

William R Wagner

List of Publications by Year in descending order

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241
papers

14,994
citations

16411

64
h-index

22102

113
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247
all docs

247
docs citations

247
times ranked

13952
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbubbles Targeted to Intercellular Adhesion Molecule-1 Bind to Activated Coronary Artery Endothelial Cells. <i>Circulation</i> , 1998, 98, 1-5.	1.6	1,005
2	Preparation and characterization of highly porous, biodegradable polyurethane scaffolds for soft tissue applications. <i>Biomaterials</i> , 2005, 26, 3961-3971.	5.7	620
3	Microintegrating smooth muscle cells into a biodegradable, elastomeric fiber matrix. <i>Biomaterials</i> , 2006, 27, 735-744.	5.7	341
4	Design and analysis of tissue engineering scaffolds that mimic soft tissue mechanical anisotropy. <i>Biomaterials</i> , 2006, 27, 3631-8.	5.7	341
5	Elevated platelet factor 4 and Î²-thromboglobulin plasma levels in depressed patients with ischemic heart disease. <i>Biological Psychiatry</i> , 1997, 42, 290-295.	0.7	326
6	Fate Of Culture-Expanded Mesenchymal Stem Cells in The Microvasculature. <i>Circulation Research</i> , 2009, 104, 398-402.	2.0	280
7	Synthesis, characterization, and cytocompatibility of elastomeric, biodegradable poly(ester-urethane)ureas based on poly(caprolactone) and putrescine. <i>Journal of Biomedical Materials Research Part B</i> , 2002, 61, 493-503.	3.0	275
8	A bilayered elastomeric scaffold for tissue engineering of small diameter vascular grafts. <i>Acta Biomaterialia</i> , 2010, 6, 110-122.	4.1	258
9	Synthesis, characterization and therapeutic efficacy of a biodegradable, thermoresponsive hydrogel designed for application in chronic infarcted myocardium. <i>Biomaterials</i> , 2009, 30, 4357-4368.	5.7	248
10	Ultrasound Imaging of Acute Cardiac Transplant Rejection With Microbubbles Targeted to Intercellular Adhesion Molecule-1. <i>Circulation</i> , 2003, 108, 218-224.	1.6	242
11	Biodegradable poly(ether ester urethane)urea elastomers based on poly(ether ester) triblock copolymers and putrescine: synthesis, characterization and cytocompatibility. <i>Biomaterials</i> , 2004, 25, 85-96.	5.7	225
12	An Elastic, Biodegradable Cardiac Patch Induces Contractile Smooth Muscle and Improves Cardiac Remodeling and Function in Subacute Myocardial Infarction. <i>Journal of the American College of Cardiology</i> , 2007, 49, 2292-2300.	1.2	211
13	Fabrication of biodegradable elastomeric scaffolds with sub-micron morphologies. <i>Journal of Biomedical Materials Research Part B</i> , 2004, 70A, 603-614.	3.0	192
14	Mechanical properties and in vivo behavior of a biodegradable synthetic polymer microfibrillar extracellular matrix hydrogel biohybrid scaffold. <i>Biomaterials</i> , 2011, 32, 3387-3394.	5.7	188
15	Fabrication of cell microintegrated blood vessel constructs through electrohydrodynamic atomization. <i>Biomaterials</i> , 2007, 28, 2738-2746.	5.7	186
16	Intra-myocardial biomaterial injection therapy in the treatment of heart failure: Materials, outcomes and challenges. <i>Acta Biomaterialia</i> , 2011, 7, 1-15.	4.1	178
17	Ageing of the skeletal muscle extracellular matrix drives a stem cell fibrogenic conversion. <i>Ageing Cell</i> , 2017, 16, 518-528.	3.0	172
18	Ultrasonic imaging of tumor angiogenesis using contrast microbubbles targeted via the tumor-binding peptide arginine-arginine-leucine. <i>Cancer Research</i> , 2005, 65, 533-9.	0.4	172

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19	Evaluation of Platelet Activation in Depressed Patients With Ischemic Heart Disease After Paroxetine or Nortriptyline Treatment. <i>Journal of Clinical Psychopharmacology</i> , 2000, 20, 137-140.	0.7	169
20	Development of a tissue-engineered vascular graft combining a biodegradable scaffold, muscle-derived stem cells and a rotational vacuum seeding technique. <i>Biomaterials</i> , 2008, 29, 825-833.	5.7	168
21	Injectable, rapid gelling and highly flexible hydrogel composites as growth factor and cell carriers. <i>Acta Biomaterialia</i> , 2010, 6, 1978-1991.	4.1	167
22	Tailoring the degradation kinetics of poly(ester carbonate urethane)urea thermoplastic elastomers for tissue engineering scaffolds. <i>Biomaterials</i> , 2010, 31, 4249-4258.	5.7	165
23	Biodegradable Polyurethane Ureas with Variable Polyester or Polycarbonate Soft Segments: Effects of Crystallinity, Molecular Weight, and Composition on Mechanical Properties. <i>Biomacromolecules</i> , 2011, 12, 3265-3274.	2.6	163
24	Myocardial Ischemic Memory Imaging With Molecular Echocardiography. <i>Circulation</i> , 2007, 115, 345-352.	1.6	154
25	Comparative in Vitro Analysis of Topical Hemostatic Agents. <i>Journal of Surgical Research</i> , 1996, 66, 100-108.	0.8	150
26	Computational Simulation of Platelet Deposition and Activation: I. Model Development and Properties. <i>Annals of Biomedical Engineering</i> , 1999, 27, 436-448.	1.3	150
27	A small diameter, fibrous vascular conduit generated from a poly(ester urethane)urea and phospholipid polymer blend. <i>Biomaterials</i> , 2009, 30, 2457-2467.	5.7	148
28	Biodegradable elastomeric scaffolds with basic fibroblast growth factor release. <i>Journal of Controlled Release</i> , 2007, 120, 70-78.	4.8	147
29	Characterization of the complete fiber network topology of planar fibrous tissues and scaffolds. <i>Biomaterials</i> , 2010, 31, 5345-5354.	5.7	144
30	Targeted ultrasound contrast agents: In vitro assessment of endothelial dysfunction and multi-targeting to ICAM-1 and sialyl Lewisx. <i>Biotechnology and Bioengineering</i> , 2005, 92, 780-788.	1.7	141
31	Pericyte-based human tissue engineered vascular grafts. <i>Biomaterials</i> , 2010, 31, 8235-8244.	5.7	137
32	<i>In Vivo</i> Assessment of a Tissue-Engineered Vascular Graft Combining a Biodegradable Elastomeric Scaffold and Muscle-Derived Stem Cells in a Rat Model. <i>Tissue Engineering - Part A</i> , 2010, 16, 1215-1223.	1.6	137
33	The engineering of organized human corneal tissue through the spatial guidance of corneal stromal stem cells. <i>Biomaterials</i> , 2012, 33, 1343-1352.	5.7	135
34	Modulating Targeted Adhesion of an Ultrasound Contrast Agent to Dysfunctional Endothelium. <i>Annals of Biomedical Engineering</i> , 2002, 30, 1012-1019.	1.3	131
35	Reactive oxygen species scavenging with a biodegradable, thermally responsive hydrogel compatible with soft tissue injection. <i>Biomaterials</i> , 2018, 177, 98-112.	5.7	128
36	Targeted In Vivo Labeling of Receptors for Vascular Endothelial Growth Factor. <i>Circulation</i> , 2003, 108, 97-103.	1.6	118

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37	Preclinical biocompatibility assessment of the EVAHEART ventricular assist device: Coating comparison and platelet activation. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 85-92.	2.1	118
38	On the biomechanical function of scaffolds for engineering load-bearing soft tissues. <i>Acta Biomaterialia</i> , 2010, 6, 2365-2381.	4.1	118
39	Synthesis, Characterization and Cytocompatibility of Polyurethaneurea Elastomers with Designed Elastase Sensitivity. <i>Biomacromolecules</i> , 2005, 6, 2833-2842.	2.6	116
40	Generating Elastic, Biodegradable Polyurethane/Poly(lactide-co-glycolide) Fibrous Sheets with Controlled Antibiotic Release via Two-Stream Electrospinning. <i>Biomacromolecules</i> , 2008, 9, 1200-1207.	2.6	107
41	Bi-layered polyurethane " Extracellular matrix cardiac patch improves ischemic ventricular wall remodeling in a rat model. <i>Biomaterials</i> , 2016, 107, 1-14.	5.7	107
42	In Vivo Evaluation of a Porous, Elastic, Biodegradable Patch for Reconstructive Cardiac Procedures. <i>Annals of Thoracic Surgery</i> , 2007, 83, 648-654.	0.7	106
43	Hybrid nanofibrous scaffolds from electrospinning of a synthetic biodegradable elastomer and urinary bladder matrix. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2008, 19, 635-652.	1.9	102
44	Treatment of rat pancreatic islets with reactive PEG. <i>Biomaterials</i> , 2000, 21, 1155-1164.	5.7	95
45	<i>In vivo</i> performance of a phospholipid-coated bioerodable elastomeric graft for small-diameter vascular applications. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 96A, 436-448.	2.1	95
46	Bioengineering Organized, Multilamellar Human Corneal Stromal Tissue by Growth Factor Supplementation on Highly Aligned Synthetic Substrates. <i>Tissue Engineering - Part A</i> , 2013, 19, 2063-2075.	1.6	94
47	Photocissable Hydrogel Synthesis via Rapid Photopolymerization of Novel PEG-Based Polymers in the Absence of Photoinitiators. <i>Journal of the American Chemical Society</i> , 1996, 118, 6235-6240.	6.6	93
48	A seeding device for tissue engineered tubular structures. <i>Biomaterials</i> , 2006, 27, 4863-4870.	5.7	93
49	Computational Simulation of Platelet Deposition and Activation: II. Results for Poiseuille Flow over Collagen. <i>Annals of Biomedical Engineering</i> , 1999, 27, 449-458.	1.3	92
50	Protein-Reactive, Thermoresponsive Copolymers with High Flexibility and Biodegradability. <i>Biomacromolecules</i> , 2008, 9, 1283-1292.	2.6	86
51	Thermally Responsive Injectable Hydrogel Incorporating Methacrylate-Polylactide for Hydrolytic Lability. <i>Biomacromolecules</i> , 2010, 11, 1873-1881.	2.6	84
52	Simple surface modification of a titanium alloy with silanated zwitterionic phosphorylcholine or sulfobetaine modifiers to reduce thrombogenicity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 79, 357-364.	2.5	79
53	Molecular barriers to biomaterial thrombosis by modification of surface proteins with polyethylene glycol. <i>Biomaterials</i> , 1998, 19, 1885-1893.	5.7	76
54	Morphological and mechanical characteristics of the reconstructed rat abdominal wall following use of a wet electrospun biodegradable polyurethane elastomer scaffold. <i>Biomaterials</i> , 2010, 31, 3253-3265.	5.7	75

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55	Microstructural manipulation of electrospun scaffolds for specific bending stiffness for heart valve tissue engineering. <i>Acta Biomaterialia</i> , 2012, 8, 4268-4277.	4.1	75
56	Tissue-to-cellular level deformation coupling in cell micro-integrated elastomeric scaffolds. <i>Biomaterials</i> , 2008, 29, 3228-3236.	5.7	74
57	Elastomeric Electrospun Polyurethane Scaffolds: The Interrelationship Between Fabrication Conditions, Fiber Topology, and Mechanical Properties. <i>Advanced Materials</i> , 2011, 23, 106-111.	11.1	73
58	Influence of Serotonin-Transporter-Linked Promoter Region Polymorphism on Platelet Activation in Geriatric Depression. <i>American Journal of Psychiatry</i> , 2001, 158, 2074-2076.	4.0	72
59	Corneal stromal stem cells versus corneal fibroblasts in generating structurally appropriate corneal stromal tissue. <i>Experimental Eye Research</i> , 2014, 120, 71-81.	1.2	71
60	Albumin Microbubble Adherence to Human Coronary Endothelium: Implications for Assessment of Endothelial Function Using Myocardial Contrast Echocardiography. <i>Journal of the American College of Cardiology</i> , 1997, 30, 689-693.	1.2	70
61	Targeting and ultrasound imaging of microbubble-based contrast agents. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1999, 8, 177-184.	1.1	70
62	Immobilized carbonic anhydrase on hollow fiber membranes accelerates CO ₂ removal from blood. <i>Journal of Membrane Science</i> , 2012, 403-404, 25-31.	4.1	69
63	From single fiber to macro-level mechanics: A structural finite-element model for elastomeric fibrous biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 39, 146-161.	1.5	69
64	Biodegradable poly(ester urethane)urea elastomers with variable amino content for subsequent functionalization with phosphorylcholine. <i>Acta Biomaterialia</i> , 2014, 10, 4639-4649.	4.1	66
65	Ventricular wall biomaterial injection therapy after myocardial infarction: Advances in material design, mechanistic insight and early clinical experiences. <i>Biomaterials</i> , 2017, 129, 37-53.	5.7	66
66	Heart valve scaffold fabrication: Bioinspired control of macro-scale morphology, mechanics and micro-structure. <i>Biomaterials</i> , 2018, 150, 25-37.	5.7	66
67	Modeling Flow Effects on Thrombotic Deposition in a Membrane Oxygenator. <i>Artificial Organs</i> , 2000, 24, 29-36.	1.0	65
68	Nonthrombogenic, Biodegradable Elastomeric Polyurethanes with Variable Sulfobetaine Content. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 22796-22806.	4.0	65
69	Timing effect of intramyocardial hydrogel injection for positively impacting left ventricular remodeling after myocardial infarction. <i>Biomaterials</i> , 2016, 83, 182-193.	5.7	64
70	Towards microfabricated biohybrid artificial lung modules for chronic respiratory support. <i>Biomedical Microdevices</i> , 2009, 11, 117-127.	1.4	63
71	Right Ventricular Outflow Tract Repair with a Cardiac Biologic Scaffold. <i>Cells Tissues Organs</i> , 2012, 195, 159-170.	1.3	62
72	Surface Modification of a Biodegradable Magnesium Alloy with Phosphorylcholine (PC) and Sulfobetaine (SB) Functional Macromolecules for Reduced Thrombogenicity and Acute Corrosion Resistance. <i>Langmuir</i> , 2013, 29, 8320-8327.	1.6	62

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73	Biodegradable, elastomeric coatings with controlled anti-proliferative agent release for magnesium-based cardiovascular stents. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 144, 170-179.	2.5	62
74	Topography-driven surface renewal. <i>Nature Physics</i> , 2018, 14, 948-953.	6.5	59
75	Synthesis, characterization and surface modification of low moduli poly(ether carbonate) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	4.1	57
76	Controlled Release of IGF-1 and HGF from a Biodegradable Polyurethane Scaffold. <i>Pharmaceutical Research</i> , 2011, 28, 1282-1293.	1.7	57
77	Mesenchymal stem cells attenuate angiotensin II-induced aortic aneurysm growth in apolipoprotein E-deficient mice. <i>Journal of Vascular Surgery</i> , 2011, 54, 1743-1752.	0.6	56
78	Synthesis, Characterization, and Paclitaxel Release from a Biodegradable, Elastomeric, Poly(ester) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2012, 13, 3686-3694.	2.6	56
79	Multi-Constituent Simulation of Thrombus Deposition. <i>Scientific Reports</i> , 2017, 7, 42720.	1.6	56
80	Ultrasound molecular imaging of cardiovascular disease. <i>Nature Clinical Practice Cardiovascular Medicine</i> , 2008, 5, S26-S32.	3.3	55
81	Fiber micro-architecture in the longitudinal-radial and circumferential-radial planes of ascending thoracic aortic aneurysm media. <i>Journal of Biomechanics</i> , 2013, 46, 2787-2794.	0.9	55
82	A custom image-based analysis tool for quantifying elastin and collagen micro-architecture in the wall of the human aorta from multi-photon microscopy. <i>Journal of Biomechanics</i> , 2014, 47, 935-943.	0.9	54
83	Sustained viral gene delivery from a micro-fibrous, elastomeric cardiac patch to the ischemic rat heart. <i>Biomaterials</i> , 2017, 133, 132-143.	5.7	54
84	Intramyocardial injection of a fully synthetic hydrogel attenuates left ventricular remodeling post myocardial infarction. <i>Biomaterials</i> , 2019, 217, 119289.	5.7	54
85	Platelet activation, aggregation, and life span in calves implanted with axial flow ventricular assist devices. <i>Annals of Thoracic Surgery</i> , 2002, 73, 1933-1938.	0.7	51
86	An Elastomeric Patch Electrospun from a Blended Solution of Dermal Extracellular Matrix and Biodegradable Polyurethane for Rat Abdominal Wall Repair. <i>Tissue Engineering - Part C: Methods</i> , 2012, 18, 122-132.	1.1	51
87	The effect of polymer degradation time on functional outcomes of temporary elastic patch support in ischemic cardiomyopathy. <i>Biomaterials</i> , 2013, 34, 7353-7363.	5.7	51
88	Elastase-Sensitive Elastomeric Scaffolds with Variable Anisotropy for Soft Tissue Engineering. <i>Pharmaceutical Research</i> , 2008, 25, 2400-2412.	1.7	50
89	Optimal elastomeric scaffold leaflet shape for pulmonary heart valve leaflet replacement. <i>Journal of Biomechanics</i> , 2013, 46, 662-669.	0.9	50
90	Characterizing the modification of surface proteins with poly(ethylene glycol) to interrupt platelet adhesion. <i>Biomaterials</i> , 2006, 27, 3125-3135.	5.7	49

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91	Injectable, porous, biohybrid hydrogels incorporating decellularized tissue components for soft tissue applications. <i>Acta Biomaterialia</i> , 2018, 73, 112-126.	4.1	49
92	Naive Rat Amnion-Derived Cell Transplantation Improved Left Ventricular Function and Reduced Myocardial Scar of Postinfarcted Heart. <i>Cell Transplantation</i> , 2009, 18, 477-486.	1.2	48
93	Extended and sequential delivery of protein from injectable thermoresponsive hydrogels. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 776-785.	2.1	48
94	Creating molecular barriers to acute platelet deposition on damaged arteries with reactive polyethylene glycol. , 1998, 41, 251-256.		46
95	Transient elastic support for vein grafts using a constricting microfibrillar polymer wrap. <i>Biomaterials</i> , 2008, 29, 3213-3220.	5.7	46
96	Targeted ultrasound imaging using microbubbles. <i>Cardiology Clinics</i> , 2004, 22, 283-298.	0.9	45
97	Constitutive modeling of ascending thoracic aortic aneurysms using microstructural parameters. <i>Medical Engineering and Physics</i> , 2016, 38, 121-130.	0.8	45
98	Vacuum-Assisted Venous Drainage during Fetal Cardiopulmonary Bypass. <i>ASAIO Journal</i> , 2005, 51, 644-648.	0.9	44
99	Predicting Membrane Oxygenator Pressure Drop Using Computational Fluid Dynamics. <i>Artificial Organs</i> , 2002, 26, 600-607.	1.0	43
100	Development of Composite Porous Scaffolds Based on Collagen and Biodegradable Poly(ester) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	1.2	43
101	Vascular Endoluminal Delivery of Mesenchymal Stem Cells Using Acoustic Radiation Force. <i>Tissue Engineering - Part A</i> , 2011, 17, 1457-1464.	1.6	43
102	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. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2013, 146, 391-399.e1.	0.4	43
103	Non-invasive characterization of polyurethane-based tissue constructs in a rat abdominal repair model using high frequency ultrasound elasticity imaging. <i>Biomaterials</i> , 2013, 34, 2701-2709.	5.7	42
104	<i>In Vivo</i> Functional Evaluation of Tissue-Engineered Vascular Grafts Fabricated Using Human Adipose-Derived Stem Cells from High Cardiovascular Risk Populations. <i>Tissue Engineering - Part A</i> , 2016, 22, 765-775.	1.6	42
105	Molecular barriers to biomaterial thrombosis by modification of surface proteins with polyethylene glycol. <i>Biomaterials</i> , 1999, 20, 101-109.	5.7	41
106	Intramyocardial Injection of a Synthetic Hydrogel with Delivery of bFGF and IGF1 in a Rat Model of Ischemic Cardiomyopathy. <i>Biomacromolecules</i> , 2014, 15, 1-11.	2.6	41
107	Covalent surface modification of a titanium alloy with a phosphorylcholineâ€“containing copolymer for reduced thrombogenicity in cardiovascular devices. <i>Journal of Biomedical Materials Research - Part A</i> , 2009, 91A, 18-28.	2.1	40
108	Surface modification of a titanium alloy with a phospholipid polymer prepared by a plasma-induced grafting technique to improve surface thromboresistance. <i>Colloids and Surfaces B: Biointerfaces</i> , 2009, 74, 96-102.	2.5	40

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109	Hollow Fiber Membrane Modification with Functional Zwitterionic Macromolecules for Improved Thromboresistance in Artificial Lungs. <i>Langmuir</i> , 2015, 31, 2463-2471.	1.6	40
110	Orthogonally Functionalizable Polyurethane with Subsequent Modification with Heparin and Endothelium-Inducing Peptide Aiming for Vascular Reconstruction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14442-14452.	4.0	39
111	Assessing acute platelet adhesion on opaque metallic and polymeric biomaterials with fiber optic microscopy. , 2000, 49, 460-468.		37
112	Evaluation of the stromal vascular fraction of adipose tissue as the basis for a stem cell-based tissue-engineered vascular graft. <i>Journal of Vascular Surgery</i> , 2017, 66, 883-890.e1.	0.6	37
113	A biostable, anti-fouling zwitterionic polyurethane-urea based on PDMS for use in blood-contacting medical devices. <i>Journal of Materials Chemistry B</i> , 2020, 8, 8305-8314.	2.9	37
114	Fabrication of elastomeric scaffolds with curvilinear fibrous structures for heart valve leaflet engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 3101-3106.	2.1	36
115	Placement of an Elastic Biodegradable Cardiac Patch on a Subacute Infarcted Heart Leads to Cellularization With Early Developmental Cardiomyocyte Characteristics. <i>Journal of Cardiac Failure</i> , 2012, 18, 585-595.	0.7	35
116	Extracellular matrix fiber microarchitecture is region-specific in bicuspid aortic valve-associated ascending aortopathy. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2016, 151, 1718-1728.e5.	0.4	35
117	Active wrinkles to drive self-cleaning: A strategy for anti-thrombotic surfaces for vascular grafts. <i>Biomaterials</i> , 2019, 192, 226-234.	5.7	35
118	Highly crystalline MP-1 hydroxylapatite coating Part I: In vitro characterization and comparison to other plasma-sprayed hydroxylapatite coatings. <i>Clinical Oral Implants Research</i> , 1999, 10, 245-256.	1.9	34
119	Assessment of Hydraulic Performance and Biocompatibility of a MagLev Centrifugal Pump System Designed for Pediatric Cardiac or Cardiopulmonary Support. <i>ASAIO Journal</i> , 2007, 53, 771-777.	0.9	34
120	Optimization of ultrasound contrast agents with computational models to improve selection of ligands and binding strength. <i>Biotechnology and Bioengineering</i> , 2010, 107, 854-864.	1.7	34
121	Tailoring the degradation rates of thermally responsive hydrogels designed for soft tissue injection by varying the autocatalytic potential. <i>Biomaterials</i> , 2015, 53, 484-493.	5.7	34
122	A biohybrid artificial lung prototype with active mixing of endothelialized microporous hollow fibers. <i>Biotechnology and Bioengineering</i> , 2010, 106, 490-500.	1.7	33
123	Engineered Fetal Cardiac Graft Preserves Its Cardiomyocyte Proliferation Within Postinfarcted Myocardium and Sustains Cardiac Function. <i>Tissue Engineering - Part A</i> , 2011, 17, 585-596.	1.6	32
124	Thiol Click Modification of Cyclic Disulfide Containing Biodegradable Polyurethane Urea Elastomers. <i>Biomacromolecules</i> , 2015, 16, 1622-1633.	2.6	32
125	Visualization and analysis of biomaterial-centered thrombus formation within a defined crevice under flow. <i>Biomaterials</i> , 2016, 96, 72-83.	5.7	32
126	Nanometer-sized extracellular matrix coating on polymer-based scaffold for tissue engineering applications. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 94-103.	2.1	32

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127	Monocyte Tissue Factor Expression and Ongoing Complement Generation in Ventricular Assist Device Patients. <i>Annals of Thoracic Surgery</i> , 1998, 65, 1071-1076.	0.7	31
128	Urinary bladder matrix promotes site appropriate tissue formation following right ventricle outflow tract repair. <i>Organogenesis</i> , 2013, 9, 149-160.	0.4	31
129	Non-invasive and Non-destructive Characterization of Tissue Engineered Constructs Using Ultrasound Imaging Technologies: A Review. <i>Annals of Biomedical Engineering</i> , 2016, 44, 621-635.	1.3	31
130	Effects of fabrication on the mechanics, microstructure and micromechanical environment of small intestinal submucosa scaffolds for vascular tissue engineering. <i>Journal of Biomechanics</i> , 2014, 47, 2766-2773.	0.9	30
131	Skeletal muscle derived stem cells microintegrated into a biodegradable elastomer for reconstruction of the abdominal wall. <i>Biomaterials</i> , 2017, 113, 31-41.	5.7	30
132	Surface Modification of Electrospun Scaffolds for Endothelialization of Tissue-Engineered Vascular Grafts Using Human Cord Blood-Derived Endothelial Cells. <i>Journal of Clinical Medicine</i> , 2019, 8, 185.	1.0	30
133	InÂvivo functional assessment of a novel degradable metal and elastomeric scaffold-based tissue engineered heart valve. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2019, 157, 1809-1816.	0.4	30
134	Design Optimization of Blood Shearing Instrument by Computational Fluid Dynamics. <i>Artificial Organs</i> , 2005, 29, 482-489.	1.0	29
135	InÂvivo monitoring of structural and mechanical changes of tissue scaffolds by multi-modality imaging. <i>Biomaterials</i> , 2014, 35, 7851-7859.	5.7	29
136	Highly crystalline MP-1 hydroxylapatite coating Part II: In vivoperformance on endosseous root implants in dogs. <i>Clinical Oral Implants Research</i> , 1999, 10, 257-266.	1.9	28
137	Measurement of Hemostatic Indexes in Conjunction With Transcranial Doppler Sonography in Patients With Ventricular Assist Devices. <i>Stroke</i> , 1999, 30, 2554-2561.	1.0	27
138	Biodegradable Zwitterionic Polymer Coatings for Magnesium Alloy Stents. <i>Langmuir</i> , 2019, 35, 1421-1429.	1.6	26
139	In-vivo assessment of a tissue engineered vascular graft computationally optimized for target vessel compliance. <i>Acta Biomaterialia</i> , 2021, 123, 298-311.	4.1	26
140	Real time visualization and characterization of platelet deposition under flow onto clinically relevant opaque surfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 1303-1311.	2.1	25
141	Abdominal wall reconstruction by a regionally distinct biocomposite of extracellular matrix digest and a biodegradable elastomer. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016, 10, 748-761.	1.3	25
142	Biodegradable polyurethane scaffolds in regenerative medicine: Clinical translation review. <i>Journal of Biomedical Materials Research - Part A</i> , 2022, 110, 1460-1487.	2.1	25
143	Flow Cytometric Assays for Quantifying Activated Ovine Platelets. <i>Artificial Organs</i> , 2008, 32, 136-145.	1.0	24
144	Reconstructing the Lung. <i>Science</i> , 2010, 329, 520-522.	6.0	24

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145	Ultrasound Molecular Imaging of Angiogenesis Using Vascular Endothelial Growth Factor-Conjugated Microbubbles. <i>Molecular Pharmaceutics</i> , 2017, 14, 781-790.	2.3	24
146	In Vivo 5 Day Animal Studies of a Compact, Wearable Pumping Artificial Lung. <i>ASAIO Journal</i> , 2019, 65, 94-100.	0.9	24
147	Taking the Next Steps in Regenerative Rehabilitation: Establishment of a New Interdisciplinary Field. <i>Archives of Physical Medicine and Rehabilitation</i> , 2020, 101, 917-923.	0.5	24
148	Acute In Vivo Functional Assessment of a Biodegradable Stentless Elastomeric Tricuspid Valve. <i>Journal of Cardiovascular Translational Research</i> , 2020, 13, 796-805.	1.1	24
149	Temporal Leukocyte Numbers and Granulocyte Activation in Pulsatile and Rotary Ventricular Assist Device Patients. <i>Artificial Organs</i> , 2014, 38, 447-455.	1.0	23
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