William R Wagner

List of Publications by Year
in descending order

241 papers	14,994 citations	16411 64 h-index	22102 113 g-index
247 all docs	247 docs citations	247 times ranked	13952 citing authors

#	Article	IF	Citations
1	Adipose-derived stem cell sheet under an elastic patch improves cardiac function in rats after myocardial infarction. Journal of Thoracic and Cardiovascular Surgery, 2022, 163, e261-e272.	0.4	18
2	Biomanufacturing in low Earth orbit for regenerative medicine. Stem Cell Reports, 2022, 17, 1-13.	2.3	22
3	Engineering in-plane mechanics of electrospun polyurethane scaffolds for cardiovascular tissue applications. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 128, 105126.	1.5	7
4	PDMS-Zwitterionic Hybrid for Facile, Antifouling Microfluidic Device Fabrication. Langmuir, 2022, 38, 3775-3784.	1.6	4
5	Continuous Microfiber Wire Mandrelâ€Less Biofabrication for Soft Tissue Engineering Applications. Advanced Healthcare Materials, 2022, , 2102613.	3.9	0
6	Biodegradable polyurethane scaffolds in regenerative medicine: Clinical translation review. Journal of Biomedical Materials Research - Part A, 2022, 110, 1460-1487.	2.1	25
7	ACUTE ELUTION OF TGFÎ²2 AFFECTS THE SMOOTH MUSCLE CELLS IN A COMPLIANCE-MATCHED VASCULAR GRAFT. Tissue Engineering - Part A, 2022, , .	1.6	1
8	Pro-angiogenic Potential of Mesenchymal Stromal Cells Regulated by Matrix Stiffness and Anisotropy Mimicking Right Ventricles. Biomacromolecules, 2022, , .	2.6	2
9	A Cell-free Biodegradable Synthetic Artificial Ligament for the Reconstruction of Anterior Cruciate Ligament in a Rat Model. Acta Biomaterialia, 2021, 121, 275-287.	4.1	15
10	In-vivo assessment of a tissue engineered vascular graft computationally optimized for target vessel compliance. Acta Biomaterialia, 2021, 123, 298-311.	4.1	26
11	Can a Biohybrid Patch Salvage Ventricular Function at a Late Time PointÂin the Post-Infarction RemodelingÂProcess?. JACC Basic To Translational Science, 2021, 6, 447-463.	1.9	10
12	Injectable hydrogels for vascular embolization and cell delivery: The potential for advances in cerebral aneurysm treatment. Biomaterials, 2021, 277, 121109.	5.7	13
13	Month-long Respiratory Support by a Wearable Pumping Artificial Lung in an Ovine Model. Transplantation, 2021, 105, 999-1007.	0.5	7
14	A biostable, anti-fouling zwitterionic polyurethane-urea based on PDMS for use in blood-contacting medical devices. Journal of Materials Chemistry B, 2020, 8, 8305-8314.	2.9	37
15	In-vivo efficacy of biodegradable ultrahigh ductility Mg-Li-Zn alloy tracheal stents for pediatric airway obstruction. Communications Biology, 2020, 3, 787.	2.0	12
16	Development of a Semi-Automated, Bulk Seeding Device for Large Animal Model Implantation of Tissue Engineered Vascular Grafts. Frontiers in Bioengineering and Biotechnology, 2020, 8, 597847.	2.0	9
17	Evaluation of Bloodâ€“Materials Interactions. , 2020, , 879-898.		3
18	Covalentlyâ€Attached, Surfaceâ€Eroding Polymer Coatings on Magnesium Alloys for Corrosion Control and Temporally Varying Support of Cell Adhesion. Advanced Materials Interfaces, 2020, 7, 2000356.	1.9	10

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19	Taking the Next Steps in Regenerative Rehabilitation: Establishment of a New Interdisciplinary Field. Archives of Physical Medicine and Rehabilitation, 2020, 101, 917-923.	0.5	24
20	Acute In Vivo Functional Assessment of a Biodegradable Stentless Elastomeric Tricuspid Valve. Journal of Cardiovascular Translational Research, 2020, 13, 796-805.	1.1	24
21	In vivo testing of the low-flow CO2 removal application of a compact, platform respiratory device. Intensive Care Medicine Experimental, 2020, 8, 45.	0.9	3
22	Biodegradable Zwitterionic Polymer Coatings for Magnesium Alloy Stents. Langmuir, 2019, 35, 1421-1429.	1.6	26
23	Design Principles in Biomaterials and Scaffolds. , 2019, , 505-522.		6
24	Intramyocardial injection of a fully synthetic hydrogel attenuates left ventricular remodeling post myocardial infarction. Biomaterials, 2019, 217, 119289.	5.7	54
25	Current and Future Considerations in the Use of Mechanical Circulatory Support Devices: An Update, 2008â€“2018. Annual Review of Biomedical Engineering, 2019, 21, 33-60.	5.7	5
26	Evaluation of Microscopic Structureâ^'Function Relationships of PEGylated Small Intestinal Submucosa Vascular Grafts for Arteriovenous Connection. ACS Applied Bio Materials, 2019, 2, 3706-3721.	2.3	3
27	Blending Polymer Labile Elements at Differing Scales to Affect Degradation Profiles in Heart Valve Scaffolds. Biomacromolecules, 2019, 20, 2494-2505.	2.6	6
28	Surface Modification of Electrospun Scaffolds for Endothelialization of Tissue-Engineered Vascular Grafts Using Human Cord Blood-Derived Endothelial Cells. Journal of Clinical Medicine, 2019, 8, 185.	1.0	30
29	InÂvivo functional assessment of a novel degradable metal and elastomeric scaffold-based tissue engineered heart valve. Journal of Thoracic and Cardiovascular Surgery, 2019, 157, 1809-1816.	0.4	30
30	Evaluation of Poly (Carbonate-Urethane) Urea (PCUU) Scaffolds for Urinary Bladder Tissue Engineering. Annals of Biomedical Engineering, 2019, 47, 891-901.	1.3	12
31	Active wrinkles to drive self-cleaning: A strategy for anti-thrombotic surfaces for vascular grafts. Biomaterials, 2019, 192, 226-234.	5.7	35
32	In Vivo 5 Day Animal Studies of a Compact, Wearable Pumping Artificial Lung. ASAIO Journal, 2019, 65, 94-100.	0.9	24
33	Hybrid scaffolds of Mg alloy mesh reinforced polymer/extracellular matrix composite for critical-sized calvarial defect reconstruction. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1374-1388.	1.3	18
34	Injectable, porous, biohybrid hydrogels incorporating decellularized tissue components for soft tissue applications. Acta Biomaterialia, 2018, 73, 112-126.	4.1	49
35	Development of zwitterionic sulfobetaine block copolymer conjugation strategies for reduced platelet deposition in respiratory assist devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2681-2692.	1.6	23
36	Heart valve scaffold fabrication: Bioinspired control of macro-scale morphology, mechanics and micro-structure. Biomaterials, 2018, 150, 25-37.	5.7	66

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37	Nitro-Oleic Acid (NO₂-OA) Release Enhances Regional Angiogenesis in a Rat Abdominal Wall Defect Model. Tissue Engineering - Part A, 2018, 24, 889-904.	1.6	16
38	Meso-scale topological cues influence extracellular matrix production in a large deformation, elastomeric scaffold model. Soft Matter, 2018, 14, 8483-8495.	1.2	5
39	Assessment of Thrombelastography and Platelet Life Span in Ovines. Artificial Organs, 2018, 42, E427-E434.	1.0	3
40	Decreased Platelet Deposition in SIS-Based Vascular Grafts via Covalent Conjugation of RAFT Polymers. , 2018, , .		1
41	Comparison of endothelial cell attachment on surfaces of biodegradable polymer-coated magnesium alloys in a microfluidic environment. PLoS ONE, 2018, 13, e0205611.	1.1	4
42	Reactive oxygen species scavenging with a biodegradable, thermally responsive hydrogel compatible with soft tissue injection. Biomaterials, 2018, 177, 98-112.	5.7	128
43	Topography-driven surface renewal. Nature Physics, 2018, 14, 948-953.	6.5	59
44	An exploratory study on the preparation and evaluation of a â€œsame-dayâ€•adipose stem cellâ€“based tissue-engineered vascular graft. Journal of Thoracic and Cardiovascular Surgery, 2018, 156, 1814-1822.e3.	0.4	18
45	Launching Materialia. Acta Biomaterialia, 2018, 75, 1-2.	4.1	3
46	Stretchable, Implantable, Nanostructured Flow-Diverter System for Quantification of Intra-aneurysmal Hemodynamics. ACS Nano, 2018, 12, 8706-8716.	7.3	18
47	Preclinical performance of a pediatric mechanical circulatory support device: The PediaFlow ventricular assist device. Journal of Thoracic and Cardiovascular Surgery, 2018, 156, 1643-1651.e7.	0.4	7
48	Multi-Constituent Simulation of Thrombus Deposition. Scientific Reports, 2017, 7, 42720.	1.6	56
49	Ventricular wall biomaterial injection therapy after myocardial infarction: Advances in material design, mechanistic insight and early clinical experiences. Biomaterials, 2017, 129, 37-53.	5.7	66
50	Ultrasound Molecular Imaging of Angiogenesis Using Vascular Endothelial Growth Factor-Conjugated Microbubbles. Molecular Pharmaceutics, 2017, 14, 781-790.	2.3	24
51	Sustained viral gene delivery from a micro-fibrous, elastomeric cardiac patch to the ischemic rat heart. Biomaterials, 2017, 133, 132-143.	5.7	54
52	Aging of the skeletal muscle extracellular matrix drives a stem cell fibrogenic conversion. Aging Cell, 2017, 16, 518-528.	3.0	172
53	Evaluation of the stromal vascular fraction of adipose tissueÂas the basis for a stem cell-based tissue-engineered vascular graft. Journal of Vascular Surgery, 2017, 66, 883-890.e1.	0.6	37
54	Use of a pedicled omental flap to reduce inflammation and vascularize an abdominal wall patch. Journal of Surgical Research, 2017, 212, 77-85.	0.8	7

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55	Paths to Open Access: An update from Acta Materialia, Inc.. Acta Biomaterialia, 2017, 60, 1-2.	4.1	0
56	A retrievable rescue stent graft and radiofrequency positioning for rapid control of noncompressible hemorrhage. Journal of Trauma and Acute Care Surgery, 2017, 83, 249-255.	1.1	14
57	Skeletal muscle derived stem cells microintegrated into a biodegradable elastomer for reconstruction of the abdominal wall. Biomaterials, 2017, 113, 31-41.	5.7	30
58	A novel compartmentalised stent graft to isolate the perfusion of the abdominal organs. Journal of Medical Engineering and Technology, 2017, 41, 141-150.	0.8	1
59	An Elastomeric Polymer Matrix, PEUU-Tac, Delivers Bioactive Tacrolimus Transdurally to the CNS in Rat. EBioMedicine, 2017, 26, 47-59.	2.7	10
60	A novel low-profile ventriculoamniotic shunt for foetal aqueductal stenosis. Journal of Medical Engineering and Technology, 2016, 40, 186-198.	0.8	8
61	In VivoFunctional Evaluation of Tissue-Engineered Vascular Grafts Fabricated Using Human Adipose-Derived Stem Cells from High Cardiovascular Risk Populations. Tissue Engineering - Part A, 2016, 22, 765-775.	1.6	42
62	Biodegradable, elastomeric coatings with controlled anti-proliferative agent release for magnesium-based cardiovascular stents. Colloids and Surfaces B: Biointerfaces, 2016, 144, 170-179.	2.5	62
63	Design of a Coupled Thermoresponsive Hydrogel and Robotic System for Postinfarct Biomaterial Injection Therapy. Annals of Thoracic Surgery, 2016, 102, 780-786.	0.7	21
64	Visualization and analysis of biomaterial-centered thrombus formation within a defined crevice under flow. Biomaterials, 2016, 96, 72-83.	5.7	32
65	Nanometerâ€sized extracellular matrix coating on polymerâ€based scaffold for tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2016, 104, 94-103.	2.1	32
66	Bi-layered polyurethane â€“ Extracellular matrix cardiac patch improves ischemic ventricular wall remodeling in a rat model. Biomaterials, 2016, 107, 1-14.	5.7	107
67	Dual chamber stent prevents organ malperfusion in a model of donation after cardiac death. Surgery, 2016, 160, 892-901.	1.0	4
68	Orthogonally Functionalizable Polyurethane with Subsequent Modification with Heparin and Endothelium-Inducing Peptide Aiming for Vascular Reconstruction. ACS Applied Materials & Interfaces, 2016, 8, 14442-14452.	4.0	39
69	Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 619-635.	1.5	19
70	Abdominal wall reconstruction by a regionally distinct biocomposite of extracellular matrix digest and a biodegradable elastomer. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 748-761.	1.3	25
71	Extracellular matrix fiber microarchitecture is region-specific in bicuspid aortic valve-associated ascending aortopathy. Journal of Thoracic and Cardiovascular Surgery, 2016, 151, 1718-1728.e5.	0.4	35
72	Timing effect of intramyocardial hydrogel injection for positively impacting left ventricular remodeling after myocardial infarction. Biomaterials, 2016, 83, 182-193.	5.7	64

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73	Constitutive modeling of ascending thoracic aortic aneurysms using microstructural parameters. Medical Engineering and Physics, 2016, 38, 121-130.	0.8	45
74	Non-invasive and Non-destructive Characterization of Tissue Engineered Constructs Using Ultrasound Imaging Technologies: A Review. Annals of Biomedical Engineering, 2016, 44, 621-635.	1.3	31
75	Introduction to Acta Biomaterialia 10th year of publication. Acta Biomaterialia, 2015, 23, S1.	4.1	0
76	Fabrication of elastomeric scaffolds with curvilinear fibrous structures for heart valve leaflet engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 3101-3106.	2.1	36
77	Real time visualization and characterization of platelet deposition under flow onto clinically relevant opaque surfaces. Journal of Biomedical Materials Research - Part A, 2015, 103, 1303-1311.	2.1	25
78	Tailoring the degradation rates of thermally responsive hydrogels designed for soft tissue injection by varying the autocatalytic potential. Biomaterials, 2015, 53, 484-493.	5.7	34
79	Hollow Fiber Membrane Modification with Functional Zwitterionic Macromolecules for Improved Thromboresistance in Artificial Lungs. Langmuir, 2015, 31, 2463-2471.	1.6	40
80	Correlations between transmural mechanical and morphological properties in porcine thoracic descending aorta. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 47, 12-20.	1.5	12
81	Thiol Click Modification of Cyclic Disulfide Containing Biodegradable Polyurethane Urea Elastomers. Biomacromolecules, 2015, 16, 1622-1633.	2.6	32
82	Preoperative liver dysfunction influences blood product administration and alterations in circulating haemostatic markers following ventricular assist device implantation. European Journal of Cardio-thoracic Surgery, 2015, 47, 497-504.	0.6	5
83	Direct writing of bio-functional coatings for cardiovascular applications. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	2.1	6
84	Temporal Leukocyte Numbers and Granulocyte Activation in Pulsatile and Rotary Ventricular Assist Device Patients. Artificial Organs, 2014, 38, 447-455.	1.0	23
85	Nonthrombogenic, Biodegradable Elastomeric Polyurethanes with Variable Sulfobetaine Content. ACS Applied Materials & Interfaces, 2014, 6, 22796-22806.	4.0	65
86	Biocompatibility Assessment of the CentriMag-Novalung Adult ECMO Circuit in a Model of Acute Pulmonary Hypertension. ASAIO Journal, 2014, 60, 429-435.	0.9	6
87	Corneal stromal stem cells versus corneal fibroblasts in generating structurally appropriate corneal stromal tissue. Experimental Eye Research, 2014, 120, 71-81.	1.2	71
88	Biomaterials for refractive correction: corneal onlays and inlays. Science China Chemistry, 2014, 57, 501-509.	4.2	1
89	From single fiber to macro-level mechanics: A structural finite-element model for elastomeric fibrous biomaterials. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 146-161.	1.5	69
90	Biodegradable poly(ester urethane)urea elastomers with variable amino content for subsequent functionalization with phosphorylcholine. Acta Biomaterialia, 2014, 10, 4639-4649.	4.1	66

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91	Systems level approach reveals the correlation of endoderm differentiation of mouse embryonic stem cells with specific microstructural cues of fibrin gels. Journal of the Royal Society Interface, 2014, 11, 20140009.	1.5	9
92	A custom image-based analysis tool for quantifying elastin and collagen micro-architecture in the wall of the human aorta from multi-photon microscopy. Journal of Biomechanics, 2014, 47, 935-943.	0.9	54
93	Collagenase-Labile Polyurethane Urea Synthesis and Processing into Hollow Fiber Membranes. Biomacromolecules, 2014, 15, 2924-2932.	2.6	14
94	Intramyocardial Injection of a Synthetic Hydrogel with Delivery of bFGF and IGF1 in a Rat Model of Ischemic Cardiomyopathy. Biomacromolecules, 2014, 15, 1-11.	2.6	41
95	Effects of fabrication on the mechanics, microstructure and micromechanical environment of small intestinal submucosa scaffolds for vascular tissue engineering. Journal of Biomechanics, 2014, 47, 2766-2773.	0.9	30
96	InÂvivo monitoring of structural and mechanical changes of tissue scaffolds by multi-modality imaging. Biomaterials, 2014, 35, 7851-7859.	5.7	29
97	Ultrasound Detection of Myocardial Ischemic Memory Using an E-Selectin Targeting Peptide Amenable to Human Application. Molecular Imaging, 2014, 13, 7290.2014.00006.	0.7	18
98	Introduction to Regenerative Medicine. , 2014, , 1-16.		0
99	Ultrasound Detection of Myocardial Ischemic Memory Using an E-Selectin Targeting Peptide Amenable to Human Application. Molecular Imaging, 2014, 16, 1-9.	0.7	3
100	Ultrasound detection of myocardial ischemic memory using an E-selectin targeting peptide amenable to human application. Molecular Imaging, 2014, 13, 1-9.	0.7	8
101	Implantable Cardiac Assist Devices and IABPs. , 2013, , 799-811.		0
102	The effect of polymer degradation time on functional outcomes of temporary elastic patch support in ischemic cardiomyopathy. Biomaterials, 2013, 34, 7353-7363.	5.7	51
103	Non-invasive characterization of polyurethane-based tissue constructs in a rat abdominal repair model using high frequency ultrasound elasticity imaging. Biomaterials, 2013, 34, 2701-2709.	5.7	42
104	Biodegradable elastic patch plasty ameliorates left ventricular adverse remodeling after ischemiaâ€“reperfusion injury: A preclinical study of a porous polyurethane material in a porcine model. Journal of Thoracic and Cardiovascular Surgery, 2013, 146, 391-399.e1.	0.4	43
105	Fiber micro-architecture in the longitudinal-radial and circumferential-radial planes of ascending thoracic aortic aneurysm media. Journal of Biomechanics, 2013, 46, 2787-2794.	0.9	55
106	Optimal elastomeric scaffold leaflet shape for pulmonary heart valve leaflet replacement. Journal of Biomechanics, 2013, 46, 662-669.	0.9	50
107	Surface Modification of a Biodegradable Magnesium Alloy with Phosphorylcholine (PC) and Sulfobetaine (SB) Functional Macromolecules for Reduced Thrombogenicity and Acute Corrosion Resistance. Langmuir, 2013, 29, 8320-8327.	1.6	62
108	Bioengineering Organized, Multilamellar Human Corneal Stromal Tissue by Growth Factor Supplementation on Highly Aligned Synthetic Substrates. Tissue Engineering - Part A, 2013, 19, 2063-2075.	1.6	94

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109	A Custom Image-Based Analysis Tool for Quantifying Elastin and Collagen Fiber Micro-Architecture in the Wall of the Human Aorta From Multi-Photon Microscopy Images. , 2013, , .		0
110	Urinary bladder matrix promotes site appropriate tissue formation following right ventricle outflow tract repair. Organogenesis, 2013, 9, 149-160.	0.4	31
111	An Elastomeric Patch Electrospun from a Blended Solution of Dermal Extracellular Matrix and Biodegradable Polyurethane for Rat Abdominal Wall Repair. Tissue Engineering - Part C: Methods, 2012, 18, 122-132.	1.1	51
112	Right Ventricular Outflow Tract Repair with a Cardiac Biologic Scaffold. Cells Tissues Organs, 2012, 195, 159-170.	1.3	62
113	Synthesis, Characterization, and Paclitaxel Release from a Biodegradable, Elastomeric, Poly(ester) Tj ETQq1 1 0.784314 rgBT /Overloc 2012, 13, 3686-3694.	2.6	56
114	In vivo PEG modification of vascular surfaces for targeted delivery. Journal of Vascular Surgery, 2012, 55, 1087-1095.	0.6	14
115	Placement of an Elastic Biodegradable Cardiac Patch on a Subacute Infarcted Heart Leads to Cellularization With Early Developmental Cardiomyocyte Characteristics. Journal of Cardiac Failure, 2012, 18, 585-595.	0.7	35
116	Microstructural manipulation of electrospun scaffolds for specific bending stiffness for heart valve tissue engineering. Acta Biomaterialia, 2012, 8, 4268-4277.	4.1	75
117	The engineering of organized human corneal tissue through the spatial guidance of corneal stromal stem cells. Biomaterials, 2012, 33, 1343-1352.	5.7	135
118	Immobilized carbonic anhydrase on hollow fiber membranes accelerates CO2 removal from blood. Journal of Membrane Science, 2012, 403-404, 25-31.	4.1	69
119	Extended and sequential delivery of protein from injectable thermoresponsive hydrogels. Journal of Biomedical Materials Research - Part A, 2012, 100A, 776-785.	2.1	48
120	Computational Structural Biomechanical Models to Guide Tissue Engineered Heart Valve Leaflet Fabrication. , 2012, , .		0
121	Covalent Attachment of Multilayers on Poly(tetrafluoroethylene) Surfaces. Langmuir, 2011, 27, 11106-11110.	1.6	13
122	Biodegradable Polyurethane Ureas with Variable Polyester or Polycarbonate Soft Segments: Effects of Crystallinity, Molecular Weight, and Composition on Mechanical Properties. Biomacromolecules, 2011, 12, 3265-3274.	2.6	163
123	Mesenchymal stem cells attenuate angiotensin II-induced aortic aneurysm growth in apolipoprotein E-deficient mice. Journal of Vascular Surgery, 2011, 54, 1743-1752.	0.6	56
124	Platelet Activation After Implantation of the Levitronix PediVAS in the Ovine Model. ASAIO Journal, 2011, 57, 516-521.	0.9	8
125	Biocompatibility Assessment of the First Generation PediaFlow Pediatric Ventricular Assist Device. Artificial Organs, 2011, 35, 9-21.	1.0	19
126	Platelet Activation in Ovines Undergoing Sham Surgery or Implant of the Second Generation PediaFlow Pediatric Ventricular Assist Device. Artificial Organs, 2011, 35, 602-613.	1.0	20

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127	Controlled Release of IGF-1 and HGF from a Biodegradable Polyurethane Scaffold. Pharmaceutical Research, 2011, 28, 1282-1293.	1.7	57
128	Intra-myocardial biomaterial injection therapy in the treatment of heart failure: Materials, outcomes and challenges. Acta Biomaterialia, 2011, 7, 1-15.	4.1	178
129	Mechanical properties and in vivo behavior of a biodegradable synthetic polymer microfiberâ€“extracellular matrix hydrogel biohybrid scaffold. Biomaterials, 2011, 32, 3387-3394.	5.7	188
130	Rapid Engineered Small Diameter Vascular Grafts from Smooth Muscle Cells. Cardiovascular Engineering and Technology, 2011, 2, 149-159.	0.7	7
131	In Vitro and In Vivo Performance Evaluation of the Second Developmental Version of the PediaFlow Pediatric Ventricular Assist Device. Cardiovascular Engineering and Technology, 2011, 2, 253-262.	0.7	17
132	Elastomeric Electrospun Polyurethane Scaffolds: The Interrelationship Between Fabrication Conditions, Fiber Topology, and Mechanical Properties. Advanced Materials, 2011, 23, 106-111.	11.1	73
133	In vivo performance of a phospholipidâ€coated bioerodable elastomeric graft for smallâ€diameter vascular applications. Journal of Biomedical Materials Research - Part A, 2011, 96A, 436-448.	2.1	95
134	Spatial control of gene expression within a scaffold by localized inducer release. Biomaterials, 2011, 32, 3062-3071.	5.7	19
135	Vascular Endoluminal Delivery of Mesenchymal Stem Cells Using Acoustic Radiation Force. Tissue Engineering - Part A, 2011, 17, 1457-1464.	1.6	43
136	Engineered Fetal Cardiac Graft Preserves Its Cardiomyocyte Proliferation Within Postinfarcted Myocardium and Sustains Cardiac Function. Tissue Engineering - Part A, 2011, 17, 585-596.	1.6	32
137	Scaleâ€dependent fiber kinematics of elastomeric electrospun scaffolds for soft tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1032-1042.	2.1	20
138	A Three-Dimensional Gel Bioreactor for Assessment of Cardiomyocyte Induction in Skeletal Muscleâ€Derived Stem Cells. Tissue Engineering - Part C: Methods, 2010, 16, 375-385.	1.1	21
139	Morphological and mechanical characteristics of the reconstructed rat abdominal wall following use of a wet electrospun biodegradable polyurethane elastomer scaffold. Biomaterials, 2010, 31, 3253-3265.	5.7	75
140	Tailoring the degradation kinetics of poly(ester carbonate urethane)urea thermoplastic elastomers for tissue engineering scaffolds. Biomaterials, 2010, 31, 4249-4258.	5.7	165
141	A biohybrid artificial lung prototype with active mixing of endothelialized microporous hollow fibers. Biotechnology and Bioengineering, 2010, 106, 490-500.	1.7	33
142	Optimization of ultrasound contrast agents with computational models to improve selection of ligands and binding strength. Biotechnology and Bioengineering, 2010, 107, 854-864.	1.7	34
143	Pericyte-based human tissue engineered vascular grafts. Biomaterials, 2010, 31, 8235-8244.	5.7	137
144	A bilayered elastomeric scaffold for tissue engineering of small diameter vascular grafts. Acta Biomaterialia, 2010, 6, 110-122.	4.1	258

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145	Injectable, rapid gelling and highly flexible hydrogel composites as growth factor and cell carriers. Acta Biomaterialia, 2010, 6, 1978-1991.	4.1	167
146	On the biomechanical function of scaffolds for engineering load-bearing soft tissues. Acta Biomaterialia, 2010, 6, 2365-2381.	4.1	118
147	Characterization of the complete fiber network topology of planar fibrous tissues and scaffolds. Biomaterials, 2010, 31, 5345-5354.	5.7	144
148	Simple surface modification of a titanium alloy with silanated zwitterionic phosphorylcholine or sulfobetaine modifiers to reduce thrombogenicity. Colloids and Surfaces B: Biointerfaces, 2010, 79, 357-364.	2.5	79
149	Hemocompatibility Assessment of Carbonic Anhydrase Modified Hollow Fiber Membranes for Artificial Lungs. Artificial Organs, 2010, 34, 439-442.	1.0	22
150	Application of the HeartLander crawling robot for injection of a thermally sensitive anti-remodeling agent for myocardial infarction therapy. , 2010, 2010, 5428-31.		3
151	In Vivo Assessment of a Tissue-Engineered Vascular Graft Combining a Biodegradable Elastomeric Scaffold and Muscle-Derived Stem Cells in a Rat Model. Tissue Engineering - Part A, 2010, 16, 1215-1223.	1.6	137
152	Thermally Responsive Injectable Hydrogel Incorporating Methacrylate-Polylactide for Hydrolytic Lability. Biomacromolecules, 2010, 11, 1873-1881.	2.6	84
153	Reconstructing the Lung. Science, 2010, 329, 520-522.	6.0	24
154	Covalent surface modification of a titanium alloy with a phosphorylcholineâ€containing copolymer for reduced thrombogenicity in cardiovascular devices. Journal of Biomedical Materials Research - Part A, 2009, 91A, 18-28.	2.1	40
155	Towards microfabricated biohybrid artificial lung modules for chronic respiratory support. Biomedical Microdevices, 2009, 11, 117-127.	1.4	63
156	Surface modification of a titanium alloy with a phospholipid polymer prepared by a plasma-induced grafting technique to improve surface thromboresistance. Colloids and Surfaces B: Biointerfaces, 2009, 74, 96-102.	2.5	40
157	A small diameter, fibrous vascular conduit generated from a poly(ester urethane)urea and phospholipid polymer blend. Biomaterials, 2009, 30, 2457-2467.	5.7	148
158	Synthesis, characterization and therapeutic efficacy of a biodegradable, thermoresponsive hydrogel designed for application in chronic infarcted myocardium. Biomaterials, 2009, 30, 4357-4368.	5.7	248
159	Synthesis, characterization and surface modification of low moduli poly(ether carbonate) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	4.1	57
160	Fate Of Culture-Expanded Mesenchymal Stem Cells in The Microvasculature. Circulation Research, 2009, 104, 398-402.	2.0	280
161	Naive Rat Amnion-Derived Cell Transplantation Improved Left Ventricular Function and Reduced Myocardial Scar of Postinfarcted Heart. Cell Transplantation, 2009, 18, 477-486.	1.2	48
162	Elastase-Sensitive Elastomeric Scaffolds with Variable Anisotropy for Soft Tissue Engineering. Pharmaceutical Research, 2008, 25, 2400-2412.	1.7	50

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163	Development of a tissue-engineered vascular graft combining a biodegradable scaffold, muscle-derived stem cells and a rotational vacuum seeding technique. Biomaterials, 2008, 29, 825-833.	5.7	168
164	Transient elastic support for vein grafts using a constricting microfibrillar polymer wrap. Biomaterials, 2008, 29, 3213-3220.	5.7	46
165	Tissue-to-cellular level deformation coupling in cell micro-integrated elastomeric scaffolds. Biomaterials, 2008, 29, 3228-3236.	5.7	74
166	Flow Cytometric Assays for Quantifying Activated Ovine Platelets. Artificial Organs, 2008, 32, 136-145.	1.0	24
167	Generating Elastic, Biodegradable Polyurethane/Poly(lactide-co-glycolide) Fibrous Sheets with Controlled Antibiotic Release via Two-Stream Electrospinning. Biomacromolecules, 2008, 9, 1200-1207.	2.6	107
168	Protein-Reactive, Thermoresponsive Copolymers with High Flexibility and Biodegradability. Biomacromolecules, 2008, 9, 1283-1292.	2.6	86
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