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Dynamic mechanical conditioning of collagen-gel blood vessel constructs induces remodeling in vitro

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438	Dynamic seeding of tissue-engineered vascular grafts in a novel perfusion bioreactor system.		1
437	Mechanisms of stiffening and strengthening in media-equivalents fabricated using glycation. 2000 , 122, 216-23		135
436	Vascular tissue engineering. 2001 , 3, 225-43		347
435	Hydrogels for tissue engineering. 2001 , 101, 1869-79		4050
434	Endothelial cellular response to altered shear stress. 2001 , 281, L529-33		274
433	Functional Tissue Engineering. 2001 , 391, S295-S305		136
432	New pulsatile bioreactor for fabrication of tissue-engineered patches. 2001 , 58, 401-5		46
431	Toward a new blood vessel. 2002 , 7, 241-6		33
430	Tissue engineering and the trauma surgeon. 2002 , 4, 177-183		4
429	Dynamic loading increases strength of tissue-engineered chordae tendineae.		
428	Development of fibrin-based tissue engineered vessels.		
427	Collagen, fibrin and collagen-fibrin mixtures as matrix materials for vascular tissue engineering.		
426	The response of endothelial cells to fluid shear stress using a co-culture model of the arterial wall. 2002 , 9, 11-23		56
425	Maintenance of a functional endothelial cell monolayer on a fibroblast/polymer substrate under physiologically relevant shear stress conditions. <i>Tissue Engineering</i> , 2002 , 8, 695-708		27
424	Tissue-engineering bioreactors: a new combined cell-seeding and perfusion system for vascular tissue engineering. <i>Tissue Engineering</i> , 2002 , 8, 863-70		107
423	Fibrin as an alternative biopolymer to type-I collagen for the fabrication of a media equivalent. 2002 , 60, 607-12		190
422	The tissue-engineered small-diameter artery. 2002 , 961, 251-4		45

421	Val-ala-pro-gly, an elastin-derived non-integrin ligand: smooth muscle cell adhesion and specificity. 2003 , 67, 255-9	85
420	Quantitative assessment of collagen assembly by live cells. 2003 , 67, 775-84	8
419	Cell orientation determines the alignment of cell-produced collagenous matrix. 2003 , 36, 97-102	220
418	Indirect solid free form fabrication of local and global porous, biomimetic and composite 3D polymer-ceramic scaffolds. 2003 , 24, 181-94	567
417	A biological hybrid model for collagen-based tissue engineered vascular constructs. 2003 , 24, 1241-54	134
416	A novel bioreactor for the dynamic flexural stimulation of tissue engineered heart valve biomaterials. 2003 , 24, 2523-32	155
415	Investigation on the mechanical properties of contracted collagen gels as a scaffold for tissue engineering. 2003 , 27, 84-91	79
414	Designer blood vessels and therapeutic revascularization. 2003 , 140, 627-36	33
413	Human arteries engineered in vitro. 2003 , 4, 633-8	158
412	Remodelling of continuously distributed collagen fibres in soft connective tissues. 2003 , 36, 1151-8	83
411	Tissue engineered small-diameter vascular grafts. 2003 , 30, 507-17	84
410	Effects of medium perfusion rate on cell-seeded three-dimensional bone constructs in vitro. <i>Tissue Engineering</i> , 2003 , 9, 1197-203	321
409	Mechanical strain-stimulated remodeling of tissue-engineered blood vessel constructs. <i>Tissue Engineering</i> , 2003 , 9, 657-66	147
408	Photo-cross-linking of type I collagen gels in the presence of smooth muscle cells: mechanical properties, cell viability, and function. 2003 , 4, 890-5	171
407	Cyclic strain inhibits switching of smooth muscle cells to an osteoblast-like phenotype. 2003 , 17, 455-7	52
406	Signal transduction in matrix contraction and the migration of vascular smooth muscle cells in three-dimensional matrix. 2003 , 40, 378-88	43
405	Genomic analysis of smooth muscle cells in 3-dimensional collagen matrix. 2003 , 17, 97-9	99
404	Tissue engineering of arteries by directed remodeling of intact arterial segments. <i>Tissue Engineering</i> , 2003 , 9, 461-72	41

403	Assessment of Function in Tissue-Engineered Vascular Grafts. 2003 , 258-267	1
402	Synergistic action of growth factors and dynamic loading for articular cartilage tissue engineering. <i>Tissue Engineering</i> , 2003 , 9, 597-611	281
401	Fabrication of mitral valve chordae by directed collagen gel shrinkage. <i>Tissue Engineering</i> , 2003 , 9, 1233-42	57
400	Fibroblast alignment under interstitial fluid flow using a novel 3-D tissue culture model. 2003 , 284, H1771-7	119
399	One-dimensional viscoelastic behavior of fibroblast populated collagen matrices. 2003 , 125, 719-25	53
398	Functional Tissue Engineering and the Role of Biomechanical Signaling in Articular Cartilage Repair. 2003 , 277-290	3
397	Functional Requirements for the Engineering of a Blood Vessel Substitute. 2003 , 87-95	3
396	Perfusion bioreactor for vascular tissue engineering with capacities for longitudinal stretch. 2003 , 14, 340-7	40
395	Artificial Soft Tissue Fabrication from Cell-Contracted Biopolymers. 2003 , 305-317	2
394	[Human blood vessels created with tissue engineering]. 2004 , 20, 675-8	2
393	Novel pulse duplicating bioreactor system for tissue-engineered vascular construct. <i>Tissue Engineering</i> , 2004 , 10, 1224-33	48
392	Perfusion bioreactor for small diameter tissue-engineered arteries. <i>Tissue Engineering</i> , 2004 , 10, 930-41	120
391	Incorporation of intact elastin scaffolds in tissue-engineered collagen-based vascular grafts. <i>Tissue Engineering</i> , 2004 , 10, 1526-35	103
390	Mechanical regulation of matrix reorganization and phenotype of smooth muscle cells and mesenchymal stem cells in 3D matrix. 2004 , 2004, 5024-7	5
389	Genetic modification of smooth muscle cells to control phenotype and function in vascular tissue engineering. <i>Tissue Engineering</i> , 2004 , 10, 189-99	15
388	Fibronectin matrix polymerization increases tensile strength of model tissue. 2004 , 287, H46-53	37
387	A neo-esophagus reconstructed by cultured human esophageal epithelial cells, smooth muscle cells, fibroblasts, and collagen. 2004 , 50, 261-6	41
386	Endothelial and smooth muscle cell seeding onto processed ex vivo arterial scaffolds using 3D vascular bioreactors. 2004 , 50, 591-600	36

385	Biodegradable polyester elastomers in tissue engineering. 2004 , 4, 801-12	169
384	Tissue engineering of the vascular system. 2004 , 87 Suppl 2, 158-60	7
383	The tissue engineering of blood vessels and the heart. 2004 , 4 Suppl 6, 36-42	52
382	Cellular engineering of conduits for coronary and lower limb bypass surgery: role of cell attachment peptides and pre-conditioning in optimising smooth muscle cells (SMC) adherence to compliant poly(carbonate-urea)urethane (MyoLink) scaffolds. 2004 , 27, 608-16	25
381	Controlling the cellular organization of tissue-engineered cardiac constructs. 2004 , 1015, 299-311	52
380	Scaffolds for tissue fabrication. 2004 , 7, 30-40	723
379	Differential effects of equiaxial and uniaxial strain on mesenchymal stem cells. 2004 , 88, 359-68	267
378	A multi-station dynamic-culture force monitor system to study cell mechanobiology. 2004 , 26, 355-8	7
377	Properties of engineered vascular constructs made from collagen, fibrin, and collagen-fibrin mixtures. 2004 , 25, 3699-706	253
376	Design and application of a test system for viscoelastic characterization of collagen gels. <i>Tissue Engineering</i> , 2004 , 10, 241-52	74
375	Tissue engineering of ligaments. 2004 , 6, 131-56	276
374	Engineering of functional tendon. <i>Tissue Engineering</i> , 2004 , 10, 755-61	131
373	Vascular smooth muscle cells on hyaluronic acid: culture and mechanical characterization of an engineered vascular construct. <i>Tissue Engineering</i> , 2004 , 10, 699-710	55
372	Critical issues in vascular tissue engineering. 2004 , 1262, 122-125	6
371	Tissue engineering in surgery. 2004 , 2, 70-8	6
370	Mechanical, biochemical, and extracellular matrix effects on vascular smooth muscle cell phenotype. 2005 , 98, 2321-7	221
369	Design of scaffolds for blood vessel tissue engineering using a multi-layering electrospinning technique. 2005 , 1, 575-82	362
368	Semi-synthetic collagen/poloxamine matrices for tissue engineering. 2005 , 26, 7425-35	77

- 367 Tissue-Engineered Blood Vessels and the Future of Tissue Substitutes. **2005**, 85-97
- 366 An electro-tensile bioreactor for 3-D culturing of cardiomyocytes. A bioreactor system that simulates the myocardium's electrical and mechanical response in vivo. **2005**, 24, 73-9 30
- 365 Biaxial failure properties of planar living tissue equivalents. **2005**, 73, 182-91 24
- 364 Collagen-carbon nanotube composite materials as scaffolds in tissue engineering. **2005**, 74, 489-96 292
- 363 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
- 362 Engineering of fibrin-based functional and implantable small-diameter blood vessels. **2005**, 288, H1451-60 207
- 361 Viscoelastic testing methodologies for tissue engineered blood vessels. **2005**, 127, 1176-84 34
- 360 Cleft lip and dermatoglyphic asymmetry. *Tissue Engineering*, **1977**, 29, 211-2 69
- 359 Biomechanical Considerations for Tissue Engineered Heart Valve Bioreactors. **2005**, 235-267 2
- 358 Matrix metalloproteinase 9 facilitates collagen remodeling and angiogenesis for vascular constructs. *Tissue Engineering*, **2005**, 11, 267-76 36
- 357 Vascular engineering for bypass surgery. **2005**, 3, 659-65 6
- 356 Tissue-engineered vessel strengthens quickly under physiological deformation: application of a new perfusion bioreactor with machine vision. **2005**, 42, 503-8 16
- 355 Perfusion Bioreactors for Cardiovascular Tissue Engineering. **2005**, 285-307
- 354 Design of Vascular Graft Bioreactors. **2005**, 269-283 2
- 353 Building in vitro models of organs. **2005**, 244, 137-73 25
- 352 Repeated rapid shear-responsiveness of peptide hydrogels with tunable shear modulus. **2005**, 6, 1316-21 109
- 351 Enhanced tissue strength in cryopreserved, collagen-based blood vessel constructs. **2005**, 37, 4625-9 29
- 350 Tissue reorganization in response to mechanical load increases functionality. *Tissue Engineering*, **2005**, 11, 90-100 72

349	Heart valve tissue engineering. 2005 , 97, 743-55	249
348	Bioreactors for tissue engineering: focus on mechanical constraints. A comparative review. <i>Tissue Engineering</i> , 2006 , 12, 2367-83	133
347	Valvular endothelial cells regulate the phenotype of interstitial cells in co-culture: effects of steady shear stress. <i>Tissue Engineering</i> , 2006 , 12, 905-15	165
346	Tissue engineering: the hope, the hype, and the future. <i>Tissue Engineering</i> , 2006 , 12, 1143-50	119
345	Small-diameter artificial arteries engineered in vitro. 2006 , 98, 25-35	402
344	PCL-PGLA composite tubular scaffold preparation and biocompatibility investigation. 2006 , 29, 790-9	10
343	Heart Valve Tissue Engineering. 2006 ,	1
342	Vascular Graft Prosthesis. 2006 ,	
341	Vascular tissue engineering. 2006 , 15 Suppl 1, S119-25	17
340	Tissue Engineering of Blood Vessels. 2006 ,	
339	Short-term culture of human neonatal myofibroblasts seeded using a novel three-dimensional rotary seeding device. 2006 , 52, 310-4	11
338	Building structure into engineered tissues. 2006 , 9, 54-60	75
337	Constraint stress, microstructural characteristics, and enhanced mechanical properties of a special fibroblast-embedded collagen construct. 2006 , 30, 870-7	19
336	Biological characterisation of vascular grafts cultured in a bioreactor. 2006 , 27, 2390-7	57
335	Computational modeling of multicellular constructs with the material point method. 2006 , 39, 2074-86	44
334	Equibiaxial cyclic stretch stimulates fibroblasts to rapidly remodel fibrin. 2006 , 39, 2983-90	58
333	Characterisation of a collagen membrane for its potential use in cardiovascular tissue engineering applications. 2006 , 17, 195-201	9
332	Cellular and matrix mechanics of bioartificial tissues during continuous cyclic stretch. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 1678-90	4-7 35

331	An introductory review of cell mechanobiology. 2006 , 5, 1-16	389
330	Physical characterization of vascular grafts cultured in a bioreactor. 2006 , 27, 2380-9	67
329	Mechanical properties of bacterial cellulose and interactions with smooth muscle cells. 2006 , 27, 2141-9	453
328	Equibiaxial strain stimulates fibroblastic phenotype shift in smooth muscle cells in an engineered tissue model of the aortic wall. 2006 , 27, 5252-8	48
327	Cyclic strain increases fibroblast proliferation, matrix accumulation, and elastic modulus of fibroblast-seeded polyurethane constructs. 2006 , 39, 1136-44	125
326	Blood vessels engineered from human cells. 2006 , 16, 153-6	51
325	Tissue engineering of vascular conduits. 2006 , 93, 652-61	54
324	Hydrogels in Biology and Medicine: From Molecular Principles to Bionanotechnology. 2006 , 18, 1345-1360	3009
323	Machine vision and feedback control system allow the precise control of vascular deformation in vitro. 2006 , 77, 064304	2
322	Soft Tissue Scaffolds. 2006 ,	1
321	Mechanical loading modulates the differentiation state of vascular smooth muscle cells. <i>Tissue Engineering</i> , 2006 , 12, 3159-70	15
320	Technology insight: the evolution of tissue-engineered vascular grafts--from research to clinical practice. 2007 , 4, 389-95	220
319	Bioreactor for application of subatmospheric pressure to three-dimensional cell culture. <i>Tissue Engineering</i> , 2007 , 13, 3003-10	16
318	Antithrombogenic property of bone marrow mesenchymal stem cells in nanofibrous vascular grafts. 2007 , 104, 11915-20	322
317	Cyclic mechanical compression increases mineralization of cell-seeded polymer scaffolds in vivo. 2007 , 129, 531-9	49
316	Differential effects of EGF and TGF-beta1 on fibroblast activity in fibrin-based tissue equivalents. <i>Tissue Engineering</i> , 2007 , 13, 799-807	17
315	Polymers as replacement materials for heart valves and arteries. 2007 , 111-140	3
314	Vascular tissue engineering: bioreactor design considerations for extended culture of primary human vascular smooth muscle cells. 2007 , 53, 623-30	34

313	Soft biological materials and their impact on cell function. 2007 , 3, 299-306		643
312	Review: advances in vascular tissue engineering using protein-based biomaterials. <i>Tissue Engineering</i> , 2007 , 13, 2601-13		161
311	Chemical and physical regulation of stem cells and progenitor cells: potential for cardiovascular tissue engineering. <i>Tissue Engineering</i> , 2007 , 13, 1809-23		29
310	Macromolecular biomaterials for scaffold-based vascular tissue engineering. 2007 , 7, 701-18		97
309	In vivo cellular repopulation of tubular elastin scaffolds mediated by basic fibroblast growth factor. 2007 , 28, 2830-8		63
308	Molecular basis of the effects of mechanical stretch on vascular smooth muscle cells. 2007 , 40, 947-60		251
307	Tissue engineering of blood vessel. 2007 , 11, 945-57		143
306	In vitro characterization of a compliant biodegradable scaffold with a novel bioreactor system. <i>Annals of Biomedical Engineering</i> , 2007 , 35, 1357-67	4-7	25
305	Composite fibrin scaffolds increase mechanical strength and preserve contractility of tissue engineered blood vessels. 2008 , 25, 1212-21		40
304	Does mechanical stimulation have any role in urinary bladder tissue engineering?. 2008 , 26, 301-5		62
303	Effect of strain magnitude on the tissue properties of engineered cardiovascular constructs. <i>Annals of Biomedical Engineering</i> , 2008 , 36, 244-53	4-7	58
302	Variation of cyclic strain parameters regulates development of elastic modulus in fibroblast/substrate constructs. 2008 , 26, 1105-13		45
301	Rotating versus perfusion bioreactor for the culture of engineered vascular constructs based on hyaluronic acid. 2008 , 100, 988-97		23
300	Implanted cardiovascular polymers: Natural, synthetic and bio-inspired. 2008 , 33, 853-874		183
299	Preparation and cell affinity of microtubular orientation-structured PLGA(70/30) blood vessel scaffold. 2008 , 29, 3128-36		87
298	In vitro evaluation of electrospun silk fibroin scaffolds for vascular cell growth. 2008 , 29, 2217-27		265
297	Natural Polymers in tissue engineering applications. 2008 , 145-192		21
296	Role of cyclic strain frequency in regulating the alignment of vascular smooth muscle cells in vitro. <i>Biophysical Journal</i> , 2008 , 94, 1497-507	2.9	92

295	Feasibility study of a novel urinary bladder bioreactor. 2008 , 14, 339-48	39
294	CellSubstrate Interactions. 2008 , 666-685	2
293	Clinically relevant cell sources for TMJ disc engineering. 2008 , 87, 548-52	32
292	Mesenchymal stem cells for vascular regeneration. 2008 , 3, 877-92	97
291	Tissue engineering of a hybrid bypass graft for coronary and lower limb bypass surgery. 2008 , 22, 2084-9	44
290	Collagen-based scaffolds. 2008 , 396-415	1
289	Cyclic distension of fibrin-based tissue constructs: evidence of adaptation during growth of engineered connective tissue. 2008 , 105, 6537-42	143
288	Physical Stress as a Factor in Tissue Growth and Remodeling. 2008 , 512-535	
287	Electrospun Polydioxanone, Elastin, and Collagen Vascular Scaffolds: Uniaxial Cyclic Distension. 2009 , 4, 155892500900400	3
286	Machine to dynamically condition tissue engineered vasculature. 2009 ,	
285	Hemodynamics and axial strain additively increase matrix remodeling and MMP-9, but not MMP-2, expression in arteries engineered by directed remodeling. 2009 , 15, 1281-90	15
284	A permanent change in protein mechanical responses can be produced by thermally-induced microdomain mixing. 2009 , 20, 1629-44	9
283	Mechanically robust and bioadhesive collagen and photocrosslinkable hyaluronic acid semi-interpenetrating networks. 2009 , 15, 1645-53	148
282	Electrospinning of synthesized triblock copolymers of epsilon-caprolactone and L-lactide for the application of vascular tissue engineering. 2009 , 4, 044105	9
281	Vascular regeneration: engineering the stem cell microenvironment. 2009 , 4, 435-47	17
280	Magnitude and duration of stretch modulate fibroblast remodeling. 2009 , 131, 051005	44
279	A phenomenological model for mechanically mediated growth, remodeling, damage, and plasticity of gel-derived tissue engineered blood vessels. 2009 , 131, 101016	11
278	A novel cylindrical biaxial computer-controlled bioreactor and biomechanical testing device for vascular tissue engineering. 2009 , 15, 3331-40	30

277	Smooth muscle alpha-actin and calponin expression and extracellular matrix production of human coronary artery smooth muscle cells in 3D scaffolds. 2009 , 15, 3001-11		19
276	Nondestructive and noninvasive assessment of mechanical properties in heart valve tissue engineering. 2009 , 15, 797-806		16
275	Impact of endothelial cells and mechanical conditioning on smooth muscle cell extracellular matrix production and differentiation. 2009 , 15, 815-25		37
274	A theoretical study of mechanical stability of arteries. 2009 , 131, 051006		24
273	Comparison of Electrospun PBSU and PLGA Scaffolds Applied in Vascular Tissue Engineering. 2009 , 2, 27-38		2
272	Fabrication of burst pressure competent vascular grafts via electrospinning: effects of microstructure. 2009 , 88, 923-34		65
271	Biomimetic control of vascular smooth muscle cell morphology and phenotype for functional tissue-engineered small-diameter blood vessels. 2009 , 88, 1104-21		112
270	Development of a cell-derived matrix: effects of epidermal growth factor in chemically defined culture. 2010 , 92, 533-41		14
269	Effects of cell concentration and collagen concentration on contraction kinetics and mechanical properties in a bone marrow stromal cell-collagen construct. 2010 , 93, 1132-9		9
268	Real time, non-invasive assessment of leaflet deformation in heart valve tissue engineering. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 532-41	4-7	21
267	A new bioreactor for the development of tissue-engineered heart valves. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 674-81	4-7	25
266	Quantification of the temporal evolution of collagen orientation in mechanically conditioned engineered cardiovascular tissues. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 1263-72	4-7	56
265	Mechanical properties of completely autologous human tissue engineered blood vessels compared to human saphenous vein and mammary artery. 2009 , 30, 1542-50		372
264	Computational simulation of a magnetic microactuator for tissue engineering applications. 2009 , 11, 1259-67		2
263	Controlled cyclic stretch bioreactor for tissue-engineered heart valves. 2009 , 30, 4078-84		83
262	Dynamic culture conditions to generate silk-based tissue-engineered vascular grafts. 2009 , 30, 3213-23		129
261	Bioengineering challenges for heart valve tissue engineering. 2009 , 11, 289-313		208
260	Vascular extracellular matrix and arterial mechanics. 2009 , 89, 957-89		632

259	Polymeric materials for tissue engineering of arterial substitutes. 2009 , 17 Suppl 1, S45-54			63
258	Tissue-engineered small-caliber vascular graft based on a novel biodegradable composite fibrin-poly lactide scaffold. 2009 , 15, 1909-18			90
257	Smooth muscle cell seeding of decellularized scaffolds: the importance of bioreactor preconditioning to development of a more native architecture for tissue-engineered blood vessels. 2009 , 15, 827-40			41
256	The use of adipose progenitor cells in urology. 2009 , 395-421			
255	Implantation increases tensile strength and collagen content of self-assembled tendon constructs. 2010 , 108, 875-81			25
254	A novel single-step self-assembly approach for the fabrication of tissue-engineered vascular constructs. 2010 , 16, 1737-47			90
253	Porous nanofibrous PLLA scaffolds for vascular tissue engineering. 2010 , 31, 7971-7			147
252	Viscoelastic characteristics of contracted collagen gels populated with rat fibroblasts or cardiomyocytes. 2010 , 13, 139-44			10
251	How to optimize maturation in a bioreactor for vascular tissue engineering: focus on a decision algorithm for experimental planning. <i>Annals of Biomedical Engineering</i> , 2010 , 38, 2877-84	4-7		15
250	Approach for fabricating tissue engineered vascular grafts with stable endothelialization. <i>Annals of Biomedical Engineering</i> , 2010 , 38, 2885-95	4-7		11
249	Crosslinked urethane doped polyester biphasic scaffolds: Potential for in vivo vascular tissue engineering. 2010 , 95, 361-70			32
248	Cyclically stretching developing tissue in vivo enhances mechanical strength and organization of vascular grafts. 2010 , 6, 2448-56			22
247	Surface and mechanical properties of some new biopolyurethane composites. 2010 , 31, 1956-1964			9
246	Tissue engineering for small-diameter vascular grafts. 2010 , 116-146			
245	Tissue-engineered vascular adventitia with vasa vasorum improves graft integration and vascularization through inosculation. 2010 , 16, 2617-26			37
244	Tailoring Mechanical Properties of Collagen-Based Scaffolds for Vascular Tissue Engineering: The Effects of pH, Temperature and Ionic Strength on Gelation. 2010 , 2, 664-680			137
243	The Integrated Role of Biomaterials and Stem Cells in Vascular Regeneration. 2010 , 195-223			3
242	The Mechanical Environment of Cells in Collagen Gel Models. 2010 , 201-245			4

241	Cyclic strain improves strength and function of a collagen-based tissue-engineered vascular media. 2010 , 16, 3149-57	45
240	Comparison of the effects of possible mechanical stimuli on the rate of biochemical reactions. 2010 , 114, 10567-72	13
239	Cell motility and mechanics in three-dimensional collagen matrices. 2010 , 26, 335-61	262
238	Biomaterials for vascular tissue engineering. 2010 , 5, 107-20	275
237	Scaffolds in tissue engineering of blood vessels. 2010 , 88, 855-73	80
236	Molecular regulation of contractile smooth muscle cell phenotype: implications for vascular tissue engineering. 2010 , 16, 467-91	253
235	Design of a bioreactor to cyclically strain tissue engineered blood vessel rings. 2011 ,	2
234	Hydrogel-electrospun mesh composites for coronary artery bypass grafts. 2011 , 17, 451-61	46
233	Engineering of Small-Diameter Vessels. 2011 , 853-875	2
232	Cardiovascular Tissue Engineering. 2011 , 361-376	
231	Mechanical properties of tissue-engineered vascular constructs produced using arterial or venous cells. 2011 , 17, 2049-59	53
230	Directed cellular self-assembly to fabricate cell-derived tissue rings for biomechanical analysis and tissue engineering. 2011 , e3366	20
229	Emerging Trends in Tissue Engineering. 2011 , 251-263	2
228	Combining dynamic stretch and tunable stiffness to probe cell mechanobiology in vitro. 2011 , 6, e23272	78
227	Uniaxial mechanical strain modulates the differentiation of neural crest stem cells into smooth muscle lineage on micropatterned surfaces. 2011 , 6, e26029	30
226	Pulsatile culture of a poly(DL-lactic-co-glycolic acid) sandwiched cell/hydrogel construct fabricated using a step-by-step mold/extraction method. 2011 , 35, 645-55	23
225	Substrates for cardiovascular tissue engineering. <i>Advanced Drug Delivery Reviews</i> , 2011 , 63, 221-41	18.5 206
224	Mechanical stimuli differentially control stem cell behavior: morphology, proliferation, and differentiation. 2011 , 10, 939-53	160

223	Vascular wall engineering via femtosecond laser ablation: scaffolds with self-containing smooth muscle cell populations. <i>Annals of Biomedical Engineering</i> , 2011 , 39, 3031-41	4-7	22
222	Rapid isothermal substrate microfabrication of a biocompatible thermoplastic elastomer for cellular contact guidance. 2011 , 7, 2492-8		27
221	Dynamic mechanical stimulations induce anisotropy and improve the tensile properties of engineered tissues produced without exogenous scaffolding. 2011 , 7, 3294-301		48
220	Biomaterials advances in patches for congenital heart defect repair. 2011 , 4, 646-54		52
219	Tissue Engineering of Blood Vessels: Functional Requirements, Progress, and Future Challenges. 2011 , 2, 137-148		66
218	Roles of genipin crosslinking and biomolecule conditioning in collagen-based biopolymer: Potential for vascular media regeneration. 2011 , 97, 16-26		23
217	Differences in valvular and vascular cell responses to strain in osteogenic media. 2011 , 32, 2885-93		21
216	Implantable arterial grafts from human fibroblasts and fibrin using a multi-graft pulsed flow-stretch bioreactor with noninvasive strength monitoring. 2011 , 32, 714-22		186
215	Biomaterial selection for tooth regeneration. 2011 , 17, 373-88		98
214	Substantial expression of mature elastin in arterial constructs. 2011 , 108, 2705-10		114
213	The Effect of Dynamical Strain on the Maturation of Collagen-Based Cell-Containing Scaffolds for Vascular Tissue Engineering. 2011 , 409, 152-157		1
212	Engineered vascular tissue fabricated from aggregated smooth muscle cells. 2011 , 194, 13-24		52
211	Design and fabrication of a mechanically matched vascular graft. 2011 , 133, 091004		7
210	Biomechanical and morphological differences between the sclera canal ring and a peripheral sclera ring in the porcine eye. 2012 , 47, 61-5		2
209	Porcine small diameter arterial extracellular matrix supports endothelium formation and media remodeling forming a promising vascular engineered biograft. 2012 , 18, 411-22		49
208	Rapid 3D printing of anatomically accurate and mechanically heterogeneous aortic valve hydrogel scaffolds. 2012 , 4, 035005		475
207	Human fibroblast-derived ECM as a scaffold for vascular tissue engineering. 2012 , 33, 9205-13		74
206	Epithelial machines of morphogenesis and their potential application in organ assembly and tissue engineering. 2012 , 11, 1109-21		10

205	Influence of mechanical stimulation in the development of a medial equivalent tissue-engineered vascular construct using a gelatin-g-vinyl acetate co-polymer scaffold. 2012 , 23, 2069-87		11
204	A new bioreactor adapts to materials state and builds a growth model for vascular tissue engineering. 2012 , 36, 438-45		10
203	Perspectives on the advanced control of bioreactors for functional vascular tissue engineering in vitro. 2012 , 9, 233-9		7
202	Vascular tissue engineering: the next generation. 2012 , 18, 394-404		117
201	The influence of matrix integrity on stress-fiber remodeling in 3D. 2012 , 33, 7508-18		69
200	Oxygen Transport in Bioreactors for Engineered Vascular Tissues. 2012 , 287-306		2
199	A prototype tissue engineered blood vessel using amniotic membrane as scaffold. 2012 , 8, 3342-8		20
198	Tissue Engineering in Drug Delivery. 2012 , 533-568		0
197	Construction of a tubular scaffold that mimics J-shaped stress/strain mechanics using an innovative electrospinning technique. 2012 , 18, 567-74		24
196	Successful development of small diameter tissue-engineering vascular vessels by our novel integrally designed pulsatile perfusion-based bioreactor. 2012 , 7, e42569		28
195	Stem cell sources for vascular tissue engineering and regeneration. 2012 , 18, 405-25		69
194	On the Viscoelastic Properties of Collagen-Gel-Based Lattices under Cyclic Loading: Applications for Vascular Tissue Engineering. 2012 , 297, 724-734		15
193	Anisotropic effects of mechanical strain on neural crest stem cells. <i>Annals of Biomedical Engineering</i> , 2012 , 40, 598-605	4-7	8
192	Co-culturing monocytes with smooth muscle cells improves cell distribution within a degradable polyurethane scaffold and reduces inflammatory cytokines. 2012 , 8, 488-501		22
191	Immediate production of a tubular dense collagen construct with bioinspired mechanical properties. 2012 , 8, 1813-25		51
190	A novel strategy to engineer small-diameter vascular grafts from marrow-derived mesenchymal stem cells. 2012 , 36, 93-101		37
189	Tubular hydrogels of circumferentially aligned nanofibers to encapsulate and orient vascular cells. 2012 , 33, 5713-22		100
188	Fetal development, mechanobiology and optimal control processes can improve vascular tissue regeneration in bioreactors: an integrative review. 2012 , 34, 269-78		20

187	Improving the mechanical properties of chitosan-based heart valve scaffolds using chitosan fibers. 2012 , 5, 171-80		74
186	Mechanical characterization and non-linear elastic modeling of poly(glycerol sebacate) for soft tissue engineering. 2012 , 11, 3-15		29
185	Mechanical characterization of a customized decellularized scaffold for vascular tissue engineering. 2012 , 8, 58-70		70
184	Engineering functional bladder tissues. 2013 , 7, 515-22		56
183	Biohybrid nanogels. 2013 , 51, 3044-3057		22
182	Development of fibroblast-seeded collagen gels under planar biaxial mechanical constraints: a biomechanical study. 2013 , 12, 849-68		8
181	The effect of pulsatile loading and scaffold structure for the generation of a medial equivalent tissue engineered vascular graft. 2013 , 2, 227-39		13
180	Blood Vessel Tissue Engineering. 2013 , 1237-1246		
179	Dissecting the role of human embryonic stem cell-derived mesenchymal cells in human umbilical vein endothelial cell network stabilization in three-dimensional environments. 2013 , 19, 211-23		15
178	Self-assembled smooth muscle cell tissue rings exhibit greater tensile strength than cell-seeded fibrin or collagen gel rings. 2013 , 101, 428-37		18
177	A poroelastic model describing nutrient transport and cell stresses within a cyclically strained collagen hydrogel. <i>Biophysical Journal</i> , 2013 , 105, 2188-98	2.9	7
176	Differential and synergistic effects of mechanical stimulation and growth factor presentation on vascular wall function. 2013 , 34, 7281-91		14
175	Non-invasive assessment of elastic modulus of arterial constructs during cell culture using ultrasound elasticity imaging. 2013 , 39, 2103-15		15
174	Natural Polymers in Tissue Engineering Applications. 2013 , 385-425		15
173	Collagen--emerging collagen based therapies hit the patient. <i>Advanced Drug Delivery Reviews</i> , 2013 , 65, 429-56	18.5	205
172	The "artificial artery" as in vitro perfusion model. 2013 , 8, e57227		20
171	Ureteral tissue engineering: where are we and how to proceed?. 2013 , 19, 413-9		21
170	An airway smooth muscle cell niche under physiological pulsatile flow culture using a tubular dense collagen construct. 2013 , 34, 1954-66		25

169	Influence of cyclic mechanical stretch and tissue constraints on cellular and collagen alignment in fibroblast-derived cell sheets. 2013 , 19, 386-95	40
168	Multiscale mechanical simulations of cell compacted collagen gels. 2013 , 135, 71004	28
167	Strain magnitude-dependent calcific marker expression in valvular and vascular cells. 2013 , 197, 372-83	14
166	Collagen-based tissue repair composite. 183-202	
165	Hydrogel scaffolds for regenerative medicine. 295-316	4
164	. 2014 ,	3
163	Toward the directed self-assembly of engineered tissues. 2014 , 5, 507-26	17
162	Impact of cyclic stretch on induced elastogenesis within collagenous conduits. 2014 , 20, 1403-15	22
161	Vascular Tissue Engineering: Recent Advances in Small Diameter Blood Vessel Regeneration. 2014 , 2014, 1-27	79
160	Polymers for medical and tissue engineering applications. 2014 , 89, 1793-1810	93
159	Synergy between Rho signaling and matrix density in cyclic stretch-induced stress fiber organization. 2014 , 10, 1876-85	24
158	Effects of photochemical riboflavin-mediated crosslinks on the physical properties of collagen constructs and fibrils. 2014 , 25, 11-21	48
157	Development of a Small Diameter Vascular Graft Using the Human Amniotic Membrane. 2014 , 5, 96-109	12
156	Strategies for directing the structure and function of three-dimensional collagen biomaterials across length scales. 2014 , 10, 1488-501	143
155	25th anniversary article: supramolecular materials for regenerative medicine. 2014 , 26, 1642-59	248
154	Cytocompatibility of a silk fibroin tubular scaffold. 2014 , 34, 429-36	51
153	The Role of Mechanical Cues in Regulating Cellular Activities and Guiding Tissue Development. 2014 , 45-58	
152	Strategies and Challenges for Bio-inspired Cardiovascular Biomaterials. 2014 , 227-257	

151	Bioreactors for Tissue Engineering Purposes. 2014 , 177-185	5
150	Engineering of arteries in vitro. 2014 , 71, 2103-18	88
149	Tissue engineering in the gut: developments in neuromusculature. 2014 , 146, 1614-24	31
148	Microfluidic techniques for development of 3D vascularized tissue. 2014 , 35, 7308-25	215
147	In vitro evaluations of electrospun nanofiber scaffolds composed of poly(e-caprolactone) and polyethylenimine. 2015 , 30, 1808-1819	19
146	Chinese-Noodle-Inspired Muscle Myofiber Fabrication. 2015 , 25, 5999-6008	48
145	Hemodynamics of the renal artery ostia with implications for their structural development and efficiency of flow. 2015 , 52, 257-68	1
144	Scaffolds in vascular regeneration: current status. 2015 , 11, 79-91	55
143	Potential of Newborn and Adult Stem Cells for the Production of Vascular Constructs Using the Living Tissue Sheet Approach. 2015 , 2015, 168294	8
142	Mechanobiological stimulation of tissue engineered blood vessels. 227-244	1
141	A microfabricated magnetic actuation device for mechanical conditioning of arrays of 3D microtissues. 2015 , 15, 2496-503	22
140	Development of a Bioreactor to Culture Tissue Engineered Ureters Based on the Application of Tubular OPTIMAIX 3D Scaffolds. 2015 , 95, 106-13	5
139	Immunomodulatory polymeric scaffold enhances extracellular matrix production in cell co-cultures under dynamic mechanical stimulation. 2015 , 24, 74-86	30
138	An automated fabrication strategy to create patterned tubular architectures at cell and tissue scales. 2015 , 7, 025003	16
137	Differential effects of culture senescence and mechanical stimulation on the proliferation and leiomyogenic differentiation of MSC from different sources: implications for engineering vascular grafts. 2015 , 21, 1364-75	32
136	Insoluble elastin reduces collagen scaffold stiffness, improves viscoelastic properties, and induces a contractile phenotype in smooth muscle cells. 2015 , 73, 296-307	86
135	A method for mechanical characterization of small blood vessels and vascular grafts. 2015 , 55, 1591-1595	12
134	Longitudinal Stretching for Maturation of Vascular Tissues Using Magnetic Forces. 2016 , 3,	3

133	Engineering biosynthetic cell encapsulation systems. 2016 , 205-239		19
132	Methods in Mechanical Testing of Arterial Tissue: A Review. 2016 , 52, 380-399		27
131	Unraveling the role of mechanical stimulation on smooth muscle cells: A comparative study between 2D and 3D models. 2016 , 113, 2254-63		29
130	Cell layer-electrospun mesh composites for coronary artery bypass grafts. 2016 , 104, 2200-9		4
129	Rapid Fabrication of a Cell-Seeded Collagen Gel-Based Tubular Construct that Withstands Arterial Pressure : Rapid Fabrication of a Gel-Based Media Equivalent. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 3384-3397	4-7	7
128	Mechanobiological Control of Cell Fate for Applications in Cardiovascular Regenerative Medicine. 2016 , 219-253		
127	Mimicking Form and Function of Native Small Diameter Vascular Conduits Using Mulberry and Non-mulberry Patterned Silk Films. 2016 , 8, 15874-88		57
126	Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model. 2016 , 62, 619-635		17
125	Cellulose Nanofibril Hydrogel Tubes as Sacrificial Templates for Freestanding Tubular Cell Constructs. 2016 , 17, 905-13		56
124	Microstructure-dependent mechanical properties of electrospun core-shell scaffolds at multi-scale levels. 2016 , 59, 207-219		14
123	Protein-Based Hydrogels. 2016 , 73-104		5
122	Biomechanical conditioning of tissue engineered heart valves: Too much of a good thing?. <i>Advanced Drug Delivery Reviews</i> , 2016 , 96, 161-75	18.5	47
121	The Tissue-Engineered Vascular Graft-Past, Present, and Future. 2016 , 22, 68-100		411
120	Cyclic Stretch and Perfusion Bioreactor for Conditioning Large Diameter Engineered Tissue Tubes. <i>Annals of Biomedical Engineering</i> , 2016 , 44, 1785-97	4-7	7
119	Contact-free monitoring of vessel graft stiffness - proof of concept as a tool for vascular tissue engineering. 2017 , 11, 2828-2835		2
118	Microstructured human fibroblast-derived extracellular matrix scaffold for vascular media fabrication. 2017 , 11, 2479-2489		5
117	The effect of a cyclic uniaxial strain on urinary bladder cells. 2017 , 35, 1531-1539		9
116	Mechanically Oriented 3D Collagen Hydrogel for Directing Neurite Growth. 2017 , 23, 403-414		50

115	A Dual-Mode Bioreactor System for Tissue Engineered Vascular Models. <i>Annals of Biomedical Engineering</i> , 2017 , 45, 1496-1510	4-7	15
114	Creating homogenous strain distribution within 3D cell-encapsulated constructs using a simple and cost-effective uniaxial tensile bioreactor: Design and validation study. 2017 , 114, 1878-1887		12
113	Fabrication of Hybrid Collagen Aerogels Reinforced with Wheat Grass Bioactives as Instructive Scaffolds for Collagen Turnover and Angiogenesis for Wound Healing Applications. 2017 , 9, 16939-16950		47
112	Estimation of the physiological mechanical conditioning in vascular tissue engineering by a predictive fluid-structure interaction approach. 2017 , 20, 1077-1088		8
111	Mechanical induction of bi-directional orientation of primary porcine bladder smooth muscle cells in tubular fibrin-poly(vinylidene fluoride) scaffolds for ureteral and urethral repair using cyclic and focal balloon catheter stimulation. 2017 , 32, 321-330		9
110	J-shaped stress-strain diagram of collagen fibers: Frame tension of triangulated surfaces with fixed boundaries. 2017 , 95, 042411		10
109	Arterial graft with elastic layer structure grown from cells. 2017 , 7, 140		26
108	Biomaterials and Modifications in the Development of Small-Diameter Vascular Grafts. 2017 , 3, 712-723		47
107	Protein-Based Hydrogels Derived from Industrial Byproducts Containing Collagen, Keratin, Zein and Soy. 2017 , 8, 285-300		20
106	Biocompatibility of biodegradable medical polymers. 2017 , 379-414		6
105	Perivascular cells and tissue engineering: Current applications and untapped potential. 2017 , 171, 83-92		46
104	4.7 Real-Time Analysis of Biomaterials Function. 2017 , 85-100		
103	Collagen hydrogel-based scaffolds for vascular tissue regeneration: Mechanical and viscoelastic characterization. 2017 , 397-439		3
102	6.14 Cardiovascular Tissue Engineering ?. 2017 , 236-255		1
101	Growth Modelling Promoting Mechanical Stimulation of Smooth Muscle Cells of Porcine Tubular Organs in a Fibrin-PVDF Scaffold. 2018 , 209-232		1
100	Viscoelastic properties of multi-layered cellularized vascular tissues fabricated from collagen gel. 2018 , 80, 155-163		9
99	A Cost-Effective Culture System for the In Vitro Assembly, Maturation, and Stimulation of Advanced Multilayered Multiculture Tubular Tissue Models. 2018 , 13, 1700359		15
98	Incrementing the Frequency of Dynamic Strain on SMC-Cellularised Collagen-Based Scaffolds Affects Extracellular Matrix Remodeling and Mechanical Properties. 2018 , 4, 3759-3767		0

97	Development of biomimetic thermoplastic polyurethane/fibroin small-diameter vascular grafts via a novel electrospinning approach. 2018 , 106, 985-996	31
96	Development of a Platform for Studying 3D Astrocyte Mechanobiology: Compression of Astrocytes in Collagen Gels. <i>Annals of Biomedical Engineering</i> , 2018 , 46, 365-374	4-7 9
95	Enhanced Collagen Production from Human Dermal Fibroblasts on Poly(glycerol sebacate)-methacrylate Scaffolds. 2018 ,	1
94	Meso-scale topological cues influence extracellular matrix production in a large deformation, elastomeric scaffold model. 2018 , 14, 8483-8495	3
93	A vacuum-actuated microtissue stretcher for long-term exposure to oscillatory strain within a 3D matrix. 2018 , 20, 43	11
92	Bioengineering Approaches for Bladder Regeneration. 2018 , 19,	44
91	Mathematical Modeling and Simulations for Large-Strain J-Shaped Diagrams of Soft Biological Materials. 2018 , 10,	10
90	Dynamic properties of hydrogels and fiber-reinforced hydrogels. 2018 , 85, 194-200	25
89	Increasing Cell Seeding Density Improves Elastin Expression and Mechanical Properties in Collagen Gel-Based Scaffolds Cellularized with Smooth Muscle Cells. 2019 , 14, e1700768	7
88	Physical Stress as a Factor in Tissue Growth and Remodeling. 2019 , 417-436	
87	Fabrication Techniques for Vascular and Vascularized Tissue Engineering. 2019 , 8, e1900742	35
86	Indirect Burst Pressure Measurements for the Mechanical Assessment of Biological Vessels. 2019 , 25, 472-478	5
85	Rapid fabrication of reinforced and cell-laden vascular grafts structurally inspired by human coronary arteries. 2019 , 10, 3098	25
84	Combination of inductive effect of lipopolysaccharide and in situ mechanical conditioning for forming an autologous vascular graft in vivo. 2019 , 9, 10616	2
83	Collagen-Based Tissue Engineering Strategies for Vascular Medicine. 2019 , 7, 166	64
82	Tissue-engineering of vascular grafts containing endothelium and smooth-muscle using triple-coaxial cell printing. 2019 , 6, 041402	52
81	Image-based analysis of uniaxial ring test for mechanical characterization of soft materials and biological tissues. 2019 , 15, 3353-3361	4
80	Bioengineered Kidney and Bladder. 2019 , 432-443	

79	Electrochemical fabrication of a biomimetic elastin-containing bi-layered scaffold for vascular tissue engineering. 2018 , 11, 015007	17
78	Use of an in vitro dynamic culture system to assess flow shear forces upon cell adhesion within different structures. 2019 , 94, 869-878	1
77	Computational hemodynamics study of anterior communicating artery aneurysm associated with fenestration: A case report. 2020 , 19, 100563	1
76	Influence of multi-axial dynamic constraint on cell alignment and contractility in engineered tissues. 2020 , 112, 104024	1
75	Bioengineered human blood vessels. 2020 , 370,	40
74	Tissue engineered autologous cartilage-bone grafts for temporomandibular joint regeneration. 2020 , 12,	16
73	Tubular Fibrous Scaffolds Functionalized with Tropoelastin as a Small-Diameter Vascular Graft. 2020 , 21, 3582-3595	6
72	Tubular Silk Fibroin/Gelatin-Tyramine Hydrogel with Controllable Layer Structure and Its Potential Application for Tissue Engineering. 2020 , 6, 6896-6905	5
71	Tissue engineering: from the bedside to the bench and back to the bedside. 2020 , 36, 1123-1133	7
70	Biofabrication of a Functional Tubular Construct from Tissue Spheroids Using Magnetoacoustic Levitational Directed Assembly. 2020 , 9, e2000721	7
69	Considerations in the Development of Small-Diameter Vascular Graft as an Alternative for Bypass and Reconstructive Surgeries: A Review. 2020 , 11, 495-521	25
68	Deep learning for fabrication and maturation of 3D bioprinted tissues and organs. 2020 , 15, 340-358	39
67	Current challenges and future trends in manufacturing small diameter artificial vascular grafts in bioreactors. 2020 , 21, 377-403	5
66	From arteries to capillaries: approaches to engineering human vasculature. 2020 , 30, 1910811	28
65	Pro-elastogenic effects of mesenchymal stem cell derived smooth muscle cells in a 3D collagenous milieu. 2020 , 105, 180-190	3
64	Hydrogels as biodegradable biopolymer formulations. 2020 , 561-585	3
63	Bioprinting of Small-Diameter Blood Vessels. 2021 , 7, 832-844	7
62	Stem cell-based small-diameter vascular grafts in dynamic culture. 2021 , 62, 151-163	5

61	Densified Collagen Tubular Grafts for Human Tissue Replacement and Disease Modelling Applications.	
60	The mechanical characterization of blood vessels and their substitutes in the continuous quest for physiological-relevant performances. A critical review. 2021 , 10, 100106	13
59	3D Bioprinting of Vascularized Tissues for and Applications. 2021 , 9, 664188	10
58	Biofabrication of tissue engineering vascular systems. 2021 , 5, 021507	8
57	Mechanical stimulation induces rapid fibroblast proliferation and accelerates the early maturation of human skin substitutes. 2021 , 273, 120779	12
56	Investigation of gel formation peculiarities and properties of hydrogels obtained by the structuring of acrylamide prepolymers. 2021 , 4, 179-185	
55	A Near-Infrared Organic Fluorescent Probe for Broad Applications for Blood Vessels Imaging by High-Throughput Screening via 3D-Blood Vessel Models.. 2021 , 5, e2100338	3
54	Cellulose and its derivatives: towards biomedical applications. 2021 , 28, 1893-1931	77
53	Chapter 8:Hydrogel Processing Techniques and Vascular Tissue Engineering. 2021 , 207-237	
52	A Dynamic Straining Bioreactor for Collagen-Based Tissue Engineering. 2005 , 209-219	2
51	Biomimetic Collagen Tissues: Collagenous Tissue Engineering and Other Applications. 2008 , 475-504	14
50	Bioreactor technology in cardiovascular tissue engineering. 2009 , 112, 29-37	8
49	Fibrocartilage Tissue Engineering. 2011 , 363-387	1
48	Nanofiber composites in blood vessel tissue engineering. 2017 , 483-506	7
47	Small-Diameter Vascular Grafts. 2002 , 905-913	3
46	Prosthetic Grafts. 2010 , 1335-1349	3
45	Artificial small-diameter blood vessels: materials, fabrication, surface modification, mechanical properties, and bioactive functionalities. 2020 , 8, 1801-1822	31
44	Rapidly formed stable and aligned dense collagen gels seeded with Schwann cells support peripheral nerve regeneration. 2020 , 17, 046036	12

- 43 Tissue Engineering: The Hope, the Hype, and the Future. *Tissue Engineering*, **2006**, 060518070820001 1
- 42 Fibrillar Fibrin Gels. **2005**, 61-70 3
- 41 GROWTH AND CHARACTERIZATION OF A TISSUE-ENGINEERED CONSTRUCT FROM HUMAN CORONARY ARTERY SMOOTH MUSCLE CELLS. **2020**, 19, 85-95 1
- 40 Advancing tissue-engineered vascular grafts via their endothelialization and mechanical conditioning. **2020**, 61, 555-576 6
- 39 Mechano-regulated cell-cell signaling in the context of cardiovascular tissue engineering. **2021**, 1 0
- 38 Blood Vessel Substitute. **2002**, 891-903 2
- 37 Engineering Design Aspects of Tissue Engineering. **2003**, 71-82
- 36 CELL TRANSPLANTATION: FIRST US CLINICAL EXPERIENCE. **2003**, 285-292
- 35 Engineered Blood Vessel Substitutes. **2005**, 371-384
- 34 Bioreactors for Tissue Engineering: Focus on Mechanical Constraints. A Comparative Review. *Tissue Engineering*, **2006**, 060913044658038
- 33 Mechanical Loading Modulates the Differentiation State of Vascular Smooth Muscle Cells. *Tissue Engineering*, **2006**, 061020070827002
- 32 Engineering Smooth Muscle. **2007**, 24-1-24-14
- 31 Tissue Engineered Vascular Grafts. **2007**, 26-1-26-13
- 30 Tissue Engineering Bioreactors. **2007**, 15-1-15-18
- 29 Feasibility Study of a Novel Urinary Bladder Bioreactor. *Tissue Engineering*, 110306233438005
- 28 Engineering of Small Diameter Vessels. **2008**, 1000-1019
- 27 Standards for the in vitro fabrication of heart valves using human umbilical cord cells. **2010**, 564-573
- 26 Rapid Self-Assembly of Tubular Arterial Media Layer from Smooth Muscle Cells in Transient Fibrin Gel. *Journal of Tissue Science & Engineering*, **2011**, 10,

25 Regenerating Blood Vessels. **2011**, 393-402

24 Molecular Analysis in Mechanobiology. **2011**, 45-72

23 Functionally-Graded Biomimetic Vascular Grafts for Enhanced Tissue Regeneration and Bio-integration. 235-273

22 Fabrication and Application of Gradient Hydrogels in Cell and Tissue Engineering. **2012**, 55-78

21 Nanoscaffolds and Other Nano-Architectures for Tissue Engineering Related Applications. **2014**, 195-227

20 Traction Microscopy. **2015**, 93-114

19 Blood Vessel Substitutes. 998-1008

18 Gels: Fibrillar Fibrin. 3593-3599

17 Cardiovascular Tissue Engineering: Polymeric Starter Matrices for. 1-25

16 Blood Vessel Substitutes. **2017**, 237-247

15 Gels: Fibrillar Fibrin. **2017**, 616-622

14 Novel Bioreactors for Mechanistic Studies of Engineered Heart Valves. **2018**, 319-335

13 Off-the-Shelf Tissue-Engineered Vascular Conduits: Clinical Translation. **2020**, 1-44

12 Small-Diameter Engineered Arteries: The Gel Approach. **2020**, 1-12

1

11 Influence of multi-axial dynamic constraint on cell alignment and contractility in engineered tissues.

10 Small-Diameter Engineered Arteries: The Gel Approach. **2020**, 365-376

9 Off-the-Shelf Tissue-Engineered Vascular Conduits: Clinical Translation. **2020**, 489-531

o

8 Noninvasive determination of perfused blood vessel dimensions using a pressure-diameter relationship.

7	Multiscale mechanobiology: coupling models of adhesion kinetics and nonlinear tissue mechanics.. <i>Biophysical Journal</i> , 2022 ,	2.9	0
6	Physiologically relevant platform for an advanced in vitro model of the vascular wall: focus on in situ fabrication and mechanical maturation. <i>In Vitro Models</i> , 2022 , 1, 179		
5	Organ-specific endothelial cell heterogeneity and its impact on regenerative medicine and biomedical engineering applications.. <i>Advanced Drug Delivery Reviews</i> , 2022 , 114323	18.5	1
4	Human endothelial cells form an endothelium in freestanding collagen hollow filaments fabricated by direct extrusion printing. 2022 , 8, 100067		0
3	Control of hydrostatic pressure and osmotic stress in 3D cell culture for mechanobiological studies. 2023 , 145, 213241		0
2	Densified collagen tubular grafts for human tissue replacement and disease modelling applications. 2023 , 145, 213245		0
1	Polymeric DNA Hydrogels and Their Applications in Drug Delivery for Cancer Therapy. 2023 , 9, 239		0