Scott J Hollister

List of Publications by Year
in descending order

186	19,544	10986	11052
papers	citations	71 h-index	137 g-index

193	193	193	17168
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Repair of critical-size porcine craniofacial bone defects using a collagenâ€“polycaprolactone composite biomaterial. Biofabrication, 2022, 14, 014102.	7.1	12
2	Nonlinear Viscoelastic Properties of 3D-Printed Tissue Mimicking Materials and Metrics to Determine the Best Printed Material Match to Tissue Mechanical Behavior. Frontiers in Mechanical Engineering, 2022, 8, .	1.8	1
3	Finite element analysis of esophageal atresia repair with biodegradable polymer sleeves. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 133, 105349.	3.1	1
4	Hybrid Threeâ€Dimensionalâ€“Printed Ear Tissue Scaffold With Autologous Cartilage Mitigates Soft Tissue Complications. Laryngoscope, 2021, 131, 1008-1015.	2.0	10
5	Preclinical assessment of clinically streamlined, <scp>3Dâ€printed</scp>, biocompatible singleâ€and twoâ€stage tissue scaffolds for ear reconstruction. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 394-400.	3.4	4
6	Evaluating Directional Dependency of Selective Laser Sintered Patient Specific Biodegradable Devices to Improve Predictive Modeling and Design Verification. Annals of Biomedical Engineering, 2021, 49, 2579-2589.	2.5	2
7	Development of Photocrosslinked Poly(glycerol dodecanedioate)â€”A Biodegradable Shape Memory Polymer for 3Dâ€Printed Tissue Engineering Applications. Advanced Engineering Materials, 2021, 23, 2100219.	3.5	14
8	Tissue-engineered vascularized patient-specific temporomandibular joint reconstruction in a Yucatan pig model. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 2021, 132, 145-152.	0.4	4
9	Tracheal agenesis: Esophageal airway support with a 3-dimensionalâ€“printed bioresorbable splint. JTCVS Techniques, 2021, 10, 563-568.	0.4	4
10	Early preclinical evaluation of a novel, computer aided designed, 3D printed, bioresorbable posterior cricoid scaffold. International Journal of Pediatric Otorhinolaryngology, 2021, 150, 110892.	1.0	1
11	3D bioprinting of a trachea-mimetic cellular construct of a clinically relevant size. Biomaterials, 2021, 279, 121246.	11.4	25
12	Designing a 3D Printing Based Auxetic Cardiac Patch with hiPSC-CMs for Heart Repair. Journal of Cardiovascular Development and Disease, 2021, 8, 172.	1.6	3
13	Evaluation of human nasal cartilage nonlinear and rate dependent mechanical properties. Journal of Biomechanics, 2020, 100, 109549.	2.1	5
14	Modulating nonlinear elastic behavior of biodegradable shape memory elastomer and small intestinal submucosa(SIS) composites for soft tissue repair. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103965.	3.1	12
15	Designing Biodegradable Shape Memory Polymers for Tissue Repair. Advanced Functional Materials, 2020, 30, 2002014.	14.9	49
16	Anatomic-Based Design, Manufacturing, and Preclinical Assessment of a Novel 3D-Printed Bioscaffold for Total Nasal Reconstruction. Facial Plastic Surgery and Aesthetic Medicine, 2020, 22, 486-488.	0.9	2
17	Wireless sensor enables longitudinal monitoring of regenerative niche mechanics during rehabilitation that enhance bone repair. Bone, 2020, 135, 115311.	2.9	21
18	Degradation properties of a biodegradable shape memory elastomer, poly(glycerol dodecanoate), for soft tissue repair. PLoS ONE, 2020, 15, e0229112.	2.5	19

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19	3Dâ€printed, externallyâ€implanted, bioresorbable airway splints for severe tracheobronchomalacia. Laryngoscope, 2019, 129, 1763-1771.	2.0	63
20	Tissue Engineering and 3-Dimensional Modeling for Facial Reconstruction. Facial Plastic Surgery Clinics of North America, 2019, 27, 151-161.	1.5	31
21	Coâ€culture of adiposeâ€derived stem cells and chondrocytes on threeâ€dimensionally printed bioscaffolds for craniofacial cartilage engineering. Laryngoscope, 2018, 128, E251-E257.	2.0	31
22	Auricular reconstruction from rib to 3D printing. Journal of 3D Printing in Medicine, 2018, 2, 35-41.	2.0	22
23	A Mineralized Collagen-Polycaprolactone Composite Promotes Healing of a Porcine Mandibular Defect. Tissue Engineering - Part A, 2018, 24, 943-954.	3.1	23
24	Design and Structureâ€“Function Characterization of 3D Printed Synthetic Porous Biomaterials for Tissue Engineering. Advanced Healthcare Materials, 2018, 7, e1701095.	7.6	111
25	Regulatory interfaces surrounding the growing field of additive manufacturing of medical devices and biologic products. Journal of Clinical and Translational Science, 2018, 2, 301-304.	0.6	10
26	Quality Control of 3D Printed Resorbable Implants: The 3D Printed Airway Splint Example. , 2018, , 131-160.		2
27	Pore architecture effects on chondrogenic potential of patient-specific 3-dimensionally printed porous tissue bioscaffolds for auricular tissue engineering. International Journal of Pediatric Otorhinolaryngology, 2018, 114, 170-174.	1.0	27
28	Quality Control of 3D Printed Resorbable Implants: The 3D Printed Airway Splint Example. , 2018, , 1-30.		0
29	Treatment of Severe Acquired Tracheomalacia With a Patient-Specific, 3D-Printed, Permanent Tracheal Splint. JAMA Otolaryngology - Head and Neck Surgery, 2017, 143, 523.	2.2	24
30	Additive manufacturing of polymer melts for implantable medical devices and scaffolds. Biofabrication, 2017, 9, 012002.	7.1	145
31	Computational modeling of airway instability and collapse in tracheomalacia. Respiratory Research, 2017, 18, 62.	3.6	16
32	Tailoring the physicochemical and shape memory properties of the biodegradable polymer poly(glycerol dodecanoate) via curing conditions. Journal of Biomedical Materials Research - Part A, 2017, 105, 1618-1623.	4.0	26
33	Paediatric devices that grow up. Nature Biomedical Engineering, 2017, 1, 777-778.	22.5	5
34	Advances in 3-Dimensional Printing in Otolaryngology. JAMA Otolaryngology - Head and Neck Surgery, 2017, 143, 178.	2.2	36
35	Integration of 3D Printed and Micropatterned Polycaprolactone Scaffolds for Guidance of Oriented Collagenous Tissue Formation In Vivo. Advanced Healthcare Materials, 2016, 5, 676-687.	7.6	95
36	Evaluation of multi-scale mineralized collagenâ€“polycaprolactone composites for bone tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 318-327.	3.1	45

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37	Integrating Image-Based Design and 3D Biomaterial Printing To Create Patient Specific Devices within a Design Control Framework for Clinical Translation. ACS Biomaterials Science and Engineering, 2016, 2, 1827-1836.	5.2	50
38	3D Printing of Thermoplastics with Higher Strength Using SWIR-Supercontinuum Laser. , 2016, , .		1
39	Biomechanical evaluation of human and porcine Auricular cartilage. Laryngoscope, 2015, 125, E262-8.	2.0	39
40	Biomineral Coating Increases Bone Formation by Ex Vivo BMPâ€7 Gene Therapy in Rapid Prototyped Poly(<scp>l</scp>â€lactic acid) (PLLA) and Poly(Îµâ€caprolactone) (PCL) Porous Scaffolds. Advanced Healthcare Materials, 2015, 4, 621-632.	7.6	26
41	Bone Morphogenetic Protein-2 Adsorption onto Poly-É›-caprolactone Better Preserves Bioactivity In Vitro and Produces More Bone In Vivo than Conjugation Under Clinically Relevant Loading Scenarios. Tissue Engineering - Part C: Methods, 2015, 21, 489-498.	2.1	40
42	Design Control for Clinical Translation of 3D Printed Modular Scaffolds. Annals of Biomedical Engineering, 2015, 43, 774-786.	2.5	84
43	Bioresorbable scaffolds for bone tissue engineering: Optimal design, fabrication, mechanical testing and scale-size effects analysis. Medical Engineering and Physics, 2015, 37, 287-296.	1.7	63
44	3D-printed Bioresorbable Scaffold for Periodontal Repair. Journal of Dental Research, 2015, 94, 153S-157S.	5.2	221
45	Mitigation of tracheobronchomalacia with 3D-printed personalized medical devices in pediatric patients. Science Translational Medicine, 2015, 7, 285ra64.	12.4	372
46	Dual Delivery of EPO and BMP2 from a Novel Modular Poly-É›-Caprolactone Construct to Increase the Bone Formation in Prefabricated Bone Flaps. Tissue Engineering - Part C: Methods, 2015, 21, 889-897.	2.1	30
47	Regulatory Considerations in the Design and Manufacturing of Implantable 3Dâ€Printed Medical Devices. Clinical and Translational Science, 2015, 8, 594-600.	3.1	192
48	Design and Quality Control for Translating 3D-Printed Scaffolds. , 2015, , 43-59.		0
49	Antenatal Three-Dimensional Printing of Aberrant Facial Anatomy. Pediatrics, 2015, 136, e1382-e1385.	2.1	49
50	Static and dynamic fatigue behavior of topology designed and conventional 3D printed bioresorbable PCL cervical interbody fusion devices. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 49, 332-342.	3.1	22
51	Computer Aidedâ€“Designed, 3â€Dimensionally Printed Porous Tissue Bioscaffolds for Craniofacial Soft Tissue Reconstruction. Otolaryngology - Head and Neck Surgery, 2015, 152, 57-62.	1.9	109
52	Treatment of Severe Porcine Tracheomalacia With a 3-Dimensionally Printed, Bioresorbable, External Airway Splint. JAMA Otolaryngology - Head and Neck Surgery, 2014, 140, 66.	2.2	87
53	Comparison of reconstructive procedures for glenoid bone loss associated with recurrent anterior shoulder instability. Journal of Shoulder and Elbow Surgery, 2014, 23, 1113-1119.	2.6	35
54	Optimization of scaffold design for bone tissue engineering: A computational and experimental study. Medical Engineering and Physics, 2014, 36, 448-457.	1.7	127

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55	Image-Based, Fiber Guiding Scaffolds: A Platform for Regenerating Tissue Interfaces. Tissue Engineering - Part C: Methods, 2014, 20, 533-542.	2.1	96
56	High-Frequency Ultrasonic Imaging of Growth and Development in Manufactured Engineered Oral Mucosal Tissue Surfaces. Ultrasound in Medicine and Biology, 2014, 40, 2244-2251.	1.5	1
57	Mandibular reconstruction with a bioactive-coated cementless Ti6Al4V modular endoprosthesis in Macaca fascicularis. International Journal of Oral and Maxillofacial Surgery, 2014, 43, 758-768.	1.5	12
58	Controlled Multiple Growth Factor Delivery from Bone Tissue Engineering Scaffolds via Designed Affinity. Tissue Engineering - Part A, 2014, 20, 2077-2087.	3.1	52
59	Effects of designed PLLA and 50:50 PLGA scaffold architectures on bone formation in vivo. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 99-111.	2.7	46
60	Porous Biodegradable Lumbar Interbody Fusion Cage Design and Fabrication Using Integrated Global-Local Topology Optimization With Laser Sintering. Journal of Biomechanical Engineering, 2013, 135, 101013-8.	1.3	61
61	Anatomic considerations of transclavicular-transcoracoid drilling for coracoclavicular ligament reconstruction. Journal of Shoulder and Elbow Surgery, 2013, 22, 137-144.	2.6	71
62	Bioresorbable Airway Splint Created with a Three-Dimensional Printer. New England Journal of Medicine, 2013, 368, 2043-2045.	27.0	514
63	Use of Micro-Computed Tomography to Nondestructively Characterize Biomineral Coatings on Solid Freeform Fabricated Poly (L-Lactic Acid) and Poly (É›-Caprolactone) Scaffolds In Vitro and In Vivo. Tissue Engineering - Part C: Methods, 2013, 19, 507-517.	2.1	13
64	Characterizing Morphology and Nonlinear Elastic Properties of Normal and Thermally Stressed Engineered Oral Mucosal Tissues Using Scanning Acoustic Microscopy. Tissue Engineering - Part C: Methods, 2013, 19, 345-351.	2.1	8
65	Subcutaneous tissue response to titanium, poly(Ïµâ€caprolactone), and carbonateâ€substituted hydroxyapatiteâ€coated poly(Ïµâ€caprolactone) plates: A rabbit study. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2258-2266.	4.0	7
66	Inorganic coatings for optimized non-viral transfection of stem cells. Scientific Reports, 2013, 3, 1567.	3.3	38
67	Strut size and surface area effects on long-term in vivo degradation in computer designed poly(l-lactic acid) three-dimensional porous scaffolds. Acta Biomaterialia, 2012, 8, 2568-2577.	8.3	48
68	Permeability analysis of scaffolds for bone tissue engineering. Journal of Biomechanics, 2012, 45, 938-944.	2.1	178
69	A paradigm for the development and evaluation of novel implant topologies for bone fixation: Implant design and fabrication. Journal of Biomechanics, 2012, 45, 2241-2247.	2.1	27
70	A paradigm for the development and evaluation of novel implant topologies for bone fixation: In vivo evaluation. Journal of Biomechanics, 2012, 45, 2651-2657.	2.1	11
71	Threeâ€dimensional polycaprolactone scaffoldâ€conjugated bone morphogenetic proteinâ€2 promotes cartilage regeneration from primary chondrocytes in vitro and in vivo without accelerated endochondral ossification. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2088-2096.	4.0	41
72	Tissue engineering bone-ligament complexes using fiber-guiding scaffolds. Biomaterials, 2012, 33, 137-145.	11.4	207

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73	Controllable mineral coatings on PCL scaffolds as carriers for growth factor release. Biomaterials, 2012, 33, 713-721.	11.4	87
74	Mechanical characterization and non-linear elastic modeling of poly(glycerol sebacate) for soft tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 11, 3-15.	3.1	43
75	SU-C-218-05: A CFD-Based Approach to Validating Flow in a Prototype Dynamic Perfusion Phantom for Dynamic Contrast Fnhanced (DCE) Imaging. Medical Physics, 2012, 39, 3609-3609.	3.0	0
76	Non-linear stress-strain measurements of ex vivo produced oral mucosal equivalent (EVPOME) compared to normal oral mucosal and skin tissue. , 2011, 2011, 286-9.		2
77	Future Prospects for Periodontal Bioengineering Using Growth Factors. Clinical Advances in Periodontics, 2011, 1, 88-94.	0.7	7
78	Scaffold Translation: Barriers Between Concept and Clinic. Tissue Engineering - Part B: Reviews, 2011, 17, 459-474.	4.8	173
79	Strategies for regeneration of the bone using porcine adult adipose-derived mesenchymal stem cells. Theriogenology, 2011, 75, 1381-1399.	2.1	75
80	Nonlinear Elastic Scaffold Design, Modeling and Fabrication for Soft Tissue Engineering. Computational Methods in Applied Sciences (Springer), 2011, , 35-53.	0.3	3
81	Comparison of Scanning Acoustic Microscopy and Histology Images in Characterizing Surface Irregularities Among Engineered Human Oral Mucosal Tissues. Ultrasound in Medicine and Biology, 2011, 37, 1734-1742.	1.5	10
82	Acoustic Microscopy Analyses to Determine Good vs. Failed Tissue Engineered Oral Mucosa Under Normal or Thermally Stressed Culture Conditions. Annals of Biomedical Engineering, 2011, 39, 44-52.	2.5	9
83	Hierarchical bioactive materials for tissue reconstruction: Integrated design and manufacturing challenges. Jom, 2011, 63, 56-65.	1.9	8
84	Three-dimensional poly(1,8-octanediolâ€“co-citrate) scaffold pore shape and permeability effects on sub-cutaneous in vivo chondrogenesis using primary chondrocytes. Acta Biomaterialia, 2011, 7, 505-514.	8.3	52
85	Time course investigation of intervertebral disc degeneration produced by needle-stab injury of the rat caudal spine. Journal of Neurosurgery: Spine, 2011, 15, 404-413.	1.7	44
86	Effect of Polycaprolactone Scaffold Permeability on Bone Regeneration In Vivo. Tissue Engineering - Part A, 2011, 17, 1831-1839.	3.1	142
87	SU-E-T-97: Controllable Fluid Flow Using Polymer Compartments within a Dynamic Contrast Enhanced (DCE) Imaging Phantom Design for Quality Assurance. Medical Physics, 2011, 38, 3508-3508.	3.0	0
88	Topology optimization of three dimensional tissue engineering scaffold architectures for prescribed bulk modulus and diffusivity. Structural and Multidisciplinary Optimization, 2010, 42, 633-644.	3.5	96
89	A comparison of the influence of material on in vitro cartilage tissue engineering with PCL, PGS, and POC 3D scaffold architecture seeded with chondrocytes. Biomaterials, 2010, 31, 4304-4312.	11.4	117
90	Experimental and computational characterization of designed and fabricated 50:50 PLGA porous scaffolds for human trabecular bone applications. Journal of Materials Science: Materials in Medicine, 2010, 21, 2371-2383.	3.6	43

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91	The pore size of polycaprolactone scaffolds has limited influence on bone regeneration in an in vivo model. Journal of Biomedical Materials Research - Part A, 2010, 92A, 359-368.	4.0	212
92	Tailoring the mechanical properties of 3Dâ€designed poly(glycerol sebacate) scaffolds for cartilage applications. Journal of Biomedical Materials Research - Part A, 2010, 94A, 9-18.	4.0	167
93	Controlled nucleation of hydroxyapatite on alginate scaffolds for stem cellâ€based bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 95A, 222-234.	4.0	112
94	Mechanical, permeability, and degradation properties of 3D designed poly(1,8) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (octanediol Research - Part B Applied Biomaterials, 2010, 93B, 141-149.	3.4	45
95	Differential effects of designed scaffold permeability on chondrogenesis by chondrocytes and bone marrow stromal cells. Biomaterials, 2010, 31, 279-287.	11.4	109
96	Biomimetic hybrid scaffolds for engineering human tooth-ligament interfaces. Biomaterials, 2010, 31, 5945-5952.	11.4	185
97	Chemically-Conjugated Bone Morphogenetic Protein-2 on Three-Dimensional Polycaprolactone Scaffolds Stimulates Osteogenic Activity in Bone Marrow Stromal Cells. Tissue Engineering - Part A, 2010, 16, 3441-3448.	3.1	87
98	Mechanical and Biochemical Assessments of Three-Dimensional Poly(1,8-Octanediol-co-Citrate) Scaffold Pore Shape and Permeability Effects on In Vitro Chondrogenesis Using Primary Chondrocytes. Tissue Engineering - Part A, 2010, 16, 3759-3768.	3.1	48
99	Analysis of load sharing on uncovertebral and facet joints at the C5â€“6 level with implantation of the Bryan, Prestige LP, or ProDisc-C cervical disc prosthesis: an in vivo image-based finite element study. Neurosurgical Focus, 2010, 28, E9.	2.3	50
100	High-resolution ultrasonic monitoring of cellular differentiation in an ex vivo produced oral mucosal equivalent (EVPOME). , 2009, , .		5
101	Scaffold engineering: a bridge to where?. Biofabrication, 2009, 1, 012001.	7.1	68
102	Tissue Formation and Vascularization in Anatomically Shaped Human Joint Condyle Ectopicallyin Vivo. Tissue Engineering - Part A, 2009, 15, 3923-3930.	3.1	71
103	Developing consistently reproducible intervertebral disc degeneration at rat caudal spine by using needle puncture. Journal of Neurosurgery: Spine, 2009, 10, 522-530.	1.7	92
104	Scaffold Design and Manufacturing: From Concept to Clinic. Advanced Materials, 2009, 21, 3330-3342.	21.0	349
105	The interaction between bone marrow stromal cells and RGD-modified three-dimensional porous polycaprolactone scaffolds. Biomaterials, 2009, 30, 4063-4069.	11.4	157
106	The use of reactive polymer coatings to facilitate gene delivery from poly (É›-caprolactone) scaffolds. Biomaterials, 2009, 30, 5785-5792.	11.4	38
107	Poly(glycerol-dodecanoate), a biodegradable polyester for medical devices and tissue engineering scaffolds. Biomaterials, 2009, 30, 6479-6484.	11.4	106
108	Defining Design Targets for Tissue Engineering Scaffolds. , 2009, , 521-537.		10

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109	Intradiscal injection of simvastatin retards progression of intervertebral disc degeneration induced by stab injury. Arthritis Research and Therapy, 2009, 11, R172.	3.5	62
110	Comparison of Bone Marrow Stromal Cell Behaviors on Poly(caprolactone) with or without Surface Modification: Studies on Cell Adhesion, Survival and Proliferation. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1975-1993.	3.5	62
111	Stress Analysis of the Interface Between Cervical Vertebrae End Plates and the Bryan, Prestige LP, and ProDisc-C Cervical Disc Prostheses. Spine, 2009, 34, 1554-1560.	2.0	90
112	SU-FF-J-137: Rapid Prototyping of Vascular Trees for Quality Assurance of Dynamic Contrast Enhanced Perfusion Imaging and Analysis. Medical Physics, 2009, 36, 2508-2508.	3.0	0
113	Non-invasive monitoring of tissue scaffold degradation using ultrasound elasticity imaging. Acta Biomaterialia, 2008, 4, 783-790.	8.3	114
114	Tissue Engineering of TMJ and Bone: Concept to Clinic Approach. Journal of Oral and Maxillofacial Surgery, 2008, 66, 7-8.	1.2	17
115	Engineered Scaffold Architecture Influences Soft Tissue Regeneration. , 2008, , 67-78.		0
116	Tissue-engineered heart valve prostheses: â€˜state of the heartâ€™. Regenerative Medicine, 2008, 3, 399-419.	1.7	26
117	Three dimensional elastic modulus reconstruction for non-invasive, quantitative monitoring of tissue scaffold mechanical property changes. , 2008, , .		2
118	Brain cortex regeneration affected by scaffold architectures. Journal of Neurosurgery, 2008, 109, 715-722.	1.6	40
119	Macro-Architectures in Spinal Cord Scaffold Implants Influence Regeneration. Journal of Neurotrauma, 2008, 25, 1027-1037.	3.4	87
120	Computational Design and Simulation of Tissue Engineering Scaffolds. , 2008, , 113-127.		3
121	Poly(É›-Caprolactone) and Poly (L-Lactic-Co-Glycolic Acid) Degradable Polymer Sponges Attenuate Astrocyte Response and Lesion Growth in Acute Traumatic Brain Injury. Tissue Engineering, 2007, 13, 2515-2523.	4.6	77
122	Tissue engineering of the synovial joint: The role of cell density. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2007, 221, 429-440.	1.8	17
123	The Use of Biodegradable Poly(e-caprolactone) Scaffolds in a Rat Spinal Cord Injury Model. Neurosurgery, 2007, 61, 207-208.	1.1	0
124	Tissue-Engineered Cartilage Constructs Using Composite Hyaluronic Acid/Collagen I Hydrogels and Designed Poly(Propylene Fumarate) Scaffolds. Tissue Engineering, 2007, 13, 537-550.	4.6	113
125	5C-2 Non-Invasive Ultrasound Elastic Modulus Estimates on Tissue Scaffold Mechanical Property Change. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	1
126	Structural and mechanical evaluations of a topology optimized titanium interbody fusion cage fabricated by selective laser melting process. Journal of Biomedical Materials Research - Part A, 2007, 83A, 272-279.	4.0	166

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127	Computational design of tissue engineering scaffolds. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 2991-2998.	6.6	99
128	Computed tomographyâ€based tissueâ€engineered scaffolds in craniomaxillofacial surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2007, 3, 207-216.	2.3	105
129	Localized viral vector delivery to enhance in situ regenerative gene therapy. Gene Therapy, 2007, 14, 891-901.	4.5	73
130	Nondestructive micro-computed tomography for biological imaging and quantification of scaffoldâ€“bone interaction in vivo. Biomaterials, 2007, 28, 2479-2490.	11.4	186
131	In situ Transduction by Virus Localization on Bioengineering Scaffolds for Bone Regeneration. FASEB Journal, 2007, 21, A134.	0.5	0
132	Selective Laser Sintering Process Optimization for Layered Manufacturing of CAPAÂ® 6501 Polycaprolactone Bone Tissue Engineering Scaffolds. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2006, 128, 531-540.	2.2	116
133	Craniofacial Tissue Engineering by Stem Cells. Journal of Dental Research, 2006, 85, 966-979.	5.2	308
134	Quantitative molecular sensing in biological tissues: an approach to non-invasive optical characterization. Optics Express, 2006, 14, 6157.	3.4	44
135	Noninvasive, quantitative fluorescence sensing in 3D tissues: an approach to in vivo molecular characterization of engineered tissue constructs. , 2006, , ME59.		0
136	Internal Structure Evaluation of Three-Dimensional Calcium Phosphate Bone Scaffolds: A Micro-Computed Tomographic Study. Journal of the American Ceramic Society, 2006, 89, 3176-3181.	3.8	6
137	Combined use of designed scaffolds and adenoviral gene therapy for skeletal tissue engineering. Biomaterials, 2006, 27, 1160-1166.	11.4	85
138	Framework for optimal design of porous scaffold microstructure by computational simulation of bone regeneration. Biomaterials, 2006, 27, 3964-3972.	11.4	278
139	Bone tissue engineering using polycaprolactone scaffolds fabricated via selective laser sintering. Biomaterials, 2005, 26, 4817-4827.	11.4	1,354
140	Porous scaffold design for tissue engineering. Nature Materials, 2005, 4, 518-524.	27.5	3,370
141	Engineering craniofacial scaffolds. Orthodontics and Craniofacial Research, 2005, 8, 162-173.	2.8	257
142	Tissue engineering osteochondral implants for temporomandibular joint repair. Orthodontics and Craniofacial Research, 2005, 8, 313-319.	2.8	97
143	Functional Bone Engineering Using ex Vivo Gene Therapy and Topology-Optimized, Biodegradable Polymer Composite Scaffolds. Tissue Engineering, 2005, 11, 1589-1598.	4.6	52
144	Engineered Osteochondral Grafts Using Biphasic Composite Solid Free-Form Fabricated Scaffolds. Tissue Engineering, 2004, 10, 1376-1385.	4.6	194

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145	Selective Laser Sintering of Polycaprolactone Bone Tissue Engineering Scaffolds. Materials Research Society Symposia Proceedings, 2004, 845, 340.	0.1	4
146	Delivery and Protection of Adenoviruses Using Biocompatible Hydrogels for Localized Gene Therapy. Molecular Therapy, 2004, 9, 130-138.	8.2	92
147	Osteocyte lacuna size and shape in women with and without osteoporotic fracture. Journal of Biomechanics, 2004, 37, 563-572.	2.1	124
148	A novel method for biomaterial scaffold internal architecture design to match bone elastic properties with desired porosity. Journal of Biomechanics, 2004, 37, 623-636.	2.1	335
149	Interbody Fusion Cage Design Using Integrated Global Layout and Local Microstructure Topology Optimization. Spine, 2004, 29, 1747-1754.	2.0	81
150	Fabrication of Polycaprolactone Bone Tissue Engineering Scaffolds Using Selective Laser Sintering. , 2004, , 525.		0
151	Design and Fabrication of Bone Tissue Engineering Scaffolds. , 2004, , 167-192.		3
152	Design and fabrication of scaffolds for anatomic bone reconstruction. Medical Journal of Malaysia, 2004, 59 Suppl B, 131-2.	0.2	0
153	Indirect solid free form fabrication of local and global porous, biomimetic and composite 3D polymer-ceramic scaffolds. Biomaterials, 2003, 24, 181-194.	11.4	629
154	Inclusion of organ deformation in dose calculations. Medical Physics, 2003, 30, 290-295.	3.0	126
155	Freeform fabrication of Nylonâ€6 tissue engineering scaffolds. Rapid Prototyping Journal, 2003, 9, 43-49.	3.2	93
156	Technical note: Creating a four-dimensional model of the liver using finite element analysis. Medical Physics, 2002, 29, 1403-1405.	3.0	65
157	Computational Design, Freeform Fabrication and Testing of Nylon-6 Tissue Engineering Scaffolds. Materials Research Society Symposia Proceedings, 2002, 758, 571.	0.1	8
158	Mechanical and in vivo performance of hydroxyapatite implants with controlled architectures. Biomaterials, 2002, 23, 1283-1293.	11.4	495
159	Optimal design and fabrication of scaffolds to mimic tissue properties and satisfy biological constraints. Biomaterials, 2002, 23, 4095-4103.	11.4	624
160	Manufacturing and Characterization of 3â€Ð Hydroxyapatite Bone Tissue Engineering Scaffolds. Annals of the New York Academy of Sciences, 2002, 961, 114-117.	3.8	51
161	Normal and reconstructed mandibular condyle mechanics. Journal of Mechanical Science and Technology, 2001, 15, 974-981.	0.4	1
162	Hydroxyapatite implants with designed internal architecture. Journal of Materials Science: Materials in Medicine, 2001, 12, 471-478.	3.6	207

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163	Image-Based Biomimetic Approach to Reconstruction of the Temporomandibular Joint. Cells Tissues Organs, 2001, 169, 309-321.	2.3	53
164	Trabecular Surface Remodeling Simulation for Cancellous Bone Using Microstructural Voxel Finite Element Models. Journal of Biomechanical Engineering, 2001, 123, 403-409.	1.3	147
165	An image-based approach for designing and manufacturing craniofacial scaffolds. International Journal of Oral and Maxillofacial Surgery, 2000, 29, 67-71.	1.5	198
166	Are regional variations in bone growth related to mechanical stress and strain parameters?. Journal of Biomechanics, 1998, 31, 327-335.	2.1	38
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