Frank P T Baaijens

List of Publications by Year in Descending Order

146 papers	7,262 citations	47 h-index	79 g-index
180 ext. papers	8,093 ext. citations	4.9 avg, IF	5.84 L-index

#	Paper	IF	Citations
146	Next-generation tissue-engineered heart valves with repair, remodelling and regeneration capacity. *Nature Reviews Cardiology*, **2021**, 18, 92-116	14.8	43
145	Transcatheter-Delivered Expandable Bioresorbable Polymeric Graft With Stenting Capacity Induces Vascular Regeneration. *JACC Basic To Translational Science*, **2020**, 5, 1095-1110	8.7	3
144	Controlling the adaption behaviour of next-generation tissue-engineered cardiovascular implants via computational modelling. *European Heart Journal*, **2020**, 41, 1069-1073	9.5	4
143	Geometry influences inflammatory host cell response and remodeling in tissue-engineered heart valves in-vivo. *Scientific Reports*, **2020**, 10, 19882	4.9	8
142	Dual Electrospun Supramolecular Polymer Systems for Selective Cell Migration. *Macromolecular Bioscience*, **2018**, 18, e1800004	5.5	0
141	Can We Grow Valves Inside the Heart? Perspective on Material-based In Situ Heart Valve Tissue Engineering. *Frontiers in Cardiovascular Medicine*, **2018**, 5, 54	5.4	30
140	Computational modeling guides tissue-engineered heart valve design for long-term in vivo performance in a translational sheep model. *Science Translational Medicine*, **2018**, 10,	17.5	83
139	Predicting and understanding collagen remodeling in human native heart valves during early development. *Acta Biomaterialia*, **2018**, 80, 203-216	10.8	4
138	First percutaneous implantation of a completely tissue-engineered self-expanding pulmonary heart valve prosthesis using a newly developed delivery system: a feasibility study in sheep. *Cardiovascular Intervention and Therapeutics*, **2017**, 32, 36-47	2.5	15
137	Are adipose-derived stem cells cultivated in human platelet lysate suitable for heart valve tissue engineering?. *Journal of Tissue Engineering and Regenerative Medicine*, **2017**, 11, 2193-2203	4.4	6
136	Cellular strain avoidance is mediated by a functional actin cap - observations in an -deficient cell model. *Journal of Cell Science*, **2017**, 130, 779-790	5.3	8
135	Understanding the requirements of self-expandable stents for heart valve replacement: Radial force, hoop force and equilibrium. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 68, 252-264	4.1	32
134	In situ heart valve tissue engineering using a bioresorbable elastomeric implant - From material design to 12 months follow-up in sheep. *Biomaterials*, **2017**, 125, 101-117	15.6	161
133	Computationally Designed 3D Printed Self-Expandable Polymer Stents with Biodegradation Capacity for Minimally Invasive Heart Valve Implantation: A Proof-of-Concept Study. *3D Printing and Additive Manufacturing*, **2017**, 4, 19-29	4	46
132	The Effects of Scaffold Remnants in Decellularized Tissue-Engineered Cardiovascular Constructs on the Recruitment of Blood Cells. *Tissue Engineering - Part A*, **2017**, 23, 1142-1151	3.9	8
131	3D Fiber Orientation in Atherosclerotic Carotid Plaques. *Journal of Structural Biology*, **2017**, 200, 28-35	3.4	19
130	Improved Geometry of Decellularized Tissue Engineered Heart Valves to Prevent Leaflet Retraction. *Annals of Biomedical Engineering*, **2016**, 44, 1061-71	4.7	39

129	Prediction of Cell Alignment on Cyclically Strained Grooved Substrates. *Biophysical Journal*, **2016**, 111, 2274-2285	2.9	8
128	Heading in the Right Direction: Understanding Cellular Orientation Responses to Complex Biophysical Environments. *Cellular and Molecular Bioengineering*, **2016**, 9, 12-37	3.9	51
127	Superior Tissue Evolution in Slow-Degrading Scaffolds for Valvular Tissue Engineering. *Tissue Engineering - Part A*, **2016**, 22, 123-32	3.9	12
126	A computational analysis of cell-mediated compaction and collagen remodeling in tissue-engineered heart valves. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 58, 173-187	4.1	37
125	Age-dependent changes of stress and strain in the human heart valve and their relation with collagen remodeling. *Acta Biomaterialia*, **2016**, 29, 161-169	10.8	39
124	Age-Dependent Changes in Geometry, Tissue Composition and Mechanical Properties of Fetal to Adult Cryopreserved Human Heart Valves. *PLoS ONE*, **2016**, 11, e0149020	3.7	32
123	Percutaneous pulmonary valve replacement using completely tissue-engineered off-the-shelf heart valves: six-month in vivo functionality and matrix remodelling in sheep. *EuroIntervention*, **2016**, 12, 62-70	3.1	21
122	Excessive volume of hydrogel injectates may compromise the efficacy for the treatment of acute myocardial infarction. *International Journal for Numerical Methods in Biomedical Engineering*, **2016**, 32, e02772	2.6	7
121	Collagen Matrix Remodeling in Stented Pulmonary Arteries after Transapical Heart Valve Replacement. *Cells Tissues Organs*, **2016**, 201, 159-69	2.1	16
120	Modulation of collagen fiber orientation by strain-controlled enzymatic degradation. *Acta Biomaterialia*, **2016**, 35, 118-26	10.8	30
119	Pressure induced deep tissue injury explained. *Annals of Biomedical Engineering*, **2015**, 43, 297-305	4.7	109
118	The evolution of collagen fiber orientation in engineered cardiovascular tissues visualized by diffusion tensor imaging. *PLoS ONE*, **2015**, 10, e0127847	3.7	26
117	In Situ Tissue Engineering of Functional Small-Diameter Blood Vessels by Host Circulating Cells Only. *Tissue Engineering - Part A*, **2015**, 21, 2583-94	3.9	74
116	Diffusion profile of macromolecules within and between human skin layers for (trans)dermal drug delivery. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 50, 215-22	4.1	16
115	Emerging Trends in Heart Valve Engineering: Part IV. Computational Modeling and Experimental Studies. *Annals of Biomedical Engineering*, **2015**, 43, 2314-33	4.7	30
114	Hydrolytic and oxidative degradation of electrospun supramolecular biomaterials: In vitro degradation pathways. *Acta Biomaterialia*, **2015**, 27, 21-31	10.8	48
113	Emerging trends in heart valve engineering: Part II. Novel and standard technologies for aortic valve replacement. *Annals of Biomedical Engineering*, **2015**, 43, 844-57	4.7	38
112	Emerging trends in heart valve engineering: Part I. Solutions for future. *Annals of Biomedical Engineering*, **2015**, 43, 833-43	4.7	70

111	Emerging trends in heart valve engineering: Part III. Novel technologies for mitral valve repair and replacement. *Annals of Biomedical Engineering*, **2015**, 43, 858-70	4.7	28
110	Competition between cap and basal actin fiber orientation in cells subjected to contact guidance and cyclic strain. *Scientific Reports*, **2015**, 5, 8752	4.9	21
109	Poly-ε-caprolactone scaffold and reduced in vitro cell culture: beneficial effect on compaction and improved valvular tissue formation. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, E289-301	4.4	8
108	In Vivo Collagen Remodeling in the Vascular Wall of Decellularized Stented Tissue-Engineered Heart Valves. *Tissue Engineering - Part A*, **2015**, 21, 2206-15	3.9	30
107	Local anisotropic mechanical properties of human carotid atherosclerotic plaques - characterisation by micro-indentation and inverse finite element analysis. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 43, 59-68	4.1	15
106	Computational and experimental investigation of local stress fiber orientation in uniaxially and biaxially constrained microtissues. *Biomechanics and Modeling in Mechanobiology*, **2014**, 13, 1053-63	3.8	10
105	Degree of scaffold degradation influences collagen (re)orientation in engineered tissues. *Tissue Engineering - Part A*, **2014**, 20, 1747-57	3.9	18
104	How to make a heart valve: from embryonic development to bioengineering of living valve substitutes. *Cold Spring Harbor Perspectives in Medicine*, **2014**, 4, a013912	5.4	49
103	Differential response of endothelial and endothelial colony forming cells on electrospun scaffolds with distinct microfiber diameters. *Biomacromolecules*, **2014**, 15, 821-9	6.9	38
102	Tailoring the void space and mechanical properties in electrospun scaffolds towards physiological ranges. *Journal of Materials Chemistry B*, **2014**, 2, 305-313	7.3	32
101	A physically motivated constitutive model for cell-mediated compaction and collagen remodeling in soft tissues. *Biomechanics and Modeling in Mechanobiology*, **2014**, 13, 985-1001	3.8	34
100	Synergistic protein secretion by mesenchymal stromal cells seeded in 3D scaffolds and circulating leukocytes in physiological flow. *Biomaterials*, **2014**, 35, 9100-13	15.6	33
99	Mechanics of the pulmonary valve in the aortic position. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 29, 557-67	4.1	12
98	Strain-dependent modulation of macrophage polarization within scaffolds. *Biomaterials*, **2014**, 35, 4919-28	15.6	122
97	Transcatheter implantation of homologous "off-the-shelf" tissue-engineered heart valves with self-repair capacity: long-term functionality and rapid in vivo remodeling in sheep. *Journal of the American College of Cardiology*, **2014**, 63, 1320-1329	15.1	142
96	Biomechanics and mechanobiology in functional tissue engineering. *Journal of Biomechanics*, **2014**, 47, 1933-40	2.9	157
95	Shear flow affects selective monocyte recruitment into MCP-1-loaded scaffolds. *Journal of Cellular and Molecular Medicine*, **2014**, 18, 2176-88	5.6	31
94	Cell-mediated retraction versus hemodynamic loading - A delicate balance in tissue-engineered heart valves. *Journal of Biomechanics*, **2014**, 47, 2064-9	2.9	14

93	Synergy between Rho signaling and matrix density in cyclic stretch-induced stress fiber organization. *Acta Biomaterialia*, **2014**, 10, 1876-85	10.8	24
92	Compressive mechanical properties of atherosclerotic plaques--indentation test to characterise the local anisotropic behaviour. *Journal of Biomechanics*, **2014**, 47, 784-92	2.9	43
91	Computational model predicts cell orientation in response to a range of mechanical stimuli. *Biomechanics and Modeling in Mechanobiology*, **2014**, 13, 227-36	3.8	43
90	Off-the-shelf human decellularized tissue-engineered heart valves in a non-human primate model. *Biomaterials*, **2013**, 34, 7269-80	15.6	151
89	Understanding strain-induced collagen matrix development in engineered cardiovascular tissues from gene expression profiles. *Cell and Tissue Research*, **2013**, 352, 727-37	4.2	12
88	Mechanical analysis of ovine and pediatric pulmonary artery for heart valve stent design. *Journal of Biomechanics*, **2013**, 46, 2075-81	2.9	11
87	Strain-induced collagen organization at the micro-level in fibrin-based engineered tissue constructs. *Annals of Biomedical Engineering*, **2013**, 41, 763-74	4.7	38
86	Local axial compressive mechanical properties of human carotid atherosclerotic plaques-characterisation by indentation test and inverse finite element analysis. *Journal of Biomechanics*, **2013**, 46, 1759-66	2.9	64
85	The potential of prolonged tissue culture to reduce stress generation and retraction in engineered heart valve tissues. *Tissue Engineering - Part C: Methods*, **2013**, 19, 205-15	2.9	8
84	Engineering fibrin-based tissue constructs from myofibroblasts and application of constraints and strain to induce cell and collagen reorganization. *Journal of Visualized Experiments*, **2013**, e51009	1.6	1
83	Soft substrates normalize nuclear morphology and prevent nuclear rupture in fibroblasts from a laminopathy patient with compound heterozygous LMNA mutations. *Nucleus*, **2013**, 4, 61-73	3.9	42
82	Engineering skeletal muscle tissues from murine myoblast progenitor cells and application of electrical stimulation. *Journal of Visualized Experiments*, **2013**, e4267	1.6	17
81	Matrix production and organization by endothelial colony forming cells in mechanically strained engineered tissue constructs. *PLoS ONE*, **2013**, 8, e73161	3.7	13
80	Decellularized homologous tissue-engineered heart valves as off-the-shelf alternatives to xeno- and homografts. *Biomaterials*, **2012**, 33, 4545-54	15.6	126
79	Passive and active contributions to generated force and retraction in heart valve tissue engineering. *Biomechanics and Modeling in Mechanobiology*, **2012**, 11, 1015-27	3.8	28
78	Influence of substrate stiffness on circulating progenitor cell fate. *Journal of Biomechanics*, **2012**, 45, 736-44	2.9	31
77	The influence of matrix integrity on stress-fiber remodeling in 3D. *Biomaterials*, **2012**, 33, 7508-18	15.6	69
76	A comparative analysis of the collagen architecture in the carotid artery: second harmonic generation versus diffusion tensor imaging. *Biochemical and Biophysical Research Communications*, **2012**, 426, 54-8	3.4	36

75	Polymer-based scaffold designs for in situ vascular tissue engineering: controlling recruitment and differentiation behavior of endothelial colony forming cells. *Macromolecular Bioscience*, **2012**, 12, 577-90	5.5	43
74	Plasma variations of biomarkers for muscle damage in male nondisabled and spinal cord injured subjects. *Journal of Rehabilitation Research and Development*, **2012**, 49, 361-72		14
73	A mesofluidics-based test platform for systematic development of scaffolds for in situ cardiovascular tissue engineering. *Tissue Engineering - Part C: Methods*, **2012**, 18, 475-85	2.9	18
72	Variation in tissue outcome of ovine and human engineered heart valve constructs: relevance for tissue engineering. *Regenerative Medicine*, **2012**, 7, 59-70	2.5	19
71	Low oxygen concentrations impair tissue development in tissue-engineered cardiovascular constructs. *Tissue Engineering - Part A*, **2012**, 18, 221-31	3.9	8
70	Trans-apical versus surgical implantation of autologous ovine tissue-engineered heart valves. *Journal of Heart Valve Disease*, **2012**, 21, 670-8		21
69	An in vitro model system to quantify stress generation, compaction, and retraction in engineered heart valve tissue. *Tissue Engineering - Part C: Methods*, **2011**, 17, 983-91	2.9	32
68	Mechanoregulation of vascularization in aligned tissue-engineered muscle: a role for vascular endothelial growth factor. *Tissue Engineering - Part A*, **2011**, 17, 2857-65	3.9	46
67	Linear shear response of the upper skin layers. *Biorheology*, **2011**, 48, 229-45	1.7	45
66	Computed tomography detects tissue formation in a stented engineered heart valve. *Annals of Thoracic Surgery*, **2011**, 92, 344-5	2.7	2
65	Substrates for cardiovascular tissue engineering. *Advanced Drug Delivery Reviews*, **2011**, 63, 221-41	18.5	206
64	Advanced maturation by electrical stimulation: Differences in response between C2C12 and primary muscle progenitor cells. *Journal of Tissue Engineering and Regenerative Medicine*, **2011**, 5, 529-39	4.4	101
63	In vitro indentation to determine the mechanical properties of epidermis. *Journal of Biomechanics*, **2011**, 44, 1176-81	2.9	124
62	An overview of theoretical studies of the mechanical effects on cellular behaviour. Preface. *Computer Methods in Biomechanics and Biomedical Engineering*, **2011**, 14, 401	2.1	
61	Remodeling of the collagen fiber architecture due to compaction in small vessels under tissue engineered conditions. *Journal of Biomechanical Engineering*, **2011**, 133, 071002	2.1	8
60	Controlling matrix formation and cross-linking by hypoxia in cardiovascular tissue engineering. *Journal of Applied Physiology*, **2010**, 109, 1483-91	3.7	24
59	Minimally-invasive implantation of living tissue engineered heart valves: a comprehensive approach from autologous vascular cells to stem cells. *Journal of the American College of Cardiology*, **2010**, 56, 510-20	15.1	183
58	Meet the new meat: tissue engineered skeletal muscle. *Trends in Food Science and Technology*, **2010** , 21, 59-66	15.3	68

57	Tissue-engineered heart valves develop native-like collagen fiber architecture. *Tissue Engineering - Part A*, **2010**, 16, 1527-37	3.9	33
56	Modeling collagen remodeling. *Journal of Biomechanics*, **2010**, 43, 166-75	2.9	66
55	Does subcutaneous adipose tissue behave as an (anti-)thixotropic material?. *Journal of Biomechanics*, **2010**, 43, 1153-9	2.9	34
54	Effects of a combined mechanical stimulation protocol: Value for skeletal muscle tissue engineering. *Journal of Biomechanics*, **2010**, 43, 1514-21	2.9	68
53	Dynamic straining combined with fibrin gel cell seeding improves strength of tissue-engineered small-diameter vascular grafts. *Tissue Engineering - Part A*, **2009**, 15, 1081-9	3.9	80
52	Deformation-controlled load application in heart valve tissue engineering. *Tissue Engineering - Part C: Methods*, **2009**, 15, 707-16	2.9	16
51	Straining mode-dependent collagen remodeling in engineered cardiovascular tissue. *Tissue Engineering - Part A*, **2009**, 15, 841-9	3.9	18
50	Nondestructive and noninvasive assessment of mechanical properties in heart valve tissue engineering. *Tissue Engineering - Part A*, **2009**, 15, 797-806	3.9	16
49	The transport profile of cytokines in epidermal equivalents subjected to mechanical loading. *Annals of Biomedical Engineering*, **2009**, 37, 1007-18	4.7	22
48	Quantification of the temporal evolution of collagen orientation in mechanically conditioned engineered cardiovascular tissues. *Annals of Biomedical Engineering*, **2009**, 37, 1263-72	4.7	56
47	The influence of endothelial cells on the ECM composition of 3D engineered cardiovascular constructs. *Journal of Tissue Engineering and Regenerative Medicine*, **2009**, 3, 11-8	4.4	16
46	Tissue engineering of heart valves: advances and current challenges. *Expert Review of Medical Devices*, **2009**, 6, 259-75	3.5	114
45	Hypoxia induces near-native mechanical properties in engineered heart valve tissue. *Circulation*, **2009**, 119, 290-7	16.7	40
44	Intermittent straining accelerates the development of tissue properties in engineered heart valve tissue. *Tissue Engineering - Part A*, **2009**, 15, 999-1008	3.9	49
43	Tailoring fiber diameter in electrospun poly(epsilon-caprolactone) scaffolds for optimal cellular infiltration in cardiovascular tissue engineering. *Tissue Engineering - Part A*, **2009**, 15, 437-44	3.9	142
42	Biomechanics: Concepts and Computation **2009**,		10
41	Thermoplastic Elastomers Based on Strong and Well-Defined Hydrogen-Bonding Interactions. *Macromolecules*, **2008**, 41, 5703-5708	5.5	73
40	The influence of serum-free culture conditions on skeletal muscle differentiation in a tissue-engineered model. *Tissue Engineering - Part A*, **2008**, 14, 161-71	3.9	42

39	Linear viscoelastic behavior of subcutaneous adipose tissue. *Biorheology*, **2008**, 45, 677-688	1.7	136
38	Living heart valve and small-diameter artery substitutes--an emerging field for intellectual property development. *Recent Patents on Biotechnology*, **2008**, 2, 1-9	2.2	1
37	The non-linear mechanical properties of soft engineered biological tissues determined by finite spherical indentation. *Computer Methods in Biomechanics and Biomedical Engineering*, **2008**, 11, 585-92	2.1	16
36	Cell nutrition **2008**, 327-362		5
35	Stress related collagen ultrastructure in human aortic valves--implications for tissue engineering. *Journal of Biomechanics*, **2008**, 41, 2612-7	2.9	39
34	Effect of biomimetic conditions on mechanical and structural integrity of PGA/P4HB and electrospun PCL scaffolds. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 1137-44	4.5	29
33	Remodelling of the angular collagen fiber distribution in cardiovascular tissues. *Biomechanics and Modeling in Mechanobiology*, **2008**, 7, 93-103	3.8	96
32	Effect of strain magnitude on the tissue properties of engineered cardiovascular constructs. *Annals of Biomedical Engineering*, **2008**, 36, 244-53	4.7	58
31	A microstructurally motivated model of the mechanical behavior of tissue engineered blood vessels. *Annals of Biomedical Engineering*, **2008**, 36, 1782-92	4.7	20
30	Mechanical characterization of anisotropic planar biological soft tissues using finite indentation: experimental feasibility. *Journal of Biomechanics*, **2008**, 41, 422-9	2.9	55
29	Diffusion measurements in epidermal tissues with fluorescent recovery after photobleaching. *Skin Research and Technology*, **2008**, 14, 462-7	1.9	17
28	The role of collagen cross-links in biomechanical behavior of human aortic heart valve leaflets--relevance for tissue engineering. *Tissue Engineering*, **2007**, 13, 1501-11		144
27	Are disc pressure, stress, and osmolarity affected by intra- and extrafibrillar fluid exchange?. *Journal of Orthopaedic Research*, **2007**, 25, 1317-24	3.8	30
26	Mechanisms that play a role in the maintenance of the calcium gradient in the epidermis. *Skin Research and Technology*, **2007**, 13, 369-76	1.9	15
25	Cytokine and chemokine release upon prolonged mechanical loading of the epidermis. *Experimental Dermatology*, **2007**, 16, 567-73	4	37
24	The relative contributions of compression and hypoxia to development of muscle tissue damage: an in vitro study. *Annals of Biomedical Engineering*, **2007**, 35, 273-84	4.7	123
23	Modeling the mechanics of tissue-engineered human heart valve leaflets. *Journal of Biomechanics*, **2007**, 40, 325-34	2.9	73
22	Temporal differences in the influence of ischemic factors and deformation on the metabolism of engineered skeletal muscle. *Journal of Applied Physiology*, **2007**, 103, 464-73	3.7	82

21	Mechanical characterization of anisotropic planar biological soft tissues using large indentation: a computational feasibility study. *Journal of Biomechanical Engineering*, **2006**, 128, 428-36	2.1	30
20	Autologous human tissue-engineered heart valves: prospects for systemic application. *Circulation*, **2006**, 114, I152-8	16.7	119
19	Influence of osmotic pressure changes on the opening of existing cracks in 2 intervertebral disc models. *Spine*, **2006**, 31, 1783-8	3.3	38
18	Determination of the Poisson's ratio of the cell: recovery properties of chondrocytes after release from complete micropipette aspiration. *Journal of Biomechanics*, **2006**, 39, 78-87	2.9	176
17	Response to Dr. Schachar. *Journal of Biomechanics*, **2006**, 39, 2344-2345	2.9	2
16	Osmoviscoelastic finite element model of the intervertebral disc. *European Spine Journal*, **2006**, 15 Suppl 3, S361-71	2.7	67
15	An in vitro model system to study the damaging effects of prolonged mechanical loading of the epidermis. *Annals of Biomedical Engineering*, **2006**, 34, 506-14	4.7	19
14	A structural constitutive model for collagenous cardiovascular tissues incorporating the angular fiber distribution. *Journal of Biomechanical Engineering*, **2005**, 127, 494-503	2.1	104
13	Improved prediction of the collagen fiber architecture in the aortic heart valve. *Journal of Biomechanical Engineering*, **2005**, 127, 329-36	2.1	68
12	Fibrin as a cell carrier in cardiovascular tissue engineering applications. *Biomaterials*, **2005**, 26, 3113-21	15.6	207
11	Large deformation finite element analysis of micropipette aspiration to determine the mechanical properties of the chondrocyte. *Annals of Biomedical Engineering*, **2005**, 33, 494-501	4.7	81
10	Tissue engineering of human heart valve leaflets: a novel bioreactor for a strain-based conditioning approach. *Annals of Biomedical Engineering*, **2005**, 33, 1778-88	4.7	168
9	Functional tissue engineering of the aortic heart valve. *Clinical Hemorheology and Microcirculation*, **2005**, 33, 197-9	2.5	5
8	Decreased mechanical stiffness in LMNA-/- cells is caused by defective nucleo-cytoskeletal integrity: implications for the development of laminopathies. *Human Molecular Genetics*, **2004**, 13, 2567-80	5.6	274
7	An integrated finite-element approach to mechanics, transport and biosynthesis in tissue engineering. *Journal of Biomechanical Engineering*, **2004**, 126, 82-91	2.1	63
6	Evaluation of a continuous quantification method of apoptosis and necrosis in tissue cultures. *Cytotechnology*, **2004**, 46, 139-50	2.2	25
5	A theoretical analysis of damage evolution in skeletal muscle tissue with reference to pressure ulcer development. *Journal of Biomechanical Engineering*, **2003**, 125, 902-9	2.1	31
4	Finite element model of mechanically induced collagen fiber synthesis and degradation in the aortic valve. *Annals of Biomedical Engineering*, **2003**, 31, 1040-53	4.7	37

3	Computational analyses of mechanically induced collagen fiber remodeling in the aortic heart valve. *Journal of Biomechanical Engineering*, **2003**, 125, 549-57	2.1	83
2	Monitoring local cell viability in engineered tissues: a fast, quantitative, and nondestructive approach. *Tissue Engineering*, **2003**, 9, 269-81		35
1	In vitro models to study compressive strain-induced muscle cell damage. *Biorheology*, **2003**, 40, 383-8	1.7	31