demonstrates the dynamics of lymph flow and lymphangiogenesis during the acute versus chronic phases of arthritis in mice. Arthritis and Rheumatism, 2010, 62, 1881-1889. | 6.7 | 78 |
| 88 | Gene Expression Analysis of the Pleiotropic Effects of TGF-Î²1 in an In Vitro Model of Flexor Tendon Healing. PLoS ONE, 2012, 7, e51411. | 2.5 | 78 |
| 89 | A Phage Display Technique Identifies a Novel Regulator of Cell Differentiation. Journal of Biological Chemistry, 2003, 278, 438-443. | 3.4 | 77 |
| 90 | Gene therapy approaches to regenerating bone. Advanced Drug Delivery Reviews, 2012, 64, 1320-1330. | 13.7 | 77 |

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| 91 | Anti-TNF-alpha therapy as a clinical intervention for periprosthetic osteolysis. Arthritis Research, 2000, 2, 165. | 2.0 | 76 |
| 92 | Use of volumetric computerized tomography as a primary outcome measure to evaluate drug efficacy in the prevention of peri-prosthetic osteolysis: A 1-year clinical pilot of etanercept vs. placebo. Journal of Orthopaedic Research, 2003, 21, 1049-1055. | 2.3 | 76 |
| 93 | Chronic Osteomyelitis with Staphylococcus aureus Deformation in Submicron Canaliculi of Osteocytes. JBJS Case Connector, 2018, 8, e8-e8. | 0.3 | 76 |
| 94 | Transforming Growth Factor-Î² Stimulates Cyclin D1 Expression through Activation of Î²-Catenin Signaling in Chondrocytes. Journal of Biological Chemistry, 2006, 281, 21296-21304. | 3.4 | 74 |
| 95 | Structure-Function Studies of p38 Mitogen-activated Protein Kinase. Journal of Biological Chemistry, 1997, 272, 11096-11102. | 3.4 | 73 |
| 96 | Effects of receptor activator of NFÎºB (RANK) signaling blockade on fracture healing. Journal of Orthopaedic Research, 2003, 21, 676-684. | 2.3 | 73 |
| 97 | Smad7 mediates inhibition of Saos2 osteosarcoma cell differentiation by NFÎºB. Experimental Cell Research, 2006, 312, 40-50. | 2.6 | 73 |
| 98 | Expanded CD23+/CD21hi B Cells in Inflamed Lymph Nodes Are Associated with the Onset of Inflammatory-Erosive Arthritis in TNF-Transgenic Mice and Are Targets of Anti-CD20 Therapy. Journal of Immunology, 2010, 184, 6142-6150. | 0.8 | 73 |
| 99 | Viral interleukin-10 gene inhibition of inflammation, osteoclastogenesis, and bone resorption in response to titanium particles. Arthritis and Rheumatism, 2002, 46, 1298-1308. | 6.7 | 72 |
| 100 | Aging periosteal progenitor cells have reduced regenerative responsiveness to bone injury and to the anabolic actions of PTH 1-34 treatment. Bone, 2014, 62, 79-89. | 2.9 | 72 |
| 101 | Use of zoledronate to treat osteoblastic versus osteolytic lesions in a severe-combined-immunodeficient mouse model. Cancer Research, 2002, 62, 5564-70. | 0.9 | 71 |
| 102 | TNF inhibits production of stromal cell-derived factor 1 by bone stromal cells and increases osteoclast precursor mobilization from bone marrow to peripheral blood. Arthritis Research and Therapy, 2008, 10, R37. | 3.5 | 70 |
| 103 | VEGF-C, a Lymphatic Growth Factor, Is a RANKL Target Gene in Osteoclasts That Enhances Osteoclastic Bone Resorption through an Autocrine Mechanism. Journal of Biological Chemistry, 2008, 283, 13491-13499. | 3.4 | 70 |
| 104 | NF-ÎºB-Mediated Inhibition of Apoptosis Is Required for Encephalomyocarditis Virus Virulence: a Mechanism of Resistance in p50 Knockout Mice. Journal of Virology, 1998, 72, 5654-5660. | 3.4 | 70 |
| 105 | Passive immunization with anti-glucosaminidase monoclonal antibodies protects mice from implant-associated osteomyelitis by mediating opsonophagocytosis ofStaphylococcus aureusmegaclusters. Journal of Orthopaedic Research, 2014, 32, 1389-1396. | 2.3 | 68 |
| 106 | COX-2 from the injury milieu is critical for the initiation of periosteal progenitor cell mediated bone healing. Bone, 2008, 43, 1075-1083. | 2.9 | 65 |
| 107 | NF-ÎºB Regulates VCAM-1 Expression on Fibroblast-Like Synoviocytes. Journal of Immunology, 2000, 164, 5990-5997. | 0.8 | 64 |
| 108 | Wnt-mediated regulation of chondrocyte maturation: Modulation by TGF-Î². Journal of Cellular Biochemistry, 2005, 95, 1057-1068. | 2.6 | 63 |

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| 109 | Adjuvant antibioticâ€loaded bone cement: Concerns with current use and research to make it work. Journal of Orthopaedic Research, 2021, 39, 227-239. | 2.3 | 63 |
| 110 | In vivo quantification of lymph viscosity and pressure in lymphatic vessels and draining lymph nodes of arthritic joints in mice. Journal of Physiology, 2014, 592, 1213-1223. | 2.9 | 61 |
| 111 | Periprosthetic osteolysis: an immunologistÊ¼s update. Current Opinion in Rheumatology, 2006, 18, 80-87. | 4.3 | 59 |
| 112 | Runx3/AML2/Cbfa3 Regulates Early and Late Chondrocyte Differentiation. Journal of Bone and Mineral Research, 2007, 22, 1260-1270. | 2.8 | 59 |
| 113 | PGE2 Signaling Through the EP4 Receptor on Fibroblasts Upregulates RANKL and Stimulates Osteolysis. Journal of Bone and Mineral Research, 2009, 24, 1753-1762. | 2.8 | 59 |
| 114 | Exposure to receptor-activator of NFÎºB ligand renders pre-osteoclasts resistant to IFN-Î³ by inducing terminal differentiation. Arthritis Research, 2002, 5, R49-59. | 2.0 | 58 |
| 115 | MRI and Quantification of Draining Lymph Node Function in Inflammatory Arthritis. Annals of the New York Academy of Sciences, 2007, 1117, 106-123. | 3.8 | 57 |
| 116 | PTHrP Expression in Chondrocytes, Regulation by TGF-Î², and Interactions between Epiphyseal and Growth Plate Chondrocytes. Experimental Cell Research, 2000, 256, 555-562. | 2.6 | 56 |
| 117 | Direct Gene Therapy for Bone Regeneration: Gene Delivery, Animal Models, and Outcome Measures. Tissue Engineering - Part B: Reviews, 2010, 16, 13-20. | 4.8 | 56 |
| 118 | Surface topography of silicon nitride affects antimicrobial and osseointegrative properties of tibial implants in a murine model. Journal of Biomedical Materials Research - Part A, 2017, 105, 3413-3421. | 4.0 | 56 |
| 119 | Micro-computed tomography prediction of biomechanical strength in murine structural bone grafts. Journal of Biomechanics, 2007, 40, 3178-3186. | 2.1 | 55 |
| 120 | Teriparatide therapy enhances devitalized femoral allograft osseointegration and biomechanics in a murine model. Bone, 2011, 48, 562-570. | 2.9 | 55 |
| 121 | Self-complementary AAV2.5-BMP2-coated Femoral Allografts Mediated Superior Bone Healing Versus Live Autografts in Mice With Equivalent Biomechanics to Unfractured Femur. Molecular Therapy, 2011, 19, 1416-1425. | 8.2 | 55 |
| 122 | Transforming Growth Factor-Î² and Wnt Signals Regulate Chondrocyte Differentiation through Twist1 in a Stage-Specific Manner. Molecular Endocrinology, 2007, 21, 2805-2820. | 3.7 | 54 |
| 123 | Synthetic scaffold coating with adeno-associated virus encoding BMP2 to promote endogenous bone repair. Cell and Tissue Research, 2012, 347, 575-588. | 2.9 | 54 |
| 124 | The role of the lymphatic system in inflammatory-erosive arthritis. Seminars in Cell and Developmental Biology, 2015, 38, 90-97. | 5.0 | 54 |
| 125 | Efficacy of B cell depletion therapy for murine joint arthritis flare is associated with increased lymphatic flow. Arthritis and Rheumatism, 2013, 65, 130-138. | 6.7 | 53 |
| 126 | A novel murine model of established Staphylococcal bone infection in the presence of a fracture fixation plate to study therapies utilizing antibiotic-laden spacers after revision surgery. Bone, 2015, 72, 128-136. | 2.9 | 53 |

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|---|---|---|---|
| 127 | Oral Pentoxifylline Inhibits Release of Tumor Necrosis Factor-Alpha from Human Peripheral Blood Monocytes. Journal of Bone and Joint Surgery - Series A, 2001, 83, 1057-1061. | 3.0 | 52 |
| 128 | Mitochondrial Dysfunction and Permeability Transition in Osteosarcoma Cells Showing the Warburg Effect. Journal of Biological Chemistry, 2013, 288, 33303-33311. | 3.4 | 51 |
| 129 | 5-azacytidine alters TGF-? and BMP signaling and induces maturation in articular chondrocytes. Journal of Cellular Biochemistry, 2004, 92, 316-331. | 2.6 | 50 |
| 130 | Perioperative Antibiotics. Journal of Arthroplasty, 2014, 29, 29-48. | 3.1 | 50 |
| 131 | PTH-enhanced structural allograft healing is associated with decreased angiopoietin-2â€“mediated arteriogenesis, mast cell accumulation, and fibrosis. Journal of Bone and Mineral Research, 2013, 28, 586-597. | 2.8 | 49 |
| 132 | PGE2 and IL-6 production by fibroblasts in response to titanium wear debris particles is mediated through a Cox-2 dependent pathway. Journal of Orthopaedic Research, 2004, 22, 6-12. | 2.3 | 48 |
| 133 | Endogenous tissue engineering: PTH therapy for skeletal repair. Cell and Tissue Research, 2012, 347, 545-552. | 2.9 | 48 |
| 134 | Targeting Radioresistant Osteosarcoma Cells With Parthenolide. Journal of Cellular Biochemistry, 2012, 113, 1282-1291. | 2.6 | 48 |
| 135 | Differential effects of biologic versus bisphosphonate inhibition of wear debrisâ€induced osteolysis assessed by longitudinal microâ€CT. Journal of Orthopaedic Research, 2008, 26, 1340-1346. | 2.3 | 47 |
| 136 | A Diagnostic Serum Antibody Test for Patients With Staphylococcus aureus Osteomyelitis. Clinical Orthopaedics and Related Research, 2015, 473, 2735-2749. | 1.5 | 47 |
| 137 | CREB Cooperates with BMPâ€stimulated Smad signaling to enhance transcription of the Smad6 promoter. Journal of Cellular Physiology, 2004, 198, 428-440. | 4.1 | 46 |
| 138 | Recent Advances in Gene Delivery for Structural Bone Allografts. Tissue Engineering, 2007, 13, 1973-1985. | 4.6 | 46 |
| 139 | Lymphatic endothelial cells efferent to inflamed joints produce iNOS and inhibit lymphatic vessel contraction and drainage in TNF-induced arthritis in mice. Arthritis Research and Therapy, 2016, 18, 62. | 3.5 | 46 |
| 140 | Elucidating bone marrow edema and myelopoiesis in murine arthritis using contrastâ€enhanced magnetic resonance imaging. Arthritis and Rheumatism, 2008, 58, 2019-2029. | 6.7 | 45 |
| 141 | Aberrant hypertrophy in Smad3â€deficient murine chondrocytes is rescued by restoring transforming growth factor Î²â€“activated kinase 1/activating transcription factor 2 signaling: A potential clinical implication for osteoarthritis. Arthritis and Rheumatism, 2010, 62, 2359-2369. | 6.7 | 45 |
| 142 | Establishment of an index with increased sensitivity for assessing murine arthritis. Journal of Orthopaedic Research, 2011, 29, 1145-1151. | 2.3 | 45 |
| 143 | Use of a Phage Display Technique to Identify Potential Osteoblast Binding Sites Within Osteoclast Lacunae. Journal of Bone and Mineral Research, 2002, 17, 915-922. | 2.8 | 44 |
| 144 | CD23+/CD21hi B-cell translocation and ipsilateral lymph node collapse is associated with asymmetric arthritic flare in TNF-Tg mice. Arthritis Research and Therapy, 2011, 13, R138. | 3.5 | 44 |

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| 145 | The orally bioavailable met inhibitor PF-2341066 inhibits osteosarcoma growth and osteolysis/matrix production in a xenograft model. Journal of Bone and Mineral Research, 2011, 26, 1283-1294. | 2.8 | 44 |
| 146 | TAK1 regulates SOX9 expression in chondrocytes and is essential for postnatal development of the growth plate and articular cartilages. Journal of Cell Science, 2013, 126, 5704-13. | 2.0 | 44 |
| 147 | PTH Induces Systemically Administered Mesenchymal Stem Cells to Migrate to and Regenerate Spine Injuries. Molecular Therapy, 2016, 24, 318-330. | 8.2 | 43 |
| 148 | Smad6 is induced by BMP-2 and modulates chondrocyte differentiation. Journal of Orthopaedic Research, 2003, 21, 908-913. | 2.3 | 41 |
| 149 | ATF-2 cooperates with Smad3 to mediate TGF-Î² effects on chondrocyte maturation. Experimental Cell Research, 2003, 288, 198-207. | 2.6 | 41 |
| 150 | Bone fragility beyond strength and mineral density: Raman spectroscopy predicts femoral fracture toughness in a murine model of rheumatoid arthritis. Journal of Biomechanics, 2013, 46, 723-730. | 2.1 | 41 |
| 151 | Antitumoral Activity and Osteogenic Potential of Mesenchymal Stem Cells Expressing the Urokinase-Type Plasminogen Antagonist Amino-Terminal Fragment in a Murine Model of Osteolytic Tumor. Stem Cells, 2008, 26, 2981-2990. | 3.2 | 40 |
| 152 | Evaluation of dense polylactic acid/betaâ€tricalcium phosphate scaffolds for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 95A, 717-726. | 4.0 | 40 |
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