Stavros Thomopoulos

List of Publications by Year in descending order

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149 10,636 58
papers citations h-index

96 g-index 8210

37204

156 all docs

156 docs citations 156 times ranked

8210 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Electrospun Nanofibers for Regenerative Medicine. Advanced Healthcare Materials, 2012, 1, 10-25. | 7.6 | 454 |
| 2 | Variation of biomechanical, structural, and compositional properties along the tendon to bone insertion site. Journal of Orthopaedic Research, 2003, 21, 413-419. | 2.3 | 382 |
| 3 | Mechanisms of tendon injury and repair. Journal of Orthopaedic Research, 2015, 33, 832-839. | 2.3 | 381 |
| 4 | Functional Attachment of Soft Tissues to Bone: Development, Healing, and Tissue Engineering. Annual Review of Biomedical Engineering, 2013, 15, 201-226. | 12.3 | 344 |
| 5 | Nanofiber Scaffolds with Gradations in Mineral Content for Mimicking the Tendon-to-Bone Insertion Site. Nano Letters, 2009, 9, 2763-2768. | 9.1 | 310 |
| 6 | Functional Grading of Mineral and Collagen in the Attachment of Tendon to Bone. Biophysical Journal, 2009, 97, 976-985. | 0.5 | 290 |
| 7 | Characteristics of the rat supraspinatus tendon during tendon-to-bone healing after acute injury. Journal of Orthopaedic Research, 2006, 24, 541-550. | 2.3 | 280 |
| 8 | The role of mechanobiology in tendon healing. Journal of Shoulder and Elbow Surgery, 2012, 21, 228-237. | 2.6 | 243 |
| 9 | Collagen fiber orientation at the tendon to bone insertion and its influence on stress concentrations. Journal of Biomechanics, 2006, 39, 1842-1851. | 2.1 | 222 |
| 10 | Contribution of extracellular matrix to the mechanical properties of the heart. Journal of Molecular and Cellular Cardiology, 2010, 48, 490-496. | 1.9 | 200 |
| 11 | Variation of biomechanical, structural, and compositional properties along the tendon to bone insertion site. Journal of Orthopaedic Research, 2003, 21, 413-419. | 2.3 | 199 |
| 12 | "Aligned-to-random―nanofiber scaffolds for mimicking the structure of the tendon-to-bone insertion site. Nanoscale, 2010, 2, 923. | 5.6 | 195 |
| 13 | Rotator Cuff Tendinosis in an Animal Model: Role of Extrinsic and Overuse Factors. Annals of Biomedical Engineering, 2002, 30, 1057-1063. | 2.5 | 193 |
| 14 | Mineral Distributions at the Developing Tendon Enthesis. PLoS ONE, 2012, 7, e48630. | 2.5 | 168 |
| 15 | Effect of Several Growth Factors on Canine Flexor Tendon Fibroblast Proliferation and Collagen Synthesis In Vitro. Journal of Hand Surgery, 2005, 30, 441-447. | 1.6 | 166 |
| 16 | Sustained delivery of transforming growth factor beta three enhances tendonâ€toâ€bone healing in a rat model. Journal of Orthopaedic Research, 2011, 29, 1099-1105. | 2.3 | 149 |
| 17 | Tendonâ€toâ€bone attachment: From development to maturity. Birth Defects Research Part C: Embryo Today Reviews, 2014, 102, 101-112. | 3.6 | 146 |
| 18 | Nanofiber Scaffolds with Gradients in Mineral Content for Spatial Control of Osteogenesis. ACS Applied Materials & Samp; Interfaces, 2014, 6, 2842-2849. | 8.0 | 145 |

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| 19 | The Effects of Overuse Combined With Intrinsic or Extrinsic Alterations in an Animal Model of Rotator Cuff Tendinosis. American Journal of Sports Medicine, 1998, 26, 801-807. | 4.2 | 142 |
| 20 | PDGF-BB released in tendon repair using a novel delivery system promotes cell proliferation and collagen remodeling. Journal of Orthopaedic Research, 2007, 25, 1358-1368. | 2.3 | 135 |
| 21 | Complete removal of load is detrimental to rotator cuff healing. Journal of Shoulder and Elbow Surgery, 2009, 18, 669-675. | 2.6 | 135 |
| 22 | Decreased muscle loading delays maturation of the tendon enthesis during postnatal development. Journal of Orthopaedic Research, 2007, 25, 1154-1163. | 2.3 | 129 |
| 23 | The Tendon-to-Bone Transition of the Rotator Cuff: A Preliminary Raman Spectroscopic Study Documenting the Gradual Mineralization across the Insertion in Rat Tissue Samples. Applied Spectroscopy, 2008, 62, 1285-1294. | 2.2 | 128 |
| 24 | The nanometre-scale physiology of bone: steric modelling and scanning transmission electron microscopy of collagen–mineral structure. Journal of the Royal Society Interface, 2012, 9, 1774-1786. | 3.4 | 125 |
| 25 | Enthesis fibrocartilage cells originate from a population of Hedgehog-responsive cells modulated by the loading environment. Development (Cambridge), 2015, 142, 196-206. | 2.5 | 124 |
| 26 | The effect of tear size and nerve injury on rotator cuff muscle fatty degeneration in a rodent animal model. Journal of Shoulder and Elbow Surgery, 2012, 21, 847-858. | 2.6 | 119 |
| 27 | Development of the supraspinatus tendon-to-bone insertion: Localized expression of extracellular matrix and growth factor genes. Journal of Orthopaedic Research, 2007, 25, 1621-1628. | 2.3 | 116 |
| 28 | Targeting the NF- $\hat{l}^{0}B$ signaling pathway in chronic tendon disease. Science Translational Medicine, 2019, 11, . | 12.4 | 112 |
| 29 | The early inflammatory response after flexor tendon healing: A gene expression and histological analysis. Journal of Orthopaedic Research, 2014, 32, 645-652. | 2.3 | 110 |
| 30 | Adipose-derived mesenchymal stromal cells modulate tendon fibroblast responses to macrophage-induced inflammation in vitro. Stem Cell Research and Therapy, 2015, 6, 74. | 5.5 | 110 |
| 31 | Enhancing the Stiffness of Electrospun Nanofiber Scaffolds with a Controlled Surface Coating and Mineralization. Langmuir, 2011, 27, 9088-9093. | 3.5 | 104 |
| 32 | Integrating soft and hard tissues via interface tissue engineering. Journal of Orthopaedic Research, 2018, 36, 1069-1077. | 2.3 | 103 |
| 33 | The Development of Structural and Mechanical Anisotropy in Fibroblast Populated Collagen Gels. Journal of Biomechanical Engineering, 2005, 127, 742-750. | 1.3 | 101 |
| 34 | Enhanced flexor tendon healing through controlled delivery of PDGFâ€BB. Journal of Orthopaedic Research, 2009, 27, 1209-1215. | 2.3 | 101 |
| 35 | Mechanisms of Bimaterial Attachment at the Interface of Tendon to Bone. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, . | 1.4 | 96 |
| 36 | Tissue-Engineering Strategies for the Tendon/Ligament-to-Bone Insertion. Connective Tissue Research, 2012, 53, 95-105. | 2.3 | 96 |

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| 37 | 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 |
| 38 | Fibrocartilage Tissue Engineering: The Role of the Stress Environment on Cell Morphology and Matrix Expression. Tissue Engineering - Part A, 2011, 17, 1039-1053. | 3.1 | 95 |
| 39 | Generation of Electrospun Nanofibers with Controllable Degrees of Crimping Through a Simple, Plasticizerâ€Based Treatment. Advanced Materials, 2015, 27, 2583-2588. | 21.0 | 93 |
| 40 | BMP12 induces tenogenic differentiation of adipose-derived stromal cells. PLoS ONE, 2013, 8, e77613. | 2.5 | 92 |
| 41 | The role of transforming growth factor beta isoforms in tendon-to-bone healing. Connective Tissue Research, 2011, 52, 87-98. | 2.3 | 91 |
| 42 | Unification through disarray. Nature Materials, 2017, 16, 607-608. | 27.5 | 88 |
| 43 | The Effects of Exogenous Basic Fibroblast Growth Factor on Intrasynovial Flexor Tendon Healing in a Canine Model. Journal of Bone and Joint Surgery - Series A, 2010, 92, 2285-2293. | 3.0 | 87 |
| 44 | bFGF and PDGF-BB for Tendon Repair: Controlled Release and Biologic Activity by Tendon Fibroblasts In Vitro. Annals of Biomedical Engineering, 2010, 38, 225-234. | 2.5 | 87 |
| 45 | Decreased Collagen Organization and Content Are Associated With Reduced Strength of Demineralized and Intact Bone in the SAMP6 Mouse. Journal of Bone and Mineral Research, 2005, 21, 78-88. | 2.8 | 86 |
| 46 | The role of confined collagen geometry in decreasing nucleation energy barriers to intrafibrillar mineralization. Nature Communications, 2018, 9, 962. | 12.8 | 86 |
| 47 | Micro-mechanical properties of the tendon-to-bone attachment. Acta Biomaterialia, 2017, 56, 25-35. | 8.3 | 85 |
| 48 | Design and Fabrication of a Hierarchically Structured Scaffold for Tendonâ€ŧoâ€Bone Repair. Advanced Materials, 2018, 30, e1707306. | 21.0 | 82 |
| 49 | Deletion of Connexin43 in Osteoblasts/Osteocytes Leads to Impaired Muscle Formation in Mice. Journal of Bone and Mineral Research, 2015, 30, 596-605. | 2.8 | 79 |
| 50 | Protein-free formation of bone-like apatite: New insights into the key role of carbonation. Biomaterials, 2017, 127, 75-88. | 11.4 | 77 |
| 51 | <i>In Vivo</i> Evaluation of Adipose-Derived Stromal Cells Delivered with a Nanofiber Scaffold for Tendon-to-Bone Repair. Tissue Engineering - Part A, 2015, 21, 2766-2774. | 3.1 | 76 |
| 52 | Modelling the mechanics of partially mineralized collagen fibrils, fibres and tissue. Journal of the Royal Society Interface, 2014, 11, 20130835. | 3.4 | 74 |
| 53 | The effect of fibrin clot on healing rat supraspinatus tendon defects. Journal of Shoulder and Elbow Surgery, 2002, 11, 239-247. | 2.6 | 73 |
| 54 | The effect of muscle loading on flexor tendonâ€toâ€bone healing in a canine model. Journal of Orthopaedic Research, 2008, 26, 1611-1617. | 2.3 | 73 |

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| 55 | The effect of mesenchymal stromal cell sheets on the inflammatory stage of flexor tendon healing. Stem Cell Research and Therapy, 2016, 7, 144. | 5.5 | 73 |
| 56 | Enthesis Repair. Journal of Bone and Joint Surgery - Series A, 2018, 100, e109. | 3.0 | 72 |
| 57 | In Vitro Mineralization by Preosteoblasts in Poly(<scp>dl</scp> -lactide- <i>co</i> -glycolide) Inverse Opal Scaffolds Reinforced with Hydroxyapatite Nanoparticles. Langmuir, 2010, 26, 12126-12131. | 3.5 | 71 |
| 58 | Chronic Degeneration Leads to Poor Healing of Repaired Massive Rotator Cuff Tears in Rats. American Journal of Sports Medicine, 2015, 43, 2401-2410. | 4.2 | 69 |
| 59 | The Early Effects of Sustained Platelet-Derived Growth Factor Administration on the Functional and Structural Properties of Repaired Intrasynovial Flexor Tendons: An In Vivo Biomechanic Study at 3 Weeks in Canines. Journal of Hand Surgery, 2007, 32, 373-379. | 1.6 | 66 |
| 60 | Combined Administration of ASCs and BMP-12 Promotes an M2 Macrophage Phenotype and Enhances Tendon Healing. Clinical Orthopaedics and Related Research, 2017, 475, 2318-2331. | 1.5 | 63 |
| 61 | Early healing of flexor tendon insertion site injuries: Tunnel repair is mechanically and histologically inferior to surface repair in a canine model. Journal of Orthopaedic Research, 2006, 24, 990-1000. | 2.3 | 61 |
| 62 | Animal Models of Tendon and Ligament Injuries for Tissue Engineering Applications. Clinical Orthopaedics and Related Research, 1999, 367, S296-S311. | 1.5 | 57 |
| 63 | Collagen Fiber Alignment Does Not Explain Mechanical Anisotropy in Fibroblast Populated Collagen Gels. Journal of Biomechanical Engineering, 2007, 129, 642-650. | 1.3 | 55 |
| 64 | Controlled-Release Kinetics and Biologic Activity of Platelet-Derived Growth Factor-BB for Use in Flexor Tendon Repair. Journal of Hand Surgery, 2008, 33, 1548-1557. | 1.6 | 55 |
| 65 | Skeletal muscle fibrosis and stiffness increase after rotator cuff tendon injury and neuromuscular compromise in a rat model. Journal of Orthopaedic Research, 2014, 32, 1111-1116. | 2.3 | 55 |
| 66 | Strong and tough mineralized PLGA nanofibers for tendon-to-bone scaffolds. Acta Biomaterialia, 2013, 9, 9442-9450. | 8.3 | 53 |
| 67 | Technical and Biological Modifications for Enhanced Flexor Tendon Repair. Journal of Hand Surgery, 2010, 35, 1031-1037. | 1.6 | 52 |
| 68 | Allometry of the Tendon Enthesis: Mechanisms of Load Transfer Between Tendon and Bone. Journal of Biomechanical Engineering, 2015, 137, 111005. | 1.3 | 52 |
| 69 | The multiscale structural and mechanical effects of mouse supraspinatus muscle unloading on the mature enthesis. Acta Biomaterialia, 2019, 83, 302-313. | 8.3 | 52 |
| 70 | Enthesis regeneration: a role for Gli1+ progenitor cells. Development (Cambridge), 2017, 144, 1159-1164. | 2.5 | 51 |
| 71 | The effects of chronic unloading and gap formation on tendon-to-bone healing in a rat model of massive rotator cuff tears. Journal of Orthopaedic Research, 2014, 32, 439-447. | 2.3 | 49 |
| 72 | The Effect of Suture Caliber and Number of Core Suture Strands on Zone II Flexor Tendon Repair: A Study in Human Cadavers. Journal of Hand Surgery, 2014, 39, 262-268. | 1.6 | 49 |

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| 73 | Sclerostin Antibody Treatment Enhances Rotator Cuff Tendon-to-Bone Healing in an Animal Model. Journal of Bone and Joint Surgery - Series A, 2017, 99, 855-864. | 3.0 | 49 |
| 74 | $\langle i \rangle$ In situ $\langle i \rangle$ tissue engineering of the tendon-to-bone interface by endogenous stem/progenitor cells. Biofabrication, 2020, 12, 015008. | 7.1 | 47 |
| 75 | The concentration of stress at the rotator cuff tendon-to-bone attachment site is conserved across species. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 24-32. | 3.1 | 45 |
| 76 | Stochastic Interdigitation as a Toughening Mechanism at the Interface between Tendon and Bone. Biophysical Journal, 2015, 108, 431-437. | 0.5 | 44 |
| 77 | Alendronate prevents bone loss and improves tendon-to-bone repair strength in a canine model. Journal of Orthopaedic Research, 2007, 25, 473-479. | 2.3 | 42 |
| 78 | Recovery Potential After Postnatal Shoulder Paralysis. Journal of Bone and Joint Surgery - Series A, 2009, 91, 879-891. | 3.0 | 41 |
| 79 | Musculoskeletal deformities secondary to neurotomy of the superior trunk of the brachial plexus in neonatal mice. Journal of Orthopaedic Research, 2010, 28, 1391-1398. | 2.3 | 41 |
| 80 | Nanofiber Membranes with Controllable Microwells and Structural Cues and Their Use in Forming Cell Microarrays and Neuronal Networks. Small, 2011, 7, 293-297. | 10.0 | 39 |
| 81 | The Role of Muscle Loading on Bone (Re)modeling at the Developing Enthesis. PLoS ONE, 2014, 9, e97375. | 2.5 | 38 |
| 82 | The effect of adipose-derived stem cell sheets and CTGF on early flexor tendon healing in a canine model. Scientific Reports, 2018, 8, 11078. | 3.3 | 37 |
| 83 | Energy dissipation in mammalian collagen fibrils: Cyclic strain-induced damping, toughening, and strengthening. Acta Biomaterialia, 2018, 80, 217-227. | 8.3 | 35 |
| 84 | $\langle i \rangle$ In Situ $\langle i \rangle$ Evaluation of Calcium Phosphate Nucleation Kinetics and Pathways during Intra- and Extrafibrillar Mineralization of Collagen Matrices. Crystal Growth and Design, 2016, 16, 5359-5366. | 3.0 | 34 |
| 85 | Targeting Inflammation in Rotator Cuff Tendon Degeneration and Repair. Techniques in Shoulder and Elbow Surgery, 2017, 18, 84-90. | 0.2 | 34 |
| 86 | Augmenting Tendonâ€toâ€Bone Repair with Functionally Graded Scaffolds. Advanced Healthcare Materials, 2021, 10, e2002269. | 7.6 | 34 |
| 87 | Intrasynovial flexor tendon repair: A biomechanical study of variations in suture application in human cadavera. Journal of Orthopaedic Research, 2012, 30, 1652-1659. | 2.3 | 33 |
| 88 | Effect of bone morphogenetic protein 2 on tendonâ€toâ€bone healing in a canine flexor tendon model. Journal of Orthopaedic Research, 2012, 30, 1702-1709. | 2.3 | 33 |
| 89 | Simple and accurate methods for quantifying deformation, disruption, and development in biological tissues. Journal of the Royal Society Interface, 2014, 11, 20140685. | 3.4 | 31 |
| 90 | Effect of adiposeâ€derived stromal cells and BMP12 on intrasynovial tendon repair: A biomechanical, biochemical, and proteomics study. Journal of Orthopaedic Research, 2016, 34, 630-640. | 2.3 | 31 |

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| 91 | Effects of botulinum toxinâ€induced paralysis on postnatal development of the supraspinatus muscle. Journal of Orthopaedic Research, 2011, 29, 281-288. | 2.3 | 30 |
| 92 | Inverse Opal Scaffolds with Gradations in Mineral Content for Spatial Control of Osteogenesis. Advanced Materials, 2018, 30, e1706706. | 21.0 | 30 |
| 93 | The Effect of Core and Epitendinous Suture Modifications on Repair of Intrasynovial Flexor Tendons in an In Vivo Canine Model. Journal of Hand Surgery, 2012, 37, 2526-2531. | 1.6 | 29 |
| 94 | A discrete spectral analysis for determining quasi-linear viscoelastic properties of biological materials. Journal of the Royal Society Interface, 2015, 12, 20150707. | 3.4 | 29 |
| 95 | Recent advances in shoulder research. Arthritis Research and Therapy, 2012, 14, 214. | 3.5 | 28 |
| 96 | Enhanced tendon-to-bone repair through adhesive films. Acta Biomaterialia, 2018, 70, 165-176. | 8.3 | 26 |
| 97 | Rethinking Patellar Tendinopathy and Partial Patellar Tendon Tears: A Novel Classification System. American Journal of Sports Medicine, 2020, 48, 359-369. | 4.2 | 25 |
| 98 | Primary cilia as the nexus of biophysical and hedgehog signaling at the tendon enthesis. Science Advances, 2020, 6, . | 10.3 | 25 |
| 99 | Effective elastic properties of a composite containing multiple types of anisotropic ellipsoidal inclusions, with application to the attachment of tendon to bone. Journal of the Mechanics and Physics of Solids, 2015, 82, 367-377. | 4.8 | 24 |
| 100 | Tunability of collagen matrix mechanical properties via multiple modes of mineralization. Interface Focus, 2016, 6, 20150070. | 3.0 | 24 |
| 101 | Stress amplification during development of the tendon-to-bone attachment. Biomechanics and Modeling in Mechanobiology, 2014, 13, 973-983. | 2.8 | 23 |
| 102 | Cell and Biologic-Based Treatment of Flexor Tendon Injuries. Operative Techniques in Orthopaedics, 2016, 26, 206-215. | 0.1 | 23 |
| 103 | Surgical Sutures with Porous Sheaths for the Sustained Release of Growth Factors. Advanced Materials, 2016, 28, 4620-4624. | 21.0 | 23 |
| 104 | Discrete quasi-linear viscoelastic damping analysis of connective tissues, and the biomechanics of stretching. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 193-202. | 3.1 | 23 |
| 105 | The role of mechanobiology in the attachment of tendon to bone. IBMS BoneKEy, 2011, 8, 271-285. | 0.0 | 22 |
| 106 | Generation of Controllable Gradients in Cell Density. Angewandte Chemie - International Edition, 2013, 52, 429-432. | 13.8 | 21 |
| 107 | Use of a Magnesium-Based Bone Adhesive for Flexor Tendon-to-Bone Healing. Journal of Hand Surgery, 2009, 34, 1066-1073. | 1.6 | 20 |
| 108 | Shear lag sutures: Improved suture repair through the use of adhesives. Acta Biomaterialia, 2015, 23, 229-239. | 8.3 | 20 |

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| 109 | Rotator cuff muscle degeneration and tear severity related to myogenic, adipogenic, and atrophy genes in human muscle. Journal of Orthopaedic Research, 2017, 35, 2808-2814. | 2.3 | 20 |
| 110 | Toughening mechanisms for the attachment of architectured materials: The mechanics of the tendon enthesis. Science Advances, 2021, 7, eabi5584. | 10.3 | 20 |
| 111 | Effects of spaceflight on the muscles of the murine shoulder. FASEB Journal, 2017, 31, 5466-5477. | 0.5 | 19 |
| 112 | Biomechanical Testing of Murine Tendons. Journal of Visualized Experiments, 2019, , . | 0.3 | 17 |
| 113 | Regularization-Free Strain Mapping in Three Dimensions, With Application to Cardiac Ultrasound. Journal of Biomechanical Engineering, 2019, 141, . | 1.3 | 17 |
| 114 | The effect of age on rat rotator cuff muscle architecture. Journal of Shoulder and Elbow Surgery, 2014, 23, 1786-1791. | 2.6 | 16 |
| 115 | Enhanced Tendon-to-Bone Healing via IKKβ Inhibition in a Rat Rotator Cuff Model. American Journal of Sports Medicine, 2021, 49, 780-789. | 4.2 | 16 |
| 116 | Architectural and Biochemical Adaptations in Skeletal Muscle and Bone Following Rotator Cuff Injury in a Rat Model. Journal of Bone and Joint Surgery - Series A, 2015, 97, 565-573. | 3.0 | 15 |
| 117 | Effect of connective tissue growth factor delivered via porous sutures on the proliferative stage of intrasynovial tendon repair. Journal of Orthopaedic Research, 2018, 36, 2052-2063. | 2.3 | 15 |
| 118 | Toughening of fibrous scaffolds by mobile mineral deposits. Acta Biomaterialia, 2017, 58, 492-501. | 8.3 | 14 |
| 119 | Multiscale effects of spaceflight on murine tendon and bone. Bone, 2020, 131, 115152. | 2.9 | 13 |
| 120 | Hedgehog signaling underlying tendon and enthesis development and pathology. Matrix Biology, 2022, 105, 87-103. | 3.6 | 13 |
| 121 | The developing shoulder has a limited capacity to recover after a short duration of neonatal paralysis. Journal of Biomechanics, 2014, 47, 2314-2320. | 2.1 | 12 |
| 122 | The fibrous cellular microenvironment, and how cells make sense of a tangled web. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5772-5774. | 7.1 | 12 |
| 123 | Potential strain-dependent mechanisms defining matrix alignment in healing tendons. Biomechanics and Modeling in Mechanobiology, 2018, 17, 1569-1580. | 2.8 | 12 |
| 124 | The role of loading in murine models of rotator cuff disease. Journal of Orthopaedic Research, 2022, 40, 977-986. | 2.3 | 12 |
| 125 | Connexin 43 Is Necessary for Murine Tendon Enthesis Formation and Response to Loading. Journal of Bone and Mineral Research, 2020, 35, 1494-1503. | 2.8 | 11 |
| 126 | Flexor Tendon Injury and Repair. Journal of Bone and Joint Surgery - Series A, 2021, 103, e36. | 3.0 | 11 |

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| 127 | Adhesive-based tendon-to-bone repair: failure modelling and materials selection. Journal of the Royal Society Interface, 2019, 16, 20180838. | 3.4 | 9 |
| 128 | Cyclic strain enhances the early stage mineral nucleation and the modulus of demineralized bone matrix. Biomaterials Science, 2021, 9, 5907-5916. | 5.4 | 9 |
| 129 | Looped Versus Single-Stranded Flexor Tendon Repairs: A Cadaveric Mechanical Study. Journal of Hand Surgery, 2015, 40, 958-962.e1. | 1.6 | 8 |
| 130 | The effect of modified locking methods and suture materials on Zone II flexor tendon repair—An ex vivo study. PLoS ONE, 2018, 13, e0205121. | 2.5 | 8 |
| 131 | Biomimetic Scaffolds with a Mineral Gradient and Funnelâ€Shaped Channels for Spatially Controllable Osteogenesis. Advanced Healthcare Materials, 2022, 11, e2100828. | 7.6 | 8 |
| 132 | Pegylated insulinâ€like growth factorâ€l biotherapeutic delivery promotes rotator cuff regeneration in a rat model. Journal of Biomedical Materials Research - Part A, 2022, 110, 1356-1371. | 4.0 | 8 |
| 133 | Enthesis strength, toughness and stiffness: an image-based model comparing tendon insertions with varying bony attachment geometries. Journal of the Royal Society Interface, 2021, 18, 20210421. | 3.4 | 8 |
| 134 | Pulsed Electrical Stimulation Enhances Body Fluid Transport for Collagen Biomineralization. ACS Applied Bio Materials, 2020, 3, 902-910. | 4.6 | 7 |
| 135 | Tendon and Ligament Biomechanics. , 2012, , 49-74. | | 7 |
| 136 | Enhanced Zone II Flexor Tendon Repair through a New Half Hitch Loop Suture Configuration. PLoS ONE, 2016, 11, e0153822. | 2.5 | 7 |
| 137 | Mechanically Competent Chitosanâ€Based Bioadhesive for Tendonâ€toâ€Bone Repair. Advanced Healthcare Materials, 2022, 11, e2102344. | 7.6 | 6 |
| 138 | The Role of Mechanobiology in the Attachment of Tendon to Bone. , 2013, , 229-257. | | 4 |
| 139 | The Challenge of Attaching Dissimilar Materials. , 2013, , 3-17. | | 3 |
| 140 | Correction of bias in the estimation of cell volume fraction from histology sections. Journal of Biomechanics, 2020, 104, 109705. | 2.1 | 2 |
| 141 | Transient neonatal shoulder paralysis causes early osteoarthritis in a mouse model. Journal of Orthopaedic Research, 2022, 40, 1981-1992. | 2.3 | 2 |
| 142 | Metabolic regulation of intrasynovial flexor tendon repair: The effects of dichloroacetate administration on early tendon healing in a canine model. Journal of Orthopaedic Research, 2022, , . | 2.3 | 2 |
| 143 | The Nano-Physiology of Mineralized Tissues. , 2009, , . | | 1 |
| 144 | Multiscale Optimization of Joints of Dissimilar Materials in Nature and Lessons for Engineering Applications. Advanced Structured Materials, 2013, , 65-75. | 0.5 | 1 |

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| 145 | The use of connective tissue growth factor mimics for flexor tendon repair. Journal of Orthopaedic Research, 2022, 40, 2754-2762. | 2.3 | 1 |
| 146 | Neonatal Enthesis Healing Involves Noninflammatory Acellular Scar Formation through Extracellular Matrix Secretion by Resident Cells. American Journal of Pathology, 2022, 192, 1122-1135. | 3.8 | 1 |
| 147 | Shear Lag Sutures: Improved Suture Repair Through the Use of Adhesives. , 2016, , . | | O |
| 148 | Direct Estimation of Surface Strain Fields From a Stereo Vision System. Journal of Biomechanical Engineering, 2020, 142, . | 1.3 | 0 |
| 149 | Effects of tendon viscoelasticity on the distribution of forces across sutures in a model of tendon-to-bone repair. International Journal of Solids and Structures, 2022, 250, 111725. | 2.7 | 0 |