Amit Gefen

List of Publications by Year
in descending order

341 papers	14,104 citations	34105 52 h-index	28297 105 g-index
347 all docs	347 docs citations	347 times ranked	12247 citing authors

#	Article	IF	Citations
1	Tensional homeostasis and the malignant phenotype. Cancer Cell, 2005, 8, 241-254.	16.8	3,397
2	Are in vivo and in situ brain tissues mechanically similar?. Journal of Biomechanics, 2004, 37, 1339-1352.	2.1	372
3	Assessment of mechanical conditions in sub-dermal tissues during sitting: A combined experimental-MRI and finite element approach. Journal of Biomechanics, 2007, 40, 1443-1454.	2.1	273
4	A new pressure ulcer conceptual framework. Journal of Advanced Nursing, 2014, 70, 2222-2234.	3.3	271
5	Age-Dependent Changes in Material Properties of the Brain and Braincase of the Rat. Journal of Neurotrauma, 2003, 20, 1163-1177.	3.4	263
6	Biomechanical Analysis of the Three-Dimensional Foot Structure During Gait: A Basic Tool for Clinical Applications. Journal of Biomechanical Engineering, 2000, 122, 630-639.	1.3	227
7	Plantar soft tissue loading under the medial metatarsals in the standing diabetic foot. Medical Engineering and Physics, 2003, 25, 491-499.	1.7	201
8	Mechanics of the normal woman's breast. Technology and Health Care, 2007, 15, 259-271.	1.2	191
9	Pressureâ€“time cell death threshold for albino rat skeletal muscles as related to pressure sore biomechanics. Journal of Biomechanics, 2006, 39, 2725-2732.	2.1	180
10	Strains and stresses in sub-dermal tissues of the buttocks are greater in paraplegics than in healthy during sitting. Journal of Biomechanics, 2008, 41, 567-580.	2.1	175
11	Mechanical compression-induced pressure sores in rat hindlimb: muscle stiffness, histology, and computational models. Journal of Applied Physiology, 2004, 96, 2034-2049.	2.5	162
12	Analysis of muscular fatigue and foot stability during high-heeled gait. Gait and Posture, 2002, 15, 56-63.	1.4	160
13	Strain-time cell-death threshold for skeletal muscle in a tissue-engineered model system for deep tissue injury. Journal of Biomechanics, 2008, 41, 2003-2012.	2.1	153
14	In vivo biomechanical behavior of the human heel pad during the stance phase of gait. Journal of Biomechanics, 2001, 34, 1661-1665.	2.1	145
15	In Vivo Muscle Stiffening Under Bone Compression Promotes Deep Pressure Sores. Journal of Biomechanical Engineering, 2005, 127, 512-524.	1.3	140
16	Stress analysis of the standing foot following surgical plantar fascia release. Journal of Biomechanics, 2002, 35, 629-637.	2.1	139
17	Device-related pressure ulcers: SECURE prevention. Journal of Wound Care, 2020, 29, S1-S52.	1.2	132
18	Update to device-related pressure ulcers: SECURE prevention. COVID-19, face masks and skin damage. Journal of Wound Care, 2020, 29, 245-259.	1.2	123

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19	Microclimate: A critical review in the context of pressure ulcer prevention. Clinical Biomechanics, 2018, 59, 62-70.	1.2	116
20	Biomechanical analysis of the keratoconic cornea. Journal of the Mechanical Behavior of Biomedical Materials, 2009, 2, 224-236.	3.1	115
21	Internal mechanical conditions in the soft tissues of a residual limb of a trans-tibial amputee. Journal of Biomechanics, 2008, 41, 1897-1909.	2.1	102
22	How do microclimate factors affect the risk for superficial pressure ulcers: A mathematical modeling study. Journal of Tissue Viability, 2011, 20, 81-88.	2.0	102
23	The<i>in Vivo</i>Elastic Properties of the Plantar Fascia during the Contact Phase of Walking. Foot and Ankle International, 2003, 24, 238-244.	2.3	96
24	The Effects of Pressure and Shear on Capillary Closure in the Microstructure of Skeletal Muscles. Annals of Biomedical Engineering, 2007, 35, 2095-2107.	2.5	92
25	Stress Relaxation of Porcine Gluteus Muscle Subjected to Sudden Transverse Deformation as Related to Pressure Sore Modeling. Journal of Biomechanical Engineering, 2006, 128, 782-787.	1.3	90
26	Mechanotransduction in adipocytes. Journal of Biomechanics, 2012, 45, 1-8.	2.1	90
27	Integration of plantar soft tissue stiffness measurements in routine MRI of the diabetic foot. Clinical Biomechanics, 2001, 16, 921-925.	1.2	89
28	Is obesity a risk factor for deep tissue injury in patients with spinal cord injury?. Journal of Biomechanics, 2008, 41, 3322-3331.	2.1	89
29	Adipocyte Stiffness Increases with Accumulation of Lipid Droplets. Biophysical Journal, 2014, 106, 1421-1431.	0.5	89
30	Computational simulations of stress shielding and bone resorption around existing and computer-designed orthopaedic screws. Medical and Biological Engineering and Computing, 2002, 40, 311-322.	2.8	86
31	In situ forming hydrogels composed of oxidized high molecular weight hyaluronic acid and gelatin for nucleus pulposus regeneration. Acta Biomaterialia, 2013, 9, 5181-5193.	8.3	84
32	Biomechanical analysis of fatigue-related foot injury mechanisms in athletes and recruits during intensive marching. Medical and Biological Engineering and Computing, 2002, 40, 302-310.	2.8	83
33	The biomechanical efficacy of dressings in preventing heel ulcers. Journal of Tissue Viability, 2015, 24, 1-11.	2.0	83
34	Stress Analyses Coupled With Damage Laws to Determine Biomechanical Risk Factors for Deep Tissue Injury During Sitting. Journal of Biomechanical Engineering, 2009, 131, 011003.	1.3	80
35	Our contemporary understanding of the aetiology of pressure ulcers/pressure injuries. International Wound Journal, 2022, 19, 692-704.	2.9	80
36	Viscoelastic Properties of Ovine Adipose Tissue Covering the Gluteus Muscles. Journal of Biomechanical Engineering, 2007, 129, 924-930.	1.3	78

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37	Exposure to internal muscle tissue loads under the ischial tuberosities during sitting is elevated at abnormally high or low body mass indices. Journal of Biomechanics, 2010, 43, 280-286.	2.1	78
38	Optimizing the biomechanical compatibility of orthopedic screws for bone fracture fixation. Medical Engineering and Physics, 2002, 24, 337-347.	1.7	76
39	Static mechanical stretching accelerates lipid production in 3T3-L1 adipocytes by activating the MEK signaling pathway. American Journal of Physiology - Cell Physiology, 2012, 302, C429-C441.	4.6	76
40	The biomechanics of sittingâ€acquired pressure ulcers in patients with spinal cord injury or lesions. International Wound Journal, 2007, 4, 222-231.	2.9	73
41	The biomechanics of heel ulcers. Journal of Tissue Viability, 2010, 19, 124-131.	2.0	71
42	An air-cell-based cushion for pressure ulcer protection remarkably reduces tissue stresses in the seated buttocks with respect to foams: Finite element studies. Journal of Tissue Viability, 2014, 23, 13-23.	2.0	71
43	Weight and pressure ulcer occurrence: A secondary data analysis. International Journal of Nursing Studies, 2011, 48, 1339-1348.	5.6	69
44	Real-Time Finite Element Monitoring of Sub-Dermal Tissue Stresses in Individuals with Spinal Cord Injury: Toward Prevention of Pressure Ulcers. Annals of Biomedical Engineering, 2009, 37, 387-400.	2.5	68
45	The influence of foot posture, support stiffness, heel pad loading and tissue mechanical properties on biomechanical factors associated with a risk of heel ulceration. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 572-582.	3.1	67
46	Predicting penile size during erection. International Journal of Impotence Research, 2000, 12, 328-333.	1.8	60
47	Real-Time Patient-Specific Finite Element Analysis of Internal Stresses in the Soft Tissues of a Residual Limb: A New Tool for Prosthetic Fitting. Annals of Biomedical Engineering, 2006, 35, 120-135.	2.5	60
48	Confocal microscopy-based three-dimensional cell-specific modeling for large deformation analyses in cellular mechanics. Journal of Biomechanics, 2010, 43, 1806-1816.	2.1	59
49	Thermosensitive hydrogel made of ferulic acid-gelatin and chitosan glycerophosphate. Carbohydrate Polymers, 2013, 92, 1512-1519.	10.2	57
50	Analysis of stress distribution in the alveolar septa of normal and simulated emphysematic lungs. Journal of Biomechanics, 1999, 32, 891-897.	2.1	56
51	Risk factors for a pressure-related deep tissue injury: a theoretical model. Medical and Biological Engineering and Computing, 2007, 45, 563-573.	2.8	56
52	Developing a pressure ulcer risk factor minimum data set and risk assessment framework. Journal of Advanced Nursing, 2014, 70, 2339-2352.	3.3	55
53	Effects of humidity on skin friction against medical textiles as related to prevention of pressure injuries. International Wound Journal, 2018, 15, 866-874.	2.9	54
54	Comparison of the trabecular architecture and the isostatic stress flow in the human calcaneus. Medical Engineering and Physics, 2004, 26, 119-129.	1.7	53

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55	The free diffusion of macromolecules in tissue-engineered skeletal muscle subjected to large compression strains. Journal of Biomechanics, 2008, 41, 845-853.	2.1	52
56	Relationship Between Strain Levels and Permeability of the Plasma Membrane in Statically Stretched Myoblasts. Annals of Biomedical Engineering, 2012, 40, 606-618.	2.5	52
57	Different wound healing properties of dermis, adipose, and gingiva mesenchymal stromal cells. Wound Repair and Regeneration, 2016, 24, 100-109.	3.0	52
58	Cytoskeleton and plasma-membrane damage resulting from exposure to sustained deformations: A review of the mechanobiology of chronic wounds. Medical Engineering and Physics, 2016, 38, 828-833.	1.7	51
59	Real-time subject-specific monitoring of internal deformations and stresses in the soft tissues of the foot: A new approach in gait analysis. Journal of Biomechanics, 2006, 39, 2673-2689.	2.1	50
60	The false premise in measuring body-support interface pressures for preventing serious pressure ulcers. Journal of Medical Engineering and Technology, 2007, 31, 375-380.	1.4	49
61	Mechanics of the normal woman's breast. Technology and Health Care, 2007, 15, 259-71.	1.2	49
62	A standardized objective method for continuously measuring the kinematics of cultures covering a mechanically damaged site. Medical Engineering and Physics, 2012, 34, 225-232.	1.7	48
63	Effects of ambient conditions on the risk of pressure injuries in bedridden patientsâ€"multiâ€physics modelling of microclimate. International Wound Journal, 2018, 15, 402-416.	2.9	48
64	Use of weight-bearing MRI for evaluating wheelchair cushions based on internal soft-tissue deformations under ischial tuberosities. Journal of Rehabilitation Research and Development, 2010, 47, 31.	1.6	48
65	The natural medications for wound healing â€" Curcumin, Aloe-Vera and Ginger â€" do not induce a significant effect on the migration kinematics of cultured fibroblasts. Journal of Biomechanics, 2013, 46, 170-174.	2.1	47
66	Computational Studies of Strain Exposures in Neonate and Mature Rat Brains during Closed Head Impact. Journal of Neurotrauma, 2006, 23, 1570-1580.	3.4	46
67	Device-related pressure ulcers from a biomechanical perspective. Journal of Tissue Viability, 2017, 26, 57-68.	2.0	46
68	Protecting prone positioned patients from facial pressure ulcers using prophylactic dressings: A timely biomechanical analysis in the context of the COVIDâ€19 pandemic. International Wound Journal, 2020, 17, 1595-1606.	2.9	46
69	Methods to study differences in cell mobility during skin wound healing in vitro. Journal of Biomechanics, 2016, 49, 1381-1387.	2.1	45
70	Single-trabecula building block for large-scale finite element models of cancellous bone. Medical and Biological Engineering and Computing, 2004, 42, 549-556.	2.8	44
71	Patient-specific analyses of deep tissue loads post transtibial amputation in residual limbs of multiple prosthetic users. Journal of Biomechanics, 2009, 42, 2686-2693.	2.1	44
72	Large, but not Small Sustained Tensile Strains Stimulate Adipogenesis in Culture. Annals of Biomedical Engineering, 2012, 40, 1052-1060.	2.5	44

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73	A semi-stochastic cell-based formalism to model the dynamics of migration of cells in colonies. Biomechanics and Modeling in Mechanobiology, 2012, 11, 183-195.	2.8	43
74	A randomised controlled trial of the clinical effectiveness of multiâ€layer silicone foam dressings for the prevention of pressure injuries in highâ€risk aged care residents: The Border III Trial. International Wound Journal, 2018, 15, 482-490.	2.9	43
75	Effects of skin wrinkles, age and wetness on mechanical loads in the stratum corneum as related to skin lesions. Medical and Biological Engineering and Computing, 2011, 49, 97-105.	2.8	42
76	Outdoor dynamic subject-specific evaluation of internal stresses in the residual limb: Hydraulic energy-stored prosthetic foot compared to conventional energy-stored prosthetic feet. Gait and Posture, 2012, 35, 121-125.	1.4	42
77	Cell shape alteration during adipogenesis is associated with coordinated matrix cues. Journal of Cellular Physiology, 2019, 234, 3850-3863.	4.1	42
78	Membrane-Stretch-Induced Cell Death in Deep Tissue Injury: Computer Model Studies. Cellular and Molecular Bioengineering, 2009, 2, 118-132.	2.1	41
79	Surgical and Morphological Factors that Affect Internal Mechanical Loads in Soft Tissues of the Transtibial Residuum. Annals of Biomedical Engineering, 2009, 37, 2583-2605.	2.5	39
80	Deformations, mechanical strains and stresses across the different hierarchical scales in weight-bearing soft tissues. Journal of Tissue Viability, 2012, 21, 39-46.	2.0	39
81	An Observational, Prospective Cohort Pilot Study to Compare the Use of Subepidermal Moisture Measurements Versus Ultrasound and Visual Skin Assessments for Early Detection of Pressure Injury. Ostomy - Wound Management, 2018, 64, 12-27.	0.8	39
82	Microwave Drilling of Bones. IEEE Transactions on Biomedical Engineering, 2006, 53, 1174-1182.	4.2	38
83	Dressings cut to shape alleviate facial tissue loads while using an oxygen mask. International Wound Journal, 2019, 16, 813-826.	2.9	38
84	An MRI investigation of the effects of user anatomy and wheelchair cushion type on tissue deformation. Journal of Tissue Viability, 2018, 27, 42-53.	2.0	37
85	How medical engineering has changed our understanding of chronic wounds and future prospects. Medical Engineering and Physics, 2019, 72, 13-18.	1.7	37
86	Effects of Intramuscular Fat Infiltration, Scarring, and Spasticity on the Risk for Sitting-Acquired Deep Tissue Injury in Spinal Cord Injury Patients. Journal of Biomechanical Engineering, 2011, 133, 021011.	1.3	36
87	Reducing musculoskeletal disorders among computer operators: comparison between ergonomics interventions at the workplace. Ergonomics, 2012, 55, 1571-1585.	2.1	36
88	Bioengineering Models of Deep Tissue Injury. Advances in Skin and Wound Care, 2008, 21, 30-36.	1.0	35
89	COVID-19: pressure ulcers, pain and the cytokine storm. Journal of Wound Care, 2020, 29, 540-542.	1.2	35
90	Measurements of the Static Friction Coefficient Between Bone and Muscle Tissues. Journal of Biomechanical Engineering, 2010, 132, 084502.	1.3	34

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91	Confocal-based cell-specific finite element modeling extended to study variable cell shapes and intracellular structures: The example of the adipocyte. Journal of Biomechanics, 2011, 44, 567-573.	2.1	34
92	The mechanics of hyaluronic acid/adipic acid dihydrazide hydrogel: Towards developing a vessel for delivery of preadipocytes to native tissues. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 28, 320-331.	3.1	34
93	Effect of laser therapy on expression of angio- and fibrogenic factors, and cytokine concentrations during the healing process of human pressure ulcers. International Journal of Medical Sciences, 2018, 15, 1105-1112.	2.5	34
94	Critical biomechanical and clinical insights concerning tissue protection when positioning patients in the operating room: A scoping review. International Wound Journal, 2020, 17, 1405-1423.	2.9	33
95	A Method for Quick, Low-Cost Automated Confluency Measurements. Microscopy and Microanalysis, 2011, 17, 915-922.	0.4	32
96	Simulations of skin and subcutaneous tissue loading in the buttocks while regaining weight-bearing after a push-up in wheelchair users. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 28, 436-447.	3.1	32
97	Reswick and Rogers pressure-time curve for pressure ulcer risk. Part 2. Nursing Standard (Royal) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.1	31
98	The contribution of a directional preference of stiffness to the efficacy of prophylactic sacral dressings in protecting healthy and diabetic tissues from pressure injury: computational modelling studies. International Wound Journal, 2017, 14, 1370-1377.	2.9	31
99	Evaluation of the effect of trunk tilt on compressive soft tissue deformations under the ischial tuberosities using weight-bearing MRI. Clinical Biomechanics, 2010, 25, 402-408.	1.2	30
100	Changes in permeability of the plasma membrane of myoblasts to fluorescent dyes with different molecular masses under sustained uniaxial stretching. Medical Engineering and Physics, 2013, 35, 601-607.	1.7	30
101	Modeling the Effects of Moisture-Related Skin-Support Friction on the Risk for Superficial Pressure Ulcers during Patient Repositioning in Bed. Frontiers in Bioengineering and Biotechnology, 2013, 1, 9.	4.1	30
102	Healthcare Engineering Defined: A White Paper. Journal of Healthcare Engineering, 2015, 6, 635-648.	1.9	29
103	Ratio of total traction force to projected cell area is preserved in differentiating adipocytes. Integrative Biology (United Kingdom), 2015, 7, 1212-1217.	1.3	29
104	The biomechanical protective effects of a treatment dressing on the soft tissues surrounding a nonâ€offloaded sacral pressure ulcer. International Wound Journal, 2019, 16, 684-695.	2.9	29
105	Contribution of muscular weakness to osteoporosis: Computational and animal models. Clinical Biomechanics, 2005, 20, 984-997.	1.2	28
106	A method for patient-specific evaluation of vertebral cancellous bone strength: In vitro validation. Clinical Biomechanics, 2007, 22, 282-291.	1.2	28
107	What makes a good head positioner for preventing occipital pressure ulcers. International Wound Journal, 2018, 15, 243-249.	2.9	28
108	How much time does it take to get a pressure ulcer? Integrated evidence from human, animal, and in vitro studies. Ostomy - Wound Management, 2008, 54, 26-8, 30-5.	0.8	28

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109	Modeling mechanical strains and stresses in soft tissues of the shoulder during load carriage based on load-bearing open MRI. Journal of Applied Physiology, 2012, 112, 597-606.	2.5	27
110	The Influence of Ischemic Factors on the Migration Rates of Cell Types Involved in Cutaneous and Subcutaneous Pressure Ulcers. Annals of Biomedical Engineering, 2012, 40, 1929-1939.	2.5	27
111	A phenomenological model for chemico-mechanically induced cell shape changes during migration and cellâ€“cell contacts. Biomechanics and Modeling in Mechanobiology, 2013, 12, 301-323.	2.8	27
112	Mechanical cytoprotection: A review of cytoskeleton-protection approaches for cells. Journal of Biomechanics, 2016, 49, 1321-1329.	2.1	27
113	Simulations of foot stability during gait characteristic of ankle dorsiflexor weakness in the elderly. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2001, 9, 333-337.	4.9	26
114	Reswick and Rogers pressure-time curve for pressure ulcer risk. Part 1. Nursing Standard (Royal) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	0.1	26
115	Reswick and Rogers pressure-time curve for pressure ulcer risk. Part 1. Nursing Standard (Royal) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.1	26
116	Real-time subject-specific analyses of dynamic internal tissue loads in the residual limb of transtibial amputees. Medical Engineering and Physics, 2010, 32, 312-323.	1.7	26
117	Quantitative Monitoring of Lipid Accumulation Over Time in Cultured Adipocytes as Function of Culture Conditions: Toward Controlled Adipose Tissue Engineering. Tissue Engineering - Part C: Methods, 2010, 16, 1167-1181.	2.1	26
118	Stresses in the normal and diabetic human penis following implantation of an inflatable prosthesis. Medical and Biological Engineering and Computing, 1999, 37, 625-631.	2.8	25
119	Automatic detection of cell divisions (mitosis) in live-imaging microscopy images using Convolutional Neural Networks. , 2015, 2015, 743-6.		25
120	Clinical and biomechanical perspectives on pressure injury prevention research: The case of prophylactic dressings. Clinical Biomechanics, 2016, 38, 29-34.	1.2	25
121	The subepidermal moisture scanner: the technology explained. Journal of Wound Care, 2020, 29, S10-S16.	1.2	25
122	The Compression Intensity Index: A practical anatomical estimate of the biomechanical risk for a deep tissue injury. Technology and Health Care, 2008, 16, 141-149.	1.2	24
123	The influence of mechanical stretching on mitosis, growth, and adipose conversion in adipocyte cultures. Biomechanics and Modeling in Mechanobiology, 2012, 11, 1029-1045.	2.8	24
124	A new technique for studying directional cell migration in a hydrogel-based three-dimensional matrix for tissue engineering model systems. Micron, 2013, 51, 9-12.	2.2	24
125	Validity of the modified RULA for computer workers and reliability of one observation compared to six. Ergonomics, 2014, 57, 1856-1863.	2.1	24
126	Extensive Characterization and Comparison of Endothelial Cells Derived from Dermis and Adipose Tissue: Potential Use in Tissue Engineering. PLoS ONE, 2016, 11, e0167056.	2.5	24

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127	Device-related pressure ulcers: SECURE prevention. Second edition. Journal of Wound Care, 2022, 31, S1-S72.	1.2	24
128	How to select the elastic modulus for cancellous bone in patient-specific continuum models of the spine. Medical and Biological Engineering and Computing, 2005, 43, 465-472.	2.8	23
129	Time-related PDL: viscoelastic response during initial orthodontic tooth movement of a tooth with functioning interproximal contactâ€"A mathematical model. Journal of Biomechanics, 2008, 41, 1871-1877.	2.1	23
130	Lowâ€level stretching accelerates cell migration into a gap. International Wound Journal, 2017, 14, 698-703.	2.9	23
131	Beware of the toilet: The risk for a deep tissue injury during toilet sitting. Journal of Tissue Viability, 2018, 27, 23-31.	2.0	23
132	The microclimate under dressings applied to intact weight-bearing skin: Infrared thermography studies. Clinical Biomechanics, 2020, 75, 104994.	1.2	23
133	How patient migration in bed affects the sacral soft tissue loading and thereby the risk for a hospitalâ€acquired pressure injury. International Wound Journal, 2020, 17, 631-640.	2.9	23
134	Why is the heel particularly vulnerable to pressure ulcers?. British Journal of Nursing, 2017, 26, S62-S74.	0.7	22
135	Biomechanical Model for Stress Fractureâ€"related Factors in Athletes and Soldiers. Medicine and Science in Sports and Exercise, 2018, 50, 1827-1836.	0.4	22
136	Physiological processes of inflammation and edema initiated by sustained mechanical loading in subcutaneous tissues: A scoping review. Wound Repair and Regeneration, 2020, 28, 242-265.	3.0	22
137	A Computer Modeling Study to Assess the Durability of Prophylactic Dressings Subjected to Moisture in Biomechanical Pressure Injury Prevention. Ostomy - Wound Management, 2018, 64, 18-26.	0.8	22
138	Trabecular Bone Contributes to Strength of the Proximal Femur Under Mediolateral Impact in the Avian. Journal of Biomechanical Engineering, 2005, 127, 198-203.	1.3	21
139	Inspiratory muscles experience fatigue faster than the calf muscles during treadmill marching. Respiratory Physiology and Neurobiology, 2007, 156, 61-68.	1.6	21
140	Effects of foot posture and heel padding devices on soft tissue deformations under the heel in supine position in males: MRI studies. Journal of Rehabilitation Research and Development, 2013, 50, 1149-1156.	1.6	21
141	Effects of accumulation of lipid droplets on load transfer between and within adipocytes. Biomechanics and Modeling in Mechanobiology, 2015, 14, 15-28.	2.8	21
142	Assessment of sub-epidermal moisture by direct measurement of tissue biocapacitance. Medical Engineering and Physics, 2019, 73, 92-99.	1.7	21
143	Phantom testing of the sensitivity and precision of a subâ€epidermal moisture scanner. International Wound Journal, 2019, 16, 979-988.	2.9	21
144	A review of deep tissue injury development, detection, and prevention: shear savvy. Ostomy - Wound Management, 2013, 59, 26-35.	0.8	21

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145	A method of quantification of stress shielding in the proximal femur using hierarchical computational modeling. Computer Methods in Biomechanics and Biomedical Engineering, 2006, 9, 35-44.	1.6	20
146	Validity and reliability of upper extremity three-dimensional kinematics during a typing task. Gait and Posture, 2010, 32, 469-474.	1.4	20
147	Adjustability and Adaptability Are Critical Characteristics of Pediatric Support Surfaces. Advances in Wound Care, 2015, 4, 615-622.	5.1	20
148	Tissue loads applied by a novel medical device for closing large wounds. Journal of Tissue Viability, 2016, 25, 32-40.	2.0	20
149	Feasibility of freehand ultrasound to measure anatomical features associated with deep tissue injury risk. Medical Engineering and Physics, 2016, 38, 839-844.	1.7	20
150	Deep tissue loads in the seated buttocks on an offâ€loading wheelchair cushion versus airâ€cellâ€based and foam cushions: finite element studies. International Wound Journal, 2017, 14, 1327-1334.	2.9	20
151	The sorptivity and durability of gelling fibre dressings tested in a simulated sacral pressure ulcer system. International Wound Journal, 2021, 18, 194-208.	2.9	20
152	The mechanobiology theory of the development of medical device-related pressure ulcers revealed through a cell-scale computational modeling framework. Biomechanics and Modeling in Mechanobiology, 2021, 20, 851-860.	2.8	20
153	Effect of trabecular bone loss on cortical strain rate during impact in an in vitro model of avian femur. BioMedical Engineering OnLine, 2006, 5, 45.	2.7	19
154	Cell-level temperature distributions in skeletal muscle post spinal cord injury as related to deep tissue injury. Medical and Biological Engineering and Computing, 2010, 48, 113-122.	2.8	19
155	Sacral Soft Tissue Deformations When Using a Prophylactic Multilayer Dressing and Positioning System. Journal of Wound, Ostomy and Continence Nursing, 2018, 45, 432-437.	1.0	19
156	Modelling an adult human head on a donutâ€shaped gel head support for pressure ulcer prevention. International Wound Journal, 2019, 16, 1398-1407.	2.9	19
157	An integrated experimentalâ€computational study of the microclimate under dressings applied to intact weightâ€bearing skin. International Wound Journal, 2020, 17, 562-577.	2.9	19
158	Role of EVA viscoelastic properties in the protective performance of a sport shoe: computational studies. Bio-Medical Materials and Engineering, 2006, 16, 289-99.	0.6	19
159	Tissue changes in patients following spinal cord injury and implications for wheelchair cushions and tissue loading: a literature review. Ostomy - Wound Management, 2014, 60, 34-45.	0.8	19
160	Computer Modeling Studies to Assess Whether a Prophylactic Dressing Reduces the Risk for Deep Tissue Injury in the Heels of Supine Patients with Diabetes. Ostomy - Wound Management, 2016, 62, 42-52.	0.8	19
161	Contoured Foam Cushions Cannot Provide Long-term Protection Against Pressure-Ulcers for Individuals with a Spinal Cord Injury. Advances in Skin and Wound Care, 2015, 28, 303-316.	1.0	18
162	Towards a Mathematical Formalism for Semi-stochastic Cell-Level Computational Modeling of Tumor Initiation. Annals of Biomedical Engineering, 2015, 43, 1680-1694.	2.5	18

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163	Utilization of the foot load monitor for evaluating deep plantar tissue stresses in patients with diabetes: Proof-of-concept studies. Gait and Posture, 2009, 29, 377-382.	1.4	17
164	Evaluating the effective shear modulus of the cytoplasm in cultured myoblasts subjected to compression using an inverse finite element method. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1559-1566.	3.1	17
165	Evaluation of Fatigue of Respiratory and Lower Limb Muscles During Prolonged Aerobic Exercise. Journal of Applied Biomechanics, 2012, 28, 139-147.	0.8	17
166	Semi-stochastic cell-level computational modelling of cellular forces: application to contractures in burns and cyclic loading. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1181-1195.	2.8	17
167	Weightâ€bearingâ€"induced changes in the microtopography and structural stiffness of human skin in vivo following immobility periods. Wound Repair and Regeneration, 2015, 23, 37-43.	3.0	17
168	Printable low-cost, sustained and dynamic cell stretching apparatus. Journal of Biomechanics, 2016, 49, 1336-1339.	2.1	17
169	A novel compressive stress-based osteoarthritis-like chondrocyte system. Experimental Biology and Medicine, 2017, 242, 1062-1071.	2.4	17
170	Computer Modeling of Prophylactic Dressings: An Indispensable Guide for Healthcare Professionals. Advances in Skin and Wound Care, 2019, 32, S4-S13.	1.0	17
171	Which endotracheal tube location minimises the deviceâ€related pressure ulcer risk: The centre or a corner of the mouth?. International Wound Journal, 2020, 17, 268-276.	2.9	17
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