

# Mark S Thompson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1896399/publications.pdf>

Version: 2024-02-01

63  
papers

2,153  
citations

257450

24  
h-index

233421

45  
g-index

66  
all docs

66  
docs citations

66  
times ranked

3211  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | OxVent: Design and evaluation of a rapidly-manufactured Covid-19 ventilator. <i>EBioMedicine</i> , 2022, 76, 103868.   | 6.1 | 3         |
| 2  | Experimental Analysis of a Novel, Magnetic-Driven Tactile Feedback Device. <i>Prosthesis</i> , 2020, 2, 25-38.   | 2.9 | 2         |
| 3  | Comparing thermal discomfort with skin temperature response of lower-limb prosthesis users during exercise. <i>Clinical Biomechanics</i> , 2019, 69, 148-155.  | 1.2 | 8         |
| 4  | Engineering a uniaxial substrate-stretching device for simultaneous electrophysiological measurements and imaging of strained peripheral neurons. <i>Medical Engineering and Physics</i> , 2019, 67, 1-10. | 1.7 | 8         |
| 5  | Ion current and action potential alterations in peripheral neurons subject to uniaxial strain. <i>Journal of Neuroscience Research</i> , 2019, 97, 744-751.  | 2.9 | 12        |
| 6  | Membrane Mechanical Properties Regulate the Effect of Strain on Spontaneous Electrophysiology in Human iPSC-Derived Neurons. <i>Neuroscience</i> , 2019, 404, 165-174.                                     | 2.3 | 11        |
| 7  | 3D finite element formulation for mechanical-electrophysiological coupling in axonopathy. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 346, 1025-1050.                             | 6.6 | 21        |
| 8  | A biomechanical model for fibril recruitment: Evaluation in tendons and arteries. <i>Journal of Biomechanics</i> , 2018, 74, 192-196.  | 2.1 | 8         |
| 9  | Three-dimensional printed upper-limb prostheses lack randomised controlled trials. <i>Prosthetics and Orthotics International</i> , 2018, 42, 7-13.  | 1.0 | 33        |
| 10 | Layer-dependent role of collagen recruitment during loading of the rat bladder wall. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 403-417.   | 2.8 | 41        |
| 11 | Rapid and efficient differentiation of functional motor neurons from human iPSC for neural injury modelling. <i>Stem Cell Research</i> , 2018, 32, 126-134.  | 0.7 | 65        |
| 12 | Probing multi-scale mechanics of peripheral nerve collagen and myelin by X-ray diffraction. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 87, 205-212.                         | 3.1 | 8         |
| 13 | Strain partitioning between nerves and axons: Estimating axonal strain using sodium channel staining in intact peripheral nerves. <i>Journal of Neuroscience Methods</i> , 2018, 309, 1-5.                 | 2.5 | 7         |
| 14 | Mechanobiological modelling of tendons: Review and future opportunities. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 369-377.   | 1.8 | 14        |
| 15 | Quantitative multiphoton microscopy of murine urinary bladder morphology during in situ uniaxial loading. <i>Acta Biomaterialia</i> , 2017, 64, 59-66.   | 8.3 | 11        |
| 16 | Clinical efficacy and effectiveness of 3D printing: a systematic review. <i>BMJ Open</i> , 2017, 7, e016891.   | 1.9 | 149       |
| 17 | Examining the needs of affordable upper limb prosthetic users in India: A questionnaire-based survey. <i>Technology and Disability</i> , 2016, 28, 101-110.  | 0.6 | 11        |
| 18 | A hyperelastic fibre-reinforced continuum model of healing tendons with distributed collagen fibre orientations. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016, 15, 1457-1466.                 | 2.8 | 16        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Probing multi-scale mechanical damage in connective tissues using X-ray diffraction. <i>Acta Biomaterialia</i> , 2016, 45, 321-327.   | 8.3  | 19        |
| 20 | Probabilistic sensor network design. , 2016, , .  |      | 1         |
| 21 | A novel chemo-mechano-biological model of arterial tissue growth and remodelling. <i>Journal of Biomechanics</i> , 2016, 49, 2321-2330.   | 2.1  | 35        |
| 22 | Quantitative biomechanical comparison of ankle fracture casting methods. <i>Biomedizinische Technik</i> , 2015, 60, 263-7.  | 0.8  | 2         |
| 23 | Why is Designing for Developing Countries More Challenging? Modelling the Product Design Domain for Medical Devices. <i>Procedia Manufacturing</i> , 2015, 3, 5693-5698.          | 1.9  | 5         |
| 24 | Effect of platelet-rich plasma on healing tissues in acute ruptured Achilles tendon: a human immunohistochemistry study. <i>Lancet, The</i> , 2015, 385, S19.                     | 13.7 | 59        |
| 25 | The Mechanical, Structural, and Compositional Changes of Tendon Exposed to Elastase. <i>Annals of Biomedical Engineering</i> , 2015, 43, 2477-2486.                               | 2.5  | 38        |
| 26 | Tribological changes in the articular cartilage of a human femoral head with avascular necrosis. <i>Biointerphases</i> , 2015, 10, 021004.  | 1.6  | 4         |
| 27 | Effects of Hyaluronic Acid and $\gamma$ -Globulin Concentrations on the Frictional Response of Human Osteoarthritic Articular Cartilage. <i>PLoS ONE</i> , 2014, 9, e112684.      | 2.5  | 15        |
| 28 | Role of hyaluronic acid and phospholipid in the lubrication of a cobalt-chromium head for total hip arthroplasty. <i>Biointerphases</i> , 2014, 9, 031007.                        | 1.6  | 26        |
| 29 | See-saw rocking: an <i>in vitro</i> model for mechanotransduction research. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140330.                                   | 3.4  | 12        |
| 30 | 11 $\beta$ -Prp Enhances The Maturity Of Healing Tendon Tissues In Acute Achilles Ruptures. <i>British Journal of Sports Medicine</i> , 2014, 48, A7-A7.                          | 6.7  | 0         |
| 31 | Tendon Mechanobiology: Experimental Models Require Mathematical Underpinning. <i>Bulletin of Mathematical Biology</i> , 2013, 75, 1238-1254.                                      | 1.9  | 16        |
| 32 | The AutoQual ultrasound elastography method for quantitative assessment of lateral strain in post-rupture Achilles tendons. <i>Journal of Biomechanics</i> , 2013, 46, 2695-2700. | 2.1  | 16        |
| 33 | A novel <i>in vitro</i> loading system for high frequency loading of cultured tendon fascicles. <i>Medical Engineering and Physics</i> , 2013, 35, 205-210.                       | 1.7  | 6         |
| 34 | Elastic fibres are broadly distributed in tendon and highly localized around tenocytes. <i>Journal of Anatomy</i> , 2013, 222, 573-579.   | 1.5  | 61        |
| 35 | A Novel Method for the Accurate Evaluation of Poisson's Ratio of Soft Polymer Materials. <i>Scientific World Journal, The</i> , 2013, 2013, 1-7.                                  | 2.1  | 16        |
| 36 | Controlled motion strain measurement using lateral speckle tracking in Achilles tendons during healing. , 2012, , .   |      | 5         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Regulation of Hypoxia-Induced Cell Death in Human Tenocytes. <i>Advances in Orthopedics</i> , 2012, 2012, 1-12.   | 1.0 | 26        |
| 38 | ULTRASOUND STRAIN IMAGING MEASUREMENT IN ACHILLES TENDONS AS A MEASURE OF HEALING FROM RUPTURE WITH CONTROLLED ANKLE MOTION. <i>Journal of Biomechanics</i> , 2012, 45, S402.   | 2.1 | 1         |
| 39 | LOW DOSES OF HIGH FREQUENCY LOW MAGNITUDE LOADING INCREASE MODULUS & MAINTAIN GAG IN CULTURED TENDONS. <i>Journal of Biomechanics</i> , 2012, 45, S406.   | 2.1 | 0         |
| 40 | Chondroclasts are mature osteoclasts which are capable of cartilage matrix resorption. <i>Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin</i> , 2012, 461, 205-210.                                    | 2.8 | 41        |
| 41 | Tensile and shear mechanical properties of rotator cuff repair patches. <i>Journal of Shoulder and Elbow Surgery</i> , 2012, 21, 1168-1176.   | 2.6 | 60        |
| 42 | Platelet-rich plasma stimulates human tenocyte proliferation and potently up-regulates growth factor production by tenocytes. <i>Osteoarthritis and Cartilage</i> , 2012, 20, S249-S250.  | 1.3 | 0         |
| 43 | Mechanobiology of Bone. , 2011, , 217-236.  |     | 5         |
| 44 | Quantification and significance of fluid shear stress field in biaxial cell stretching device. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 559-564.  | 2.8 | 11        |
| 45 | Platelet-Rich Plasma Protects Tenocytes From Adverse Side Effects of Dexamethasone and Ciprofloxacin. <i>American Journal of Sports Medicine</i> , 2011, 39, 1929-1935.   | 4.2 | 47        |
| 46 | <i>In vitro</i> models for bone mechanobiology: Applications in bone regeneration and tissue engineering. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2010, 224, 1533-1541. | 1.8 | 13        |
| 47 | Curvatures with uncertainties derived in conformal space to characterize tendon microstructure. , 2010, 2010, 5589-92.  |     | 0         |
| 48 | Mechanical stimulation of the pro-angiogenic capacity of human fracture haematoma: Involvement of VEGF mechano-regulation. <i>Bone</i> , 2010, 47, 438-444.   | 2.9 | 35        |
| 49 | Mechanobiology of bone healing and regeneration: <i>in vivo</i> models. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2010, 224, 1543-1553.                                   | 1.8 | 67        |
| 50 | Biaxial cell stimulation: A mechanical validation. <i>Journal of Biomechanics</i> , 2009, 42, 1692-1696.  | 2.1 | 39        |
| 51 | The biology of platelet-rich plasma and its application in trauma and orthopaedic surgery. <i>Journal of Bone and Joint Surgery: British Volume</i> , 2009, 91-B, 987-996.  | 3.4 | 478       |
| 52 | Mechanical induction of critically delayed bone healing in sheep: Radiological and biomechanical results. <i>Journal of Biomechanics</i> , 2008, 41, 3066-3072.   | 2.1 | 60        |
| 53 | BIAXIAL CELL STIMULATION: MECHANICAL VALIDATION AND BIOLOGICAL RESPONSE. <i>Journal of Biomechanics</i> , 2008, 41, S194.   | 2.1 | 0         |
| 54 | FLUID SHEAR STRESSES IN FLEXCELL™ DEVICE. <i>Journal of Biomechanics</i> , 2008, 41, S347.  | 2.1 | 1         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Mechanical Behavior of Articular Cartilage after Osteochondral Autograft Transfer in an Ovine Model. <i>American Journal of Sports Medicine</i> , 2007, 35, 555-563.                  | 4.2 | 44        |
| 56 | Endochondral ossification in vitro is influenced by mechanical bending. <i>Bone</i> , 2007, 40, 597-603.  | 2.9 | 13        |
| 57 | Digital image correlation: A technique for determining local mechanical conditions within early bone callus. <i>Medical Engineering and Physics</i> , 2007, 29, 820-823.              | 1.7 | 68        |
| 58 | Mesenchymal Stem Cells Regulate Angiogenesis According to Their Mechanical Environment. <i>Stem Cells</i> , 2007, 25, 903-910.  | 3.2 | 194       |
| 59 | Simulation of Cell Differentiation in Fracture Healing: Mechanically Loaded Composite Scaffolds in a Novel Bioreactor System. <i>Tissue Engineering</i> , 2006, 12, 201-208.          | 4.6 | 41        |
| 60 | Gait evaluation: A tool to monitor bone healing?. <i>Clinical Biomechanics</i> , 2005, 20, 883-891.   | 1.2 | 45        |
| 61 | Compressive and Shear Properties of Commercially Available Polyurethane Foams. <i>Journal of Biomechanical Engineering</i> , 2003, 125, 732-734.                                      | 1.3 | 61        |
| 62 | Tensile mechanical properties of polyacetal after one and six months' immersion in Ringer's solution. <i>Journal of Materials Science: Materials in Medicine</i> , 2001, 12, 883-887. | 3.6 | 15        |
| 63 | Acetabular morphology and resurfacing design. <i>Journal of Biomechanics</i> , 2000, 33, 1645-1653.   | 2.1 | 24        |