

# Xiongbiao Chen

## List of Publications by Year in descending order

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159  
papers

6,608  
citations

47006

47  
h-index

85541

71  
g-index

159  
all docs

159  
docs citations

159  
times ranked

7089  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stentriever : An engineering review. <i>Interventional Neuroradiology</i> , 2023, 29, 125-133.	1.1	3
2	Review of extrusion-based multi-material bioprinting processes. <i>Bioprinting</i> , 2022, 25, e00189.	5.8	23
3	Discretization and perturbations in the simulation of localized turbulence in a pipe with a sudden expansion. <i>Journal of Fluid Mechanics</i> , 2022, 935, .	3.4	1
4	Fabrication of chitosan/alginate/hydroxyapatite hybrid scaffolds using 3D printing and impregnating techniques for potential cartilage regeneration. <i>International Journal of Biological Macromolecules</i> , 2022, 204, 62-75.	7.5	62
5	Effect of Surface Curvature on the Mechanical and Mass-Transport Properties of Additively Manufactured Tissue Scaffolds with Minimal Surfaces. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 1623-1643.	5.2	12
6	3D Bioprinted Scaffolds for Bone Tissue Engineering: State-Of-The-Art and Emerging Technologies. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 824156.	4.1	51
7	Collecting and deactivating TGF- $\beta$ 1 hydrogel for anti-scarring therapy in post-glaucoma filtration surgery. <i>Materials Today Bio</i> , 2022, 14, 100260.	5.5	2
8	Emerging biotechnologies for evaluating disruption of stress, sleep, and circadian rhythm mechanism using aptamer-based detection of salivary biomarkers. <i>Biotechnology Advances</i> , 2022, 59, 107961.	11.7	16
9	Printability and Cell Viability in Extrusion-Based Bioprinting from Experimental, Computational, and Machine Learning Views. <i>Journal of Functional Biomaterials</i> , 2022, 13, 40.	4.4	55
10	Novel trends, challenges and new perspectives for enamel repair and regeneration to treat dental defects. <i>Biomaterials Science</i> , 2022, , .	5.4	6
11	Remodelling 3D printed GelMA-HA corneal scaffolds by cornea stromal cells. <i>Colloids and Interface Science Communications</i> , 2022, 49, 100632.	4.1	8
12	A Review on Antibacterial Biomaterials in Biomedical Applications: From Materials Perspective to Bioprinting Design. <i>Polymers</i> , 2022, 14, 2238.	4.5	24
13	Self-Crosslinkable Oxidized Alginate-Carboxymethyl Chitosan Hydrogels as an Injectable Cell Carrier for In Vitro Dental Enamel Regeneration. <i>Journal of Functional Biomaterials</i> , 2022, 13, 71.	4.4	13
14	Fabrication of Wound Dressing Cotton Nano-Composite Coated with Tragacanth/Polyvinyl Alcohol: Characterization and In Vitro Studies. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 013002.	1.8	7
15	3D printing PCL/nHA bone scaffolds: exploring the influence of material synthesis techniques. <i>Biomaterials Research</i> , 2021, 25, 3.	6.9	80
16	COVID-19 basics and vaccine development with a Canadian perspective. <i>Canadian Journal of Microbiology</i> , 2021, 67, 112-118.	1.7	3
17	Printabilityâ€”A key issue in extrusion-based bioprinting. <i>Journal of Pharmaceutical Analysis</i> , 2021, 11, 564-579.	5.3	100
18	Current progress, challenges, and future prospects of testis organoidsâ€”. <i>Biology of Reproduction</i> , 2021, 104, 942-961.	2.7	11

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19	A numerical study on tumor-on-chip performance and its optimization for nanodrug-based combination therapy. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 983-1002.	2.8	2
20	Effect of unit configurations and parameters on the properties of Ti-6Al-4V unit-stacked scaffolds: A trade-off between mechanical and permeable performance. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 116, 104332.	3.1	12
21	Printability in extrusion bioprinting. <i>Biofabrication</i> , 2021, 13, 033001.	7.1	74
22	Innovation and possible long-term impact driven by COVID-19: Manufacturing, personal protective equipment and digital technologies. <i>Technology in Society</i> , 2021, 65, 101541.	9.4	55
23	Noninvasive Three-Dimensional <i>In Situ</i> and <i>In Vivo</i> Characterization of Bioprinted Hydrogel Scaffolds Using the X-ray Propagation-Based Imaging Technique. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 25611-25623.	8.0	20
24	Virtual Reality Visualization of CFD Simulated Blood Flow in Cerebral Aneurysms Treated with Flow Diverter Stents. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 8082.	2.5	6
25	Bioprinting and In Vitro Characterization of an Eggwhite-Based Cell-Laden Patch for Endothelialized Tissue Engineering Applications. <i>Journal of Functional Biomaterials</i> , 2021, 12, 45.	4.4	16
26	3-Dimensional Printing of Hydrogel-Based Nanocomposites: A Comprehensive Review on the Technology Description, Properties, and Applications. <i>Advanced Engineering Materials</i> , 2021, 23, 2100477.	3.5	25
27	Characterization of Tissue Scaffolds Using Synchrotron Radiation Microcomputed Tomography Imaging. <i>Tissue Engineering - Part C: Methods</i> , 2021, 27, 573-588.	2.1	10
28	Bioprinted constructs for respiratory tissue engineering. <i>Bioprinting</i> , 2021, 24, e00177.	5.8	7
29	Cartilage Tissue Engineering Approaches Need to Assess Fibrocartilage When Hydrogel Constructs Are Mechanically Loaded. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 787538.	4.1	10
30	Curcumin-loaded electrospun polycaprolactone/montmorillonite nanocomposite: wound dressing application with antibacterial and low cell toxicity properties. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2020, 31, 169-187.	3.5	57
31	Electrophoretic deposition of bioglass/graphene oxide composite on Ti-alloy implants for improved antibacterial and cytocompatible properties. <i>Materials Technology</i> , 2020, 35, 69-74.	3.0	13
32	In vitro and in vivo evaluation of chitosan-alginate/gentamicin wound dressing nanofibrous with high antibacterial performance. <i>Polymer Testing</i> , 2020, 82, 106298.	4.8	107
33	Electrospinning of Scaffolds from the Polycaprolactone/Polyurethane Composite with Graphene Oxide for Skin Tissue Engineering. <i>Applied Biochemistry and Biotechnology</i> , 2020, 191, 567-578.	2.9	44
34	Process-induced cell damage: pneumatic versus screw-driven bioprinting. <i>Biofabrication</i> , 2020, 12, 025011.	7.1	47
35	Extrusion-based printing of chitosan scaffolds and their in vitro characterization for cartilage tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 3179-3192.	7.5	73
36	Antibacterial activities of zeolite/silver-graphene oxide nanocomposite in bone implants. <i>Materials Technology</i> , 2020, , 1-10.	3.0	14

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37	The Hemodynamics of Aneurysms Treated with Flow-Diverting Stents Considering both Stent and Aneurysm/Artery Geometries. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5239.	2.5	3
38	Bioprinting for combating infectious diseases. <i>Bioprinting</i> , 2020, 20, e00104.	5.8	16
39	Co-incorporation of graphene oxide/silver nanoparticle into poly-L-lactic acid fibrous: A route toward the development of cytocompatible and antibacterial coating layer on magnesium implants. <i>Materials Science and Engineering C</i> , 2020, 111, 110812.	7.3	78
40	Development of the PVA/CS nanofibers containing silk protein sericin as a wound dressing: In vitro and in vivo assessment. <i>International Journal of Biological Macromolecules</i> , 2020, 149, 513-521.	7.5	122
41	Bioprinting and in vitro characterization of alginate dialdehyde-gelatin hydrogel bio-ink. <i>Bio-Design and Manufacturing</i> , 2020, 3, 48-59.	7.7	35
42	Printability of 3D Printed Hydrogel Scaffolds: Influence of Hydrogel Composition and Printing Parameters. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 292.	2.5	73
43	Clinoenstatite/Tantalum Coating for Enhancement of Biocompatibility and Corrosion Protection of Mg Alloy. <i>Journal of Functional Biomaterials</i> , 2020, 11, 26.	4.4	12
44	Electrospinning of polyurethane/graphene oxide for skin wound dressing and its in vitro characterization. <i>Journal of Biomaterials Applications</i> , 2020, 35, 135-145.	2.4	34
45	Cardiomyocyte Induction and Regeneration for Myocardial Infarction Treatment: Cell Sources and Administration Strategies. <i>Advanced Healthcare Materials</i> , 2020, 9, e2001175.	7.6	21
46	Biocompatibility and bioactivity of hardystonite-based nanocomposite scaffold for tissue engineering applications. <i>Biomedical Physics and Engineering Express</i> , 2020, 6, 035011.	1.2	12
47	Micromechanisms of Cortical Bone Failure Under Different Loading Conditions. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	1.3	8
48	A dual-transduction-integrated biosensing system to examine the 3D cell-culture for bone regeneration. <i>Biosensors and Bioelectronics</i> , 2019, 141, 111481.	10.1	8
49	Controlled Drug Delivery Systems for Oral Cancer Treatment—Current Status and Future Perspectives. <i>Pharmaceutics</i> , 2019, 11, 302.	4.5	86
50	Coating biodegradable magnesium alloys with electrospun poly-L-lactic acid- $\gamma$ -kermanite-doxycycline nanofibers for enhanced biocompatibility, antibacterial activity, and corrosion resistance. <i>Surface and Coatings Technology</i> , 2019, 377, 124898.	4.8	71
51	Synthesis and in-vitro characterization of biodegradable porous magnesium-based scaffolds containing silver for bone tissue engineering. <i>Transactions of Nonferrous Metals Society of China</i> , 2019, 29, 984-996.	4.2	27
52	Antibacterial activity and in vivo wound healing evaluation of polycaprolactone-gelatin methacryloyl-cephalexin electrospun nanofibrous. <i>Materials Letters</i> , 2019, 256, 126618.	2.6	44
53	Bioengineered tumor microenvironments with naked mole rats high-molecular-weight hyaluronan induces apoptosis in breast cancer cells. <i>Oncogene</i> , 2019, 38, 4297-4309.	5.9	18
54	Bio-fabrication of peptide-modified alginate scaffolds: Printability, mechanical stability and neurite outgrowth assessments. <i>Bioprinting</i> , 2019, 14, e00045.	5.8	48

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55	Development of Highly pH-Sensitive Hybrid Membranes by Simultaneous Electrospinning of Amphiphilic Nanofibers Reinforced with Graphene Oxide. <i>Journal of Functional Biomaterials</i> , 2019, 10, 23.	4.4	22
56	Bioprinting Schwann cell-laden scaffolds from low-viscosity hydrogel compositions. <i>Journal of Materials Chemistry B</i> , 2019, 7, 4538-4551.	5.8	54
57	Advancements in Canadian Biomaterials Research in Neurotraumatic Diagnosis and Therapies. <i>Processes</i> , 2019, 7, 336.	2.8	2
58	Printability and Cell Viability in Bioprinting Alginate Dialdehyde-Gelatin Scaffolds. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2976-2987.	5.2	123
59	CFD-Based Comparison Study of a New Flow Diverting Stent and Commercially-Available Ones for the Treatment of Cerebral Aneurysms. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1341.	2.5	10
60	Improved antibacterial properties of an Mg-Zn-Ca alloy coated with chitosan nanofibers incorporating silver sulfadiazine multiwall carbon nanotubes for bone implants. <i>Polymers for Advanced Technologies</i> , 2019, 30, 1333-1339.	3.2	42
61	Antibacterial activity and corrosion resistance of Ta <sub>2</sub> O <sub>5</sub> thin film and electrospun PCL/MgO-Ag nanofiber coatings on biodegradable Mg alloy implants. <i>Ceramics International</i> , 2019, 45, 11883-11892.	4.8	73
62	Bioprinting of Vascularized Tissue Scaffolds: Influence of Biopolymer, Cells, Growth Factors, and Gene Delivery. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-20.	1.9	38
63	Indirect 3D bioprinting and characterization of alginate scaffolds for potential nerve tissue engineering applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 93, 183-193.	3.1	76
64	Evaluating the Effects of Nanosilica on Mechanical and Tribological Properties of Polyvinyl Alcohol/Polyacrylamide Polymer Composites for Artificial Cartilage from an Atomic Level. <i>Polymers</i> , 2019, 11, 76.	4.5	21
65	Effect of Process Parameters on the Initial Burst Release of Protein-Loaded Alginate Nanospheres. <i>Journal of Functional Biomaterials</i> , 2019, 10, 42.	4.4	15
66	A new multifunctional monticellite-ciprofloxacin scaffold: Preparation, bioactivity, biocompatibility, and antibacterial properties. <i>Materials Chemistry and Physics</i> , 2019, 222, 118-131.	4.0	42
67	Development of PMMA-Mon-CNT bone cement with superior mechanical properties and favorable biological properties for use in bone-defect treatment. <i>Materials Letters</i> , 2019, 240, 9-12.	2.6	56
68	Homogeneous hydroxyapatite/alginate composite hydrogel promotes calcified cartilage matrix deposition with potential for three-dimensional bioprinting. <i>Biofabrication</i> , 2019, 11, 015015.	7.1	70
69	Investigating the Structure of the Surface Film on a Corrosion Resistant Mg-Li(-Al-Y-Zr) Alloy. <i>Corrosion</i> , 2019, 75, 80-89.	1.1	23
70	Influence of ionic crosslinkers (Ca <sup>2+</sup> /Ba <sup>2+</sup> /Zn <sup>2+</sup> ) on the mechanical and biological properties of 3D Bioprinted Hydrogel Scaffolds. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2018, 29, 1126-1154.	3.5	72
71	Influence of crosslinking on the mechanical behavior of 3D printed alginate scaffolds: Experimental and numerical approaches. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 80, 111-118.	3.1	91
72	Strategic Design and Fabrication of Nerve Guidance Conduits for Peripheral Nerve Regeneration. <i>Biotechnology Journal</i> , 2018, 13, e1700635.	3.5	122

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73	UV-Assisted 3D Bioprinting of Nanoreinforced Hybrid Cardiac Patch for Myocardial Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2018, 24, 74-88.	2.1	179
74	Dispensing-based bioprinting of mechanically-functional hybrid scaffolds with vessel-like channels for tissue engineering applications – A brief review. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 78, 298-314.	3.1	53
75	Characterization of Cell Damage and Proliferative Ability during and after Bioprinting. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 3906-3918.	5.2	70
76	Modeling of the Mechanical Behavior of 3D Bioplotting Scaffolds Considering the Penetration in Interlocked Strands. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1422.	2.5	24
77	3D biofabrication of vascular networks for tissue regeneration: A report on recent advances. <i>Journal of Pharmaceutical Analysis</i> , 2018, 8, 277-296.	5.3	128
78	Modeling the flow and mass transport in a mechanically stimulated parametric porous scaffold under fluid-structure interaction approach. <i>International Communications in Heat and Mass Transfer</i> , 2018, 96, 53-60.	5.6	23
79	Regeneration of peripheral nerves by nerve guidance conduits: Influence of design, biopolymers, cells, growth factors, and physical stimuli. <i>Progress in Neurobiology</i> , 2018, 171, 125-150.	5.7	144
80	3D bioprinting of scaffolds with living Schwann cells for potential nerve tissue engineering applications. <i>Biofabrication</i> , 2018, 10, 035014.	7.1	112
81	Computational nanomedicine for mechanistic elucidation of bilayer nanoparticle-mediated release for tissue engineering. <i>Nanomedicine</i> , 2017, 12, 423-442.	3.3	5
82	Traditional Invasive and Synchrotron-Based Noninvasive Assessments of Three-Dimensional-Printed Hybrid Cartilage Constructs <i>In Situ</i> . <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 156-168.	2.1	33
83	A brief review of extrusion-based tissue scaffold bioprinting. <i>Biotechnology Journal</i> , 2017, 12, 1600671.	3.5	172
84	Microencapsulation of Lefty-secreting engineered cells for pulmonary fibrosis therapy in mice. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017, 312, L741-L747.	2.9	2
85	Bioprinted fibrin-factor XIII-hyaluronate hydrogel scaffolds with encapsulated Schwann cells and their in vitro characterization for use in nerve regeneration. <i>Bioprinting</i> , 2017, 5, 1-9.	5.8	109
86	Investigating the properties and interaction mechanism of nano-silica in polyvinyl alcohol/polyacrylamide blends at an atomic level. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 75, 529-537.	3.1	20
87	Potential of propagation-based synchrotron X-ray phase-contrast computed tomography for cardiac tissue engineering. <i>Journal of Synchrotron Radiation</i> , 2017, 24, 842-853.	2.4	8
88	Bioprinting Pattern-Dependent Electrical/Mechanical Behavior of Cardiac Alginate Implants: Characterization and <i>Ex Vivo</i> Phase-Contrast Microtomography Assessment. <i>Tissue Engineering - Part C: Methods</i> , 2017, 23, 548-564.	2.1	34
89	Molecular dynamics simulation and experimental study of the bonding properties of polymer binders in 3D powder printed hydroxyapatite bioceramic bone scaffolds. <i>Ceramics International</i> , 2017, 43, 13702-13709.	4.8	59
90	3D printing of porous alginate/gelatin hydrogel scaffolds and their mechanical property characterization. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2017, 66, 299-306.	3.4	110

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91	Fabrication and Optimal Design of Biodegradable Polymeric Stents for Aneurysms Treatments. <i>Journal of Functional Biomaterials</i> , 2017, 8, 8.	4.4	12
92	Evaluation of PBS Treatment and PEI Coating Effects on Surface Morphology and Cellular Response of 3D-Printed Alginate Scaffolds. <i>Journal of Functional Biomaterials</i> , 2017, 8, 48.	4.4	21
93	Aggregation Behavior of Nano-Silica in Polyvinyl Alcohol/Polyacrylamide Hydrogels Based on Dissipative Particle Dynamics. <i>Polymers</i> , 2017, 9, 611.	4.5	19
94	Application of Extrusion-Based Hydrogel Bioprinting for Cartilage Tissue Engineering. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1597.	4.1	133
95	Synthesis of Injectable Alginate Hydrogels with Muscle-Derived Stem Cells for Potential Myocardial Infarction Repair. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 252.	2.5	15
96	Effect of Nanoparticle Incorporation and Surface Coating on Mechanical Properties of Bone Scaffolds: A Brief Review. <i>Journal of Functional Biomaterials</i> , 2016, 7, 18.	4.4	37
97	3D Printing of Porous Cell-Laden Hydrogel Constructs for Potential Applications in Cartilage Tissue Engineering. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1200-1210.	5.2	97
98	Data of low-dose phase-based X-ray imaging for in situ soft tissue engineering assessments. <i>Data in Brief</i> , 2016, 6, 644-651.	1.0	1
99	Influence of mechanical properties of alginate-based substrates on the performance of Schwann cells in culture. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2016, 27, 898-915.	3.5	69
100	An alginate-based platform for cancer stem cell research. <i>Acta Biomaterialia</i> , 2016, 37, 83-92.	8.3	39
101	Hydrogels bearing bioengineered mimetic embryonic microenvironments for tumor reversion. <i>Journal of Materials Chemistry B</i> , 2016, 4, 6183-6191.	5.8	15
102	Regulation of sequential release of growth factors using bilayer polymeric nanoparticles for cardiac tissue engineering. <i>Nanomedicine</i> , 2016, 11, 3237-3259.	3.3	33
103	Influence of Flow Behavior of Alginate-Cell Suspensions on Cell Viability and Proliferation. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 652-662.	2.1	41
104	Tool wear monitoring and replacement for tubesheet drilling. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 86, 2011-2020.	3.0	3
105	Using synchrotron radiation inline phase-contrast imaging computed tomography to visualize three-dimensional printed hybrid constructs for cartilage tissue engineering. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 802-812.	2.4	18
106	Low-dose phase-based X-ray imaging techniques for in situ soft tissue engineering assessments. <i>Biomaterials</i> , 2016, 82, 151-167.	11.4	34
107	Analyzing Biological Performance of 3D-Printed, Cell-Impregnated Hybrid Constructs for Cartilage Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2016, 22, 173-188.	2.1	105
108	A mathematical model and computational framework for three-dimensional chondrocyte cell growth in a porous tissue scaffold placed inside a bidirectional flow perfusion bioreactor. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2601-2610.	3.3	19

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109	Sustained co-delivery of BIO and IGF-1 by a novel hybrid hydrogel system to stimulate endogenous cardiac repair in myocardial infarcted rat hearts. <i>International Journal of Nanomedicine</i> , 2015, 10, 4691.	6.7	40
110	Visualisation and analysis of large-scale vortex structures in three-dimensional turbulent lid-driven cavity flow. <i>Journal of Turbulence</i> , 2015, 16, 901-924.	1.4	9
111	Optimization of nanoparticles for cardiovascular tissue engineering. <i>Nanotechnology</i> , 2015, 26, 235301.	2.6	18
112	Computational modelling of the scaffold-free chondrocyte regeneration: a two-way coupling between the cell growth and local fluid flow and nutrient concentration. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 1217-1225.	2.8	5
113	Fluid flow and mass transfer over circular strands using the lattice Boltzmann method. <i>Heat and Mass Transfer</i> , 2015, 51, 1493-1504.	2.1	8
114	Modelling and simulation of the chondrocyte cell growth, glucose consumption and lactate production within a porous tissue scaffold inside a perfusion bioreactor. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2015, 5, 55-62.	4.4	32
115	Use of the polycation polyethyleneimine to improve the physical properties of alginate-hyaluronic acid hydrogel during fabrication of tissue repair scaffolds. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2015, 26, 433-445.	3.5	64
116	Prediction of cell growth rate over scaffold strands inside a perfusion bioreactor. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 333-344.	2.8	17
117	PLGA/alginate composite microspheres for hydrophilic protein delivery. <i>Materials Science and Engineering C</i> , 2015, 56, 251-259.	7.3	64
118	Experimental approaches to vascularisation within tissue engineering constructs. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2015, 26, 683-734.	3.5	52
119	MODELING MECHANICAL CELL DAMAGE IN THE BIOPRINTING PROCESS EMPLOYING A CONICAL NEEDLE. <i>Journal of Mechanics in Medicine and Biology</i> , 2015, 15, 1550073.	0.7	29
120	Fabrication and Osteogenesis of a Porous Nanohydroxyapatite/Polyamide Scaffold with an Anisotropic Architecture. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 825-833.	5.2	25
121	Rate-programming of nano-particulate delivery systems for smart bioactive scaffolds in tissue engineering. <i>Nanotechnology</i> , 2015, 26, 012001.	2.6	22
122	The Effect of Chondroitin Sulphate and Hyaluronic Acid on Chondrocytes Cultured within a Fibrin-Alginate Hydrogel. <i>Journal of Functional Biomaterials</i> , 2014, 5, 197-210.	4.4	44
123	Computed Tomography Diffraction-Enhanced Imaging for <i>In Situ</i> Visualization of Tissue Scaffolds Implanted in Cartilage. <i>Tissue Engineering - Part C: Methods</i> , 2014, 20, 140-148.	2.1	18
124	Engineering Angiogenesis for Myocardial Infarction Repair: Recent Developments, Challenges, and Future Directions. <i>Cardiovascular Engineering and Technology</i> , 2014, 5, 281-307.	1.6	12
125	Two modified discrete PID-based sliding mode controllers for piezoelectric actuators. <i>International Journal of Control</i> , 2014, 87, 9-20.	1.9	3
126	Alginate-Based Hydrogels Encapsulated TWS119 for Inducing Neuronal Differentiation of Neural Stem Cells. <i>Journal of Biomaterials and Tissue Engineering</i> , 2014, 4, 1087-1092.	0.1	0



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127	Self-assembled monolayers with different chemical group substrates for the study of MCF-7 breast cancer cell line behavior. <i>Biomedical Materials (Bristol)</i> , 2013, 8, 035008.	3.3	10
128	Novel crosslinked alginate/hyaluronic acid hydrogels for nerve tissue engineering. <i>Frontiers of Materials Science</i> , 2013, 7, 269-284.	2.2	45
129	Directing neural stem cell fate with biomaterial parameters for injured brain regeneration. <i>Progress in Natural Science: Materials International</i> , 2013, 23, 103-112.	4.4	36
130	A Survey of Modeling and Control of Piezoelectric Actuators. <i>Modern Mechanical Engineering</i> , 2013, 03, 1-20.	0.5	56
131	Self-cross-linkable hydrogels composed of partially oxidized alginate and gelatin for myocardial infarction repair. <i>Journal of Bioactive and Compatible Polymers</i> , 2013, 28, 126-140.	2.1	32
132	State Space System Identification of 3-Degree-of-Freedom (DOF) Piezo-Actuator-Driven Stages with Unknown Configuration. <i>Actuators</i> , 2013, 2, 1-18.	2.3	6
133	Spinal Cord Repair by Means of Tissue Engineered Scaffolds. , 2013, , 485-547.		1
134	Strategic Design and Fabrication of Engineered Scaffolds for Articular Cartilage Repair. <i>Journal of Functional Biomaterials</i> , 2012, 3, 799-838.	4.4	163
135	Strategic Design and Recent Fabrication Techniques for Bioengineered Tissue Scaffolds to Improve Peripheral Nerve Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , 2012, 18, 454-467.	4.8	49
136	Novel models for one-sided hysteresis of piezoelectric actuators. <i>Mechatronics</i> , 2012, 22, 757-765.	3.3	15
137	Development and characterization of a novel piezoelectric-driven stick-slip actuator with anisotropic-friction surfaces. <i>International Journal of Advanced Manufacturing Technology</i> , 2012, 61, 1029-1034.	3.0	59
138	Modeling of Cell Cultures in Perfusion Bioreactors. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2568-2575.	4.2	24
139	Rotary culture promotes the proliferation of MCF-7 cells encapsulated in three-dimensional collagen- $\alpha$ 1 alginate hydrogels via activation of the ERK1/2-MAPK pathway. <i>Biomedical Materials (Bristol)</i> , 2012, 7, 015003.	3.3	25
140	Modeling of the Flow within Scaffolds in Perfusion Bioreactors. <i>American Journal of Biomedical Engineering</i> , 2012, 1, 72-77.	0.9	21
141	Mechanical Properties of Natural Cartilage and Tissue-Engineered Constructs. <i>Tissue Engineering - Part B: Reviews</i> , 2011, 17, 213-227.	4.8	222
142	X-Ray Diffraction Enhanced Imaging as a Novel Method to Visualize Low-Density Scaffolds in Soft Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , 2011, 17, 1071-1080.	2.1	29
143	Bioengineered Scaffolds for Spinal Cord Repair. <i>Tissue Engineering - Part B: Reviews</i> , 2011, 17, 177-194.	4.8	75
144	Temperature Effect on the Shear-Induced Cell Damage in Biofabrication. <i>Artificial Organs</i> , 2011, 35, 741-746.	1.9	10

#	ARTICLE	IF	CITATIONS
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