

Extracellular matrix-based materials for regenerative m

Nature Reviews Materials

3, 159-173

DOI: [10.1038/s41578-018-0023-x](https://doi.org/10.1038/s41578-018-0023-x)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Design, Fabrication, and Function of Silk-Based Nanomaterials. <i>Advanced Functional Materials</i> , 2018, 28, 1805305.	7.8	120
2	Bioactive Nanofibers Induce Neural Transdifferentiation of Human Bone Marrow Mesenchymal Stem Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 41046-41055.	4.0	42
3	Off-the-Shelf Biomimetic Graphene Oxide-Collagen Hybrid Scaffolds Wrapped with Osteoinductive Extracellular Matrix for the Repair of Cranial Defects in Rats. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 42948-42958.	4.0	55
4	A non-linear mathematical model using optical sensor to predict heart decellularization efficacy. <i>Scientific Reports</i> , 2019, 9, 12211.	1.6	6
5	Recent development and biomedical applications of decellularized extracellular matrix biomaterials. <i>Materials Science and Engineering C</i> , 2019, 104, 109942.	3.8	100
6	Mechanical characterization of single cells based on microfluidic techniques. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 117, 47-57.	5.8	17
7	Small intestinal submucosa: superiority, limitations and solutions, and its potential to address bottlenecks in tissue repair. <i>Journal of Materials Chemistry B</i> , 2019, 7, 5038-5055.	2.9	64
8	Transition Metal Dichalcogenides for Biomedical Applications. , 2019, , 241-292.		5
9	Biomedical Applications of Nanostructured Polymeric Materials. , 2019, , 1-19.		3
10	PCL-MECM-Based Hydrogel Hybrid Scaffolds and Meniscal Fibrochondrocytes Promote Whole Meniscus Regeneration in a Rabbit Meniscectomy Model. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 41626-41639.	4.0	75
11	In vivo engineered extracellular matrix scaffolds with instructive niches for oriented tissue regeneration. <i>Nature Communications</i> , 2019, 10, 4620.	5.8	192
12	Design Parameters of Tissue-Engineering Scaffolds at the Atomic Scale. <i>Angewandte Chemie</i> , 2019, 131, 17099-17107.	1.6	2
13	Electrospun nanofibers for the fabrication of engineered vascular grafts. <i>Journal of Biological Engineering</i> , 2019, 13, 83.	2.0	35
14	Fluorescence quenching study on the interaction of <i>Lycium barbarum</i> polysaccharide with bovine serum albumin. <i>Applied Physics Express</i> , 2019, 12, 092007.	1.1	4
15	Design Parameters of Tissue-Engineering Scaffolds at the Atomic Scale. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16943-16951.	7.2	26
16	Exploring the extracellular matrix in health and disease using proteomics. <i>Essays in Biochemistry</i> , 2019, 63, 417-432.	2.1	87
17	Subcutaneously engineered autologous extracellular matrix scaffolds with aligned microchannels for enhanced tendon regeneration. <i>Biomaterials</i> , 2019, 224, 119488.	5.7	26
18	Directed differential behaviors of multipotent adult stem cells from decellularized tissue/organ extracellular matrix bioinks. <i>Biomaterials</i> , 2019, 224, 119496.	5.7	90

#	ARTICLE	IF	CITATIONS
19	ECM coating modification generated by optimized decellularization process improves functional behavior of BMSCs. <i>Materials Science and Engineering C</i> , 2019, 105, 110039.	3.8	28
20	Impact of Antifouling PEG Layer on the Performance of Functional Peptides in Regulating Cell Behaviors. <i>Journal of the American Chemical Society</i> , 2019, 141, 16772-16780.	6.6	133
21	Preparation of Stepwise Adipogenesis-Mimicking ECM-Deposited PLGA-Collagen Hybrid Meshes and Their Influence on Adipogenic Differentiation of hMSCs. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 6099-6108.	2.6	12
22	Recent advances in musculoskeletal local drug delivery. <i>Acta Biomaterialia</i> , 2019, 93, 135-151.	4.1	22
23	Self-Healing Polymeric Hydrogel Formed by Metal-Ligand Coordination Assembly: Design, Fabrication, and Biomedical Applications. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800837.	2.0	183
24	Matrix bound nanovesicle-associated IL-33 activates a pro-remodeling macrophage phenotype via a non-canonical, ST2-independent pathway. <i>Journal of Immunology and Regenerative Medicine</i> , 2019, 3, 26-35.	0.2	29
25	A roadmap for promoting endogenous in situ tissue restoration using inductive bioscaffolds after acute brain injury. <i>Brain Research Bulletin</i> , 2019, 150, 136-149.	1.4	22
26	Three-dimensional printed electrospun fiber-based scaffold for cartilage regeneration. <i>Materials and Design</i> , 2019, 179, 107886.	3.3	89
27	Precise Construction of Cell-Instructive 3D Microenvironments by Photopatterning a Biodegradable Hydrogel. <i>Chemistry of Materials</i> , 2019, 31, 4710-4719.	3.2	43
28	Engineering the vasculature for islet transplantation. <i>Acta Biomaterialia</i> , 2019, 95, 131-151.	4.1	65
29	Challenges With the Development of Biomaterials for Sustainable Tissue Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 127.	2.0	191
30	Nanowired Bioelectric Interfaces. <i>Chemical Reviews</i> , 2019, 119, 9136-9152.	23.0	92
31	Cardiac tissue-derived extracellular matrix scaffolds for myocardial repair: advantages and challenges. <i>International Journal of Energy Production and Management</i> , 2019, 6, 185-199.	1.9	75
32	Extracellular vesicles derived from the mid-to-late stage of osteoblast differentiation markedly enhance osteogenesis in vitro and in vivo. <i>Biochemical and Biophysical Research Communications</i> , 2019, 514, 252-258.	1.0	43
33	Chitosan Coating an Efficient Approach to Improve the Substrate Surface for In Vitro Culture System. <i>Journal of the Electrochemical Society</i> , 2019, 166, B3025-B3030.	1.3	9
34	Electrospinning and Electrospun Nanofibers: Methods, Materials, and Applications. <i>Chemical Reviews</i> , 2019, 119, 5298-5415.	23.0	2,814
35	Engineering nanocellulose hydrogels for biomedical applications. <i>Advances in Colloid and Interface Science</i> , 2019, 267, 47-61.	7.0	286
36	Ionic silver functionalized ovine forestomach matrix - a non-cytotoxic antimicrobial biomaterial for tissue regeneration applications. <i>Biomaterials Research</i> , 2019, 23, 6.	3.2	3

#	ARTICLE	IF	CITATIONS
37	Modulating macrophage responses to promote tissue regeneration by changing the formulation of bone extracellular matrix from filler particles to gel bioscaffolds. <i>Materials Science and Engineering C</i> , 2019, 101, 330-340.	3.8	39
38	Multiscale engineering of immune cells and lymphoid organs. <i>Nature Reviews Materials</i> , 2019, 4, 355-378.	23.3	55
39	Smart injectable biogels based on hyaluronic acid bioconjugates finely substituted with poly( $\beta$ -amino) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.8	21
40	Electrospun acellular scaffolds for mimicking the natural anisotropy of the extracellular matrix. <i>RSC Advances</i> , 2019, 9, 40190-40195.	1.7	6
41	PLGA-collagen-ECM hybrid scaffolds functionalized with biomimetic extracellular matrices secreted by mesenchymal stem cells during stepwise osteogenesis- <i>co</i> -adipogenesis. <i>Journal of Materials Chemistry B</i> , 2019, 7, 7195-7206.	2.9	32
42	Biochemical and biomechanical comparisons of decellularized scaffolds derived from porcine subcutaneous and visceral adipose tissue. <i>Journal of Tissue Engineering</i> , 2019, 10, 204173141988816.	2.3	17
43	Solution viscosity regulates chondrocyte proliferation and phenotype during 3D culture. <i>Journal of Materials Chemistry B</i> , 2019, 7, 7713-7722.	2.9	32
44	Molecularly engineered metal-based bioactive soft materials - Neuroactive magnesium ion/polymer hybrids. <i>Acta Biomaterialia</i> , 2019, 85, 310-319.	4.1	32
45	Synthetic polymer coatings diminish chronic inflammation risk in large ECM-based materials. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 494-504.	2.1	9
46	3D Molecularly Functionalized Cell-Free Biomimetic Scaffolds for Osteochondral Regeneration. <i>Advanced Functional Materials</i> , 2019, 29, 1807356.	7.8	75
47	Extracellular Matrix Degradation Products Downregulate Neoplastic Esophageal Cell Phenotype. <i>Tissue Engineering - Part A</i> , 2019, 25, 487-498.	1.6	6
48	MatrisomeDB: the ECM-protein knowledge database. <i>Nucleic Acids Research</i> , 2020, 48, D1136-D1144.	6.5	181
49	Hierarchical microchanneled scaffolds modulate multiple tissue-regenerative processes of immune-responses, angiogenesis, and stem cell homing. <i>Biomaterials</i> , 2020, 227, 119548.	5.7	86
50	Macromolecular dextran sulfate facilitates extracellular matrix deposition by electrostatic interaction independent from a macromolecular crowding effect. <i>Materials Science and Engineering C</i> , 2020, 106, 110280.	3.8	29
51	3D printing electrospinning fiber-reinforced decellularized extracellular matrix for cartilage regeneration. <i>Chemical Engineering Journal</i> , 2020, 382, 122986.	6.6	121
52	Human platelet lysate-based nanocomposite bioink for bioprinting hierarchical fibrillar structures. <i>Biofabrication</i> , 2020, 12, 015012.	3.7	53
53	Fabrication of biomimetic hydrogel for chondrocyte delivery. <i>Materials Letters</i> , 2020, 258, 126660.	1.3	11
54	Bioengineered microenvironment to culture early embryos. <i>Cell Proliferation</i> , 2020, 53, e12754.	2.4	11

#	ARTICLE	IF	CITATIONS
55	Eye Socket Regeneration and Reconstruction. <i>Current Eye Research</i> , 2020, 45, 253-264.	0.7	12
56	Design and characterization of an electroconductive scaffold for cardiomyocytes based biomedical assays. <i>Materials Science and Engineering C</i> , 2020, 109, 110603.	3.8	29
57	Exploiting crosslinked decellularized matrix to achieve uterus regeneration and construction. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2020, 48, 218-229.	1.9	34
58	Pancreas whole organ engineering. , 2020, , 527-536.		1
59	Decellularized hASCs-derived matrices as biomaterials for 3D in vitro approaches. <i>Methods in Cell Biology</i> , 2020, 156, 45-58.	0.5	9
60	Swim Bladder as a Novel Biomaterial for Cardiovascular Materials with Antiâ€Calcification Properties. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901154.	3.9	24
61	Advanced Bottomâ€Up Engineering of Living Architectures. <i>Advanced Materials</i> , 2020, 32, e1903975.	11.1	127
62	Oneâ€Step Rapid Fabrication of Cellâ€Only Living Fibers. <i>Advanced Materials</i> , 2020, 32, 1906305.	11.1	20
63	Leveling Up Hydrogels: Hybrid Systems in Tissue Engineering. <i>Trends in Biotechnology</i> , 2020, 38, 292-315.	4.9	74
64	Synergistic Effect of Chitosan and Selenium Nanoparticles on Biodegradation and Antibacterial Properties of Collagenous Scaffolds Designed for Infected Burn Wounds. <i>Nanomaterials</i> , 2020, 10, 1971.	1.9	34
65	Biodegradable thermoresponsive polymers: Applications in drug delivery and tissue engineering. <i>Polymer</i> , 2020, 211, 123063.	1.8	84
66	Bioinspired Materials for Inâ€Vivo Bioelectronic Neural Interfaces. <i>Matter</i> , 2020, 3, 1087-1113.	5.0	43
67	Spheroid formation of human keratinocyte: Balancing between cell-substrate and cell-cell interaction. <i>Clinical Hemorheology and Microcirculation</i> , 2020, 76, 329-340.	0.9	3
68	Dendritic polyglycerol-conjugated gold nanostars with different densities of functional groups to regulate osteogenesis in human mesenchymal stem cells. <i>Nanoscale</i> , 2020, 12, 24006-24019.	2.8	8
69	Cell-Derived Extracellular Matrix for Tissue Engineering and Regenerative Medicine. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 602009.	2.0	75
70	Applications of materials for dural reconstruction in pre-clinical and clinical studies: Advantages and drawbacks, efficacy, and selections. <i>Materials Science and Engineering C</i> , 2020, 117, 111326.	3.8	22
71	Bioactive ROSâ€scavenging nanozymes for regenerative medicine: Reestablishing the antioxidant firewall. <i>Nano Select</i> , 2020, 1, 285-297.	1.9	25
72	The human liver matrisome â€ Proteomic analysis of native and fibrotic human liver extracellular matrices for organ engineering approaches. <i>Biomaterials</i> , 2020, 257, 120247.	5.7	21

#	ARTICLE	IF	CITATIONS
73	Decellularised scaffolds: just a framework? Current knowledge and future directions. <i>Journal of Tissue Engineering</i> , 2020, 11, 204173142094290.	2.3	54
74	ECM scaffolds mimicking extracellular matrices of endochondral ossification for the regulation of mesenchymal stem cell differentiation. <i>Acta Biomaterialia</i> , 2020, 114, 158-169.	4.1	21
75	Decellularized Extracellular Matrix-based Bioinks for Engineering Tissue- and Organ-specific Microenvironments. <i>Chemical Reviews</i> , 2020, 120, 10608-10661.	23.0	246
76	Bioinspired Materials for Wound Healing Application: The Potential of Silk Fibroin. <i>Materials</i> , 2020, 13, 3361.	1.3	50
77	Osteogenic and Adipogenic Differentiation of Mesenchymal Stem Cells in Gelatin Solutions of Different Viscosities. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000617.	3.9	18
78	Type I Collagen-Fibrin Mixed Hydrogels: Preparation, Properties and Biomedical Applications. <i>Gels</i> , 2020, 6, 36.	2.1	27
79	Decellularized Splenic Matrix as a Scaffold for Spleen Bioengineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 573461.	2.0	4
80	Repositioning Natural Antioxidants for Therapeutic Applications in Tissue Engineering. <i>Bioengineering</i> , 2020, 7, 104.	1.6	37
81	Combining in silico and in vitro models to inform cell seeding strategies in tissue engineering. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20190801.	1.5	15
82	Tissue-Specific Decellularization Methods: Rationale and Strategies to Achieve Regenerative Compounds. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5447.	1.8	145
83	Developmental bioengineering: recapitulating development for repair. <i>Molecular Systems Design and Engineering</i> , 2020, 5, 1168-1180.	1.7	2
84	Spatiotemporal regulation of dynamic cell microenvironment signals based on an azobenzene photoswitch. <i>Journal of Materials Chemistry B</i> , 2020, 8, 9212-9226.	2.9	8
85	Surface functionalization â€œ a new functional dimension added to 3D printing. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12380-12411.	2.7	36
86	Natural-Based Hydrogels for Tissue Engineering Applications. <i>Molecules</i> , 2020, 25, 5858.	1.7	93
87	Unpatterned Bioactive Poly(Butylene 1,4-Cyclohexanedicarboxylate)-Based Film Fast Induced Neuronal-Like Differentiation of Human Bone Marrow-Mesenchymal Stem Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9274.	1.8	9
88	Semantic Segmentation of Intralobular and Extralobular Tissue from Liver Scaffold H&E Images. <i>Sensors</i> , 2020, 20, 7063.	2.1	7
89	Biocompatible in situ-forming glycopolypeptide hydrogels. <i>Science China Technological Sciences</i> , 2020, 63, 992-1004.	2.0	6
90	Biodegradable Polymers as the Pivotal Player in the Design of Tissue Engineering Scaffolds. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901358.	3.9	137

#	ARTICLE	IF	CITATIONS
91	<p>Directional Osteo-Differentiation Effect of hADSCs on Nanotopographical Self-Assembled Polystyrene Nanopit Surfaces</p>. International Journal of Nanomedicine, 2020, Volume 15, 3281-3290.	3.3	10
92	Facile synthesis of 3D silk fibroin scaffolds with tunable properties for regenerative medicine. Journal of Biomaterials Science, Polymer Edition, 2020, 31, 1272-1286.	1.9	3
93	Dose optimization of decellularized skeletal muscle extracellular matrix hydrogels for improving perfusion and subsequent validation in an aged hindlimb ischemia model. Biomaterials Science, 2020, 8, 3511-3521.	2.6	20
94	Perinatal tissues and cells in tissue engineering and regenerative medicine. Acta Biomaterialia, 2020, 110, 1-14.	4.1	39
95	Remodeling of aligned fibrous extracellular matrix by encapsulated cells under mechanical stretching. Acta Biomaterialia, 2020, 112, 202-212.	4.1	12
96	Towards systems tissue engineering: Elucidating the dynamics, spatial coordination, and individual cells driving emergent behaviors. Biomaterials, 2020, 255, 120189.	5.7	8
97	Tissue engineering of the biliary tract and modelling of cholestatic disorders. Journal of Hepatology, 2020, 73, 918-932.	1.8	14
98	Electrospinning nanofiber scaffolds for soft and hard tissue regeneration. Journal of Materials Science and Technology, 2020, 59, 243-261.	5.6	135
99	The effects of silk layer-by-layer surface modification on the mechanical and structural retention of extracellular matrix scaffolds. Biomaterials Science, 2020, 8, 4026-4038.	2.6	19
100	Fast Automated Approach for the Derivation of Acellular Extracellular Matrix Scaffolds from Porcine Soft Tissues. ACS Biomaterials Science and Engineering, 2020, 6, 4200-4213.	2.6	10
101	Toward Cardiac Regeneration: Combination of Pluripotent Stem Cell-Based Therapies and Bioengineering Strategies. Frontiers in Bioengineering and Biotechnology, 2020, 8, 455.	2.0	49
102	Decellularized muscle-derived hydrogels support in vitro cardiac microtissue fabrication. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 3302-3310.	1.6	7
103	Matrix decoded â€“ A pancreatic extracellular matrix with organ specific cues guiding human iPSC differentiation. Biomaterials, 2020, 244, 119766.	5.7	21
104	3D Extracellular Matrix Mimics: Fundamental Concepts and Role of Materials Chemistry to Influence Stem Cell Fate. Biomacromolecules, 2020, 21, 1968-1994.	2.6	297
105	Deconstructing, Replicating, and Engineering Tissue Microenvironment for Stem Cell Differentiation. Tissue Engineering - Part B: Reviews, 2020, 26, 540-554.	2.5	11
106	High-throughput fabrication of cell-laden 3D biomaterial gradients. Materials Horizons, 2020, 7, 2414-2421.	6.4	20
107	Osteoblast/fibroblast coculture derived bioactive ECM with unique matrisome profile facilitates bone regeneration. Bioactive Materials, 2020, 5, 938-948.	8.6	31
108	In situ implantable three-dimensional extracellular matrix bioactive composite scaffold for postoperative skin cancer therapy. Chemical Engineering Journal, 2020, 400, 125949.	6.6	31

#	ARTICLE	IF	CITATIONS
109	Natural Multimerization Rules the Performance of Affinity-Based Physical Hydrogels for Stem Cell Encapsulation and Differentiation. <i>Biomacromolecules</i> , 2020, 21, 3081-3091.	2.6	3
110	A multifunctional silk coating on additively manufactured porous titanium to prevent implant-associated infection and stimulate bone regeneration. <i>Biomedical Materials (Bristol)</i> , 2020, 15, 065016.	1.7	20
111	Strategies for Tuning the Biodegradation of Silk Fibroin-Based Materials for Tissue Engineering Applications. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 1290-1310.	2.6	50
112	MSC-Encapsulating in Situ Cross-Linkable Gelatin Hydrogels To Promote Myocardial Repair. <i>ACS Applied Bio Materials</i> , 2020, 3, 1646-1655.	2.3	18
113	Role of Region-Specific Brain Decellularized Extracellular Matrix on <i>In Vitro</i> Neuronal Maturation. <i>Tissue Engineering - Part A</i> , 2020, 26, 964-978.	1.6	16
114	Chimeras for the twenty-first century. <i>Critical Reviews in Biotechnology</i> , 2020, 40, 283-291.	5.1	12
116	PLGA-collagen-ECM hybrid meshes mimicking stepwise osteogenesis and their influence on the osteogenic differentiation of hMSCs. <i>Biofabrication</i> , 2020, 12, 025027.	3.7	24
117	Decellularized liver as a translucent <i>ex vivo</i> model for vascular embolization evaluation. <i>Biomaterials</i> , 2020, 240, 119855.	5.7	28
118	Regulation of decellularized matrix mediated immune response. <i>Biomaterials Science</i> , 2020, 8, 1194-1215.	2.6	64
119	A virtual-droplet system for sensing MMP9 activity of single suspended and adhered cancer cells. <i>Sensors and Actuators B: Chemical</i> , 2020, 308, 127749.	4.0	11
120	Inorganic Biomaterials for Regenerative Medicine. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 5319-5344.	4.0	135
121	Biomimetic and electroactive 3D scaffolds for human neural crest-derived stem cell expansion and osteogenic differentiation. <i>MRS Communications</i> , 2020, 10, 179-187.	0.8	19
122	Thermoresponsive Inverted Colloidal Crystal Hydrogel Scaffolds for Lymphoid Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901556.	3.9	7
123	Innate tissue properties drive improved tendon healing in MRL/MpJ and harness cues that enhance behavior of canonical healing cells. <i>FASEB Journal</i> , 2020, 34, 8341-8356.	0.2	20
124	Collagen-based 3D structures are versatile, efficient materials for biomedical applications. , 2020, , 881-906.		1
125	Gelatin-crosslinked pectin nanofiber mats allowing cell infiltration. <i>Materials Science and Engineering C</i> , 2020, 112, 110941.	3.8	23
126	Ultrasonic cavitation to prepare ECM hydrogels. <i>Acta Biomaterialia</i> , 2020, 108, 77-86.	4.1	17
127	Lipidomics and RNA sequencing reveal a novel subpopulation of nanovesicle within extracellular matrix biomaterials. <i>Science Advances</i> , 2020, 6, eaay4361.	4.7	54



#	ARTICLE	IF	CITATIONS
128	Introduction to biomaterials for tissue/organ regeneration. , 2020, , 3-17.		0
129	Cells-Grab-on Particles: A Novel Approach to Control Cell Focal Adhesion on Hybrid Thermally Annealed Hydrogels. ACS Biomaterials Science and Engineering, 2020, 6, 3933-3944.	2.6	31
130	&lt;p&gt;Engineering of Aerogel-Based Biomaterials for Biomedical Applications&lt;/p&gt;. International Journal of Nanomedicine, 2020, Volume 15, 2363-2378.	3.3	72
131	Recent trends in metal ion based hydrogel biomaterials for tissue engineering and other biomedical applications. Journal of Materials Science and Technology, 2021, 63, 35-53.	5.6	58
132	Influence of viscosity on chondrogenic differentiation of mesenchymal stem cells during 3D culture in viscous gelatin solution-embedded hydrogels. Journal of Materials Science and Technology, 2021, 63, 1-8.	5.6	14
133	Mussel-inspired multifunctional coating for bacterial infection prevention and osteogenic induction. Journal of Materials Science and Technology, 2021, 68, 160-171.	5.6	6
134	In situ ornamenting poly(Îµ-caprolactone) electrospun fibers with different fiber diameters using chondrocyte-derived extracellular matrix for chondrogenesis of mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2021, 197, 111374.	2.5	10
135	Materials control of the epigenetics underlying cell plasticity. Nature Reviews Materials, 2021, 6, 69-83.	23.3	49
136	Insight into the effect of sulfonated chitosan on the structure, rheology and fibrillogenesis of collagen. International Journal of Biological Macromolecules, 2021, 166, 1480-1490.	3.6	18
137	Nanocellulose: Recent Fundamental Advances and Emerging Biological and Biomimicking Applications. Advanced Materials, 2021, 33, e2004349.	11.1	212
138	Cellular remodeling of fibrotic conduit as vascular graft. Biomaterials, 2021, 268, 120565.	5.7	16
139	Dynamic cell-adaptable hydrogels with a moderate level of elasticity promote 3D development of encapsulated cells. Applied Materials Today, 2021, 22, 100892.	2.3	9
140	Fabrication of an injectable acellular adipose matrix for soft tissue regeneration. Journal of Science: Advanced Materials and Devices, 2021, 6, 1-10.	1.5	6
141	Advances in 3D neural, vascular and neurovascular models for drug testing and regenerative medicine. Drug Discovery Today, 2021, 26, 754-768.	3.2	11
142	Adaptable hydrogel with reversible linkages for regenerative medicine: Dynamic mechanical microenvironment for cells. Bioactive Materials, 2021, 6, 1375-1387.	8.6	90
143	Understanding the role of tissue-specific decellularized spinal cord matrix hydrogel for neural stem/progenitor cell microenvironment reconstruction and spinal cord injury. Biomaterials, 2021, 268, 120596.	5.7	81
144	Fibroblast cell derived extracellular matrix containing electrospun scaffold as a hybrid biomaterial to promote in vitro endothelial cell expansion and functionalization. Materials Science and Engineering C, 2021, 120, 111659.	3.8	11
145	Nanocellulose in biomedical and biosensing applications: A review. International Journal of Biological Macromolecules, 2021, 166, 587-600.	3.6	62

#	ARTICLE	IF	CITATIONS
146	Atomic force microscopy for revealing micro/nanoscale mechanics in tumor metastasis: from single cells to microenvironmental cues. <i>Acta Pharmacologica Sinica</i> , 2021, 42, 323-339.	2.8	43
147	Recent Progress in the Design and Application of Supramolecular Peptide Hydrogels in Cancer Therapy. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001239.	3.9	25
148	Pathway-Driven Peptide-Bioglass Nanocomposites as the Dynamic and Self-Healable Matrix. <i>Chemistry of Materials</i> , 2021, 33, 589-599.	3.2	33
149	Polymeric materials for immune engineering: Molecular interaction to biomaterial design. <i>Acta Biomaterialia</i> , 2021, 133, 139-152.	4.1	30
150	On/off switchable physical stimuli regulate the future direction of adherent cellular fate. <i>Journal of Materials Chemistry B</i> , 2021, 9, 5560-5571.	2.9	3
151	3D printing biomimetic materials and structures for biomedical applications. <i>Bio-Design and Manufacturing</i> , 2021, 4, 405-428.	3.9	66
152	Recellularization of Decellularized Whole Organ Scaffolds: Elements, Progresses, and Challenges. , 2021, , 313-413.		0
153	Living Materials for Regenerative Medicine. <i>Engineered Regeneration</i> , 2021, 2, 96-104.	3.0	43
154	Application of Natural Hydrogels for Cell Therapy: Focus on Osteoarthritis. <i>Biomaterials Science Series</i> , 2021, , 393-408.	0.1	0
155	Elastin-inspired supramolecular hydrogels: a multifaceted extracellular matrix protein in biomedical engineering. <i>Soft Matter</i> , 2021, 17, 3266-3290.	1.2	17
156	The Matrix of Needs: Reframing Maslow's Hierarchy. <i>Health</i> , 2021, 13, 538-563.	0.1	5
157	Trends in Bio-Derived Biomaterials in Tissue Engineering. , 2021, , 163-213.		4
158	Use of Virus-Mimicking Nanoparticles to Investigate Early Infection Events in Upper Airway 3D Models. <i>Methods in Molecular Biology</i> , 2021, 2273, 131-138.	0.4	2
159	Demineralized and decellularized bone extracellular matrix-incorporated electrospun nanofibrous scaffold for bone regeneration. <i>Journal of Materials Chemistry B</i> , 2021, 9, 6881-6894.	2.9	25
160	Engineered Vascularized Flaps, Composed of Polymeric Soft Tissue and Live Bone, Repair Complex Tibial Defects. <i>Advanced Functional Materials</i> , 2021, 31, 2008687.	7.8	19
161	Engineering Advanced In Vitro Models of Systemic Sclerosis for Drug Discovery and Development. <i>Advanced Biology</i> , 2021, 5, e2000168.	1.4	8
162	Engineering multifunctional bactericidal nanofibers for abdominal hernia repair. <i>Communications Biology</i> , 2021, 4, 233.	2.0	19
163	Carbon Nanotubes Transform Soft Gellan Gum Hydrogels into Hybrid Organic-Inorganic Coatings with Excellent Cell Growth Capability. <i>Journal of Carbon Research</i> , 2021, 7, 18.	1.4	3

#	ARTICLE	IF	CITATIONS
164	Augmenting Tendonâ€”toâ€”Bone Repair with Functionally Graded Scaffolds. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002269.	3.9	34
165	Proâ€”angiogenic decellularized vessel matrix gel modified by silk fibroin for rapid vascularization of tissue engineering scaffold. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 1701-1713.	2.1	10
166	The epithelial-mesenchymal transition and the cytoskeleton in bioengineered systems. <i>Cell Communication and Signaling</i> , 2021, 19, 32.	2.7	64
167	Utility of perfusion decellularization to achieve biochemical and mechanically accurate whole animal and organâ€”specific tissue scaffolds. <i>Physiological Reports</i> , 2021, 9, e14804.	0.7	2
168	The effect of electrospun scaffolds on the glycosaminoglycan profile of differentiating neural stem cells. <i>Biochimie</i> , 2021, 182, 61-72.	1.3	12
169	Optimization of extracellular matrix production from human induced pluripotent stem cellâ€”derived fibroblasts for scaffold fabrication for application in wound healing. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 1803-1811.	2.1	15
170	Self-Assembling Hydrogel Structures for Neural Tissue Repair. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4136-4163.	2.6	66
171	Emergence of FRESH 3D printing as a platform for advanced tissue biofabrication. <i>APL Bioengineering</i> , 2021, 5, 010904.	3.3	115
172	3D Cell Cultureâ€”Can It Be As Popular as 2D Cell Culture?. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2000066.	1.7	20
173	Three-dimensional endothelial cell incorporation within bioactive nanofibrous scaffolds through concurrent emulsion electrospinning and coaxial cell electro spraying. <i>Acta Biomaterialia</i> , 2021, 123, 312-324.	4.1	22
174	Appreciating the First Line of the Human Innate Immune Defense: A Strategy to Model and Alleviate the Neutrophil Elastaseâ€”Mediated Attack toward Bioactivated Biomaterials. <i>Small</i> , 2021, 17, e2007551.	5.2	12
175	Sulfated glycosaminoglycans in decellularized placenta matrix as critical regulators for cutaneous wound healing. <i>Acta Biomaterialia</i> , 2021, 122, 199-210.	4.1	33
176	3D Printed Poly(Î¼-Caprolactone)/Meniscus Extracellular Matrix Composite Scaffold Functionalized With Kartogenin-Releasing PLGA Microspheres for Meniscus Tissue Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 662381.	2.0	25
177	Bioactive Decellularized Extracellular Matrix Derived from 3D Stem Cell Spheroids under Macromolecular Crowding Serves as a Scaffold for Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100024.	3.9	27
178	BoneMAâ€”synthesis and characterization of a methacrylated bone-derived hydrogel for bioprinting of in-vitro vascularized tissue constructs. <i>Biofabrication</i> , 2021, 13, 035031.	3.7	21
179	Recent advances in 3D printing with protein-based inks. <i>Progress in Polymer Science</i> , 2021, 115, 101375.	11.8	74
180	Biocompatibility Evolves: Phenomenology to Toxicology to Regeneration. <i>Advanced Healthcare Materials</i> , 2021, 10, e2002153.	3.9	46
181	Three-Dimensional Printable Gelatin Hydrogels Incorporating Graphene Oxide to Enable Spontaneous Myogenic Differentiation. <i>ACS Macro Letters</i> , 2021, 10, 426-432.	2.3	34

#	ARTICLE	IF	CITATIONS
182	The Charming World of the Extracellular Matrix: A Dynamic and Protective Network of the Intestinal Wall. <i>Frontiers in Medicine</i> , 2021, 8, 610189.	1.2	61
183	Progress and challenges of implantable neural interfaces based on nature-derived materials. <i>Bioelectronic Medicine</i> , 2021, 7, 6.	1.0	29
184	Porous Electroactive and Biodegradable Polyurethane Membrane through Self-Doping Organogel. <i>Macromolecular Rapid Communications</i> , 2021, 42, e2100125.	2.0	6
185	Recapitulating Cardiac Structure and Function In Vitro from Simple to Complex Engineering. <i>Micromachines</i> , 2021, 12, 386.	1.4	8
186	Highly Ordered 3D Tissue Engineering Scaffolds as a Versatile Culture Platform for Nerve Cells Growth. <i>Macromolecular Bioscience</i> , 2021, 21, 2100047.	2.1	10
187	Matrix metalloproteinase-sensitive poly(ethylene glycol)/peptide hydrogels as an interactive platform conducive to cell proliferation during 3D cell culture. <i>Science China Technological Sciences</i> , 2021, 64, 1285-1294.	2.0	11
188	Electrospun fibrous sponge via short fiber for mimicking 3D ECM. <i>Journal of Nanobiotechnology</i> , 2021, 19, 131.	4.2	43
189	Combined Analytical Approaches to Standardize and Characterize Biomaterials Formulations: Application to Chitosan-Gelatin Cross-Linked Hydrogels. <i>Biomolecules</i> , 2021, 11, 683.	1.8	11
190	<i>Candida albicans</i> /Macrophage Biointerface on Human and Porcine Decellularized Adipose Matrices. <i>Journal of Fungi (Basel, Switzerland)</i> , 2021, 7, 392.	1.5	3
191	Solubilized Cartilage ECM Facilitates the Recruitment and Chondrogenesis of Endogenous BMSCs in Collagen Scaffolds for Enhancing Microfracture Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 24553-24564.	4.0	31
192	Extracellular Matrix by Design: Native Biomaterial Fabrication and Functionalization to Boost Tissue Regeneration. <i>Regenerative Engineering and Translational Medicine</i> , 2022, 8, 55-74.	1.6	4
193	Multifunctional Scaffolds and Synergistic Strategies in Tissue Engineering and Regenerative Medicine. <i>Pharmaceutics</i> , 2021, 13, 792.	2.0	29
194	Covalently Crosslinked Hydrogels via Step-Growth Reactions: Crosslinking Chemistries, Polymers, and Clinical Impact. <i>Advanced Materials</i> , 2021, 33, e2006362.	11.1	95
195	Preliminary assessment of an injectable extracellular matrix from decellularized bovine myocardial tissue. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 2021, 76, 491-501.	0.6	4
196	Multifaceted Design and Emerging Applications of Tissue Adhesives. <i>Advanced Materials</i> , 2021, 33, e2007663.	11.1	117
197	Electrospun Microfibers Modulate Intracellular Amino Acids in Liver Cells via Integrin $\beta 1$ . <i>Bioengineering</i> , 2021, 8, 88.	1.6	2
199	A Robust Protocol for Decellularized Human Lung Bioink Generation Amenable to 2D and 3D Lung Cell Culture. <i>Cells</i> , 2021, 10, 1538.	1.8	22
200	Development of an electrical impedance tomography set-up for the quantification of mineralization in biopolymer scaffolds. <i>Physiological Measurement</i> , 2021, 42, 064001.	1.2	6

#	ARTICLE	IF	CITATIONS
201	Liver Organoids: Formation Strategies and Biomedical Applications. <i>Tissue Engineering and Regenerative Medicine</i> , 2021, 18, 573-585.	1.6	26
202	Nanoparticle-Cell-Cartilage Interaction: Pathology-Based Intra-articular Drug Delivery for Osteoarthritis Therapy. <i>Nano-Micro Letters</i> , 2021, 13, 149.	14.4	42
203	Structurally Dynamic Hydrogels for Biomedical Applications: Pursuing a Fine Balance between Macroscopic Stability and Microscopic Dynamics. <i>Chemical Reviews</i> , 2021, 121, 11149-11193.	23.0	161
204	Advances in Extracellular Matrix-Mimetic Hydrogels to Guide Stem Cell Fate. <i>Cells Tissues Organs</i> , 2022, 211, 703-720.	1.3	11
205	Cell-free decellularized cartilage extracellular matrix scaffolds combined with interleukin 4 promote osteochondral repair through immunomodulatory macrophages: In vitro and in vivo preclinical study. <i>Acta Biomaterialia</i> , 2021, 127, 131-145.	4.1	47
206	Progress of esophageal stricture prevention after endoscopic submucosal dissection by regenerative medicine and tissue engineering. <i>Regenerative Therapy</i> , 2021, 17, 51-60.	1.4	6
207	Photocrosslinkable liver extracellular matrix hydrogels for the generation of 3D liver microenvironment models. <i>Scientific Reports</i> , 2021, 11, 15566.	1.6	19
208	Biomimetic Supramolecular Drug Delivery Hydrogels for Accelerated Skin Tissue Regeneration. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4581-4590.	2.6	11
209	Hierarchical macro-microporous WPU-ECM scaffolds combined with Microfracture Promote in Situ Articular Cartilage Regeneration in Rabbits. <i>Bioactive Materials</i> , 2021, 6, 1932-1944.	8.6	36
210	Strategies for Vascularizing Pancreatic Islets and Stem Cell-Derived Islet Organoids. <i>Current Transplantation Reports</i> , 2021, 8, 220-227.	0.9	1
211	Curcumin in decellularized goat small intestine submucosa for wound healing and skin tissue engineering. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2022, 110, 210-219.	1.6	38
212	Embedding Collagen in Multilayers for Enzyme-Assisted Mineralization: A Promising Way to Direct Crystallization in Confinement. <i>Biomacromolecules</i> , 2021, 22, 3460-3473.	2.6	5
213	Hydrogel-Based Scaffolds in Oral Tissue Engineering. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	20
214	Highly interconnected inverse opal extracellular matrix scaffolds enhance stem cell therapy in limb ischemia. <i>Acta Biomaterialia</i> , 2021, 128, 209-221.	4.1	15
215	Milestones and current achievements in development of multifunctional bioscaffolds for medical application. <i>Bioactive Materials</i> , 2021, 6, 2412-2438.	8.6	52
216	A novel organ-chip system emulates three-dimensional architecture of the human epithelia and the mechanical forces acting on it. <i>Biomaterials</i> , 2021, 275, 120957.	5.7	40
217	Enhancing Peptide Biomaterials for Biofabrication. <i>Polymers</i> , 2021, 13, 2590.	2.0	11
218	Sticking together: Harnessing cadherin biology for tissue engineering. <i>Acta Biomaterialia</i> , 2021, 134, 107-115.	4.1	2

#	ARTICLE	IF	CITATIONS
219	Design of a decellularized fish skin as a biological scaffold for skin tissue regeneration. <i>Tissue and Cell</i> , 2021, 71, 101509.	1.0	27
220	2D biointerfaces to study stem cell–ligand interactions. <i>Acta Biomaterialia</i> , 2021, 131, 80-96.	4.1	9
221	Plasma-assisted multiscale topographic scaffolds for soft and hard tissue regeneration. <i>Npj Regenerative Medicine</i> , 2021, 6, 52.	2.5	12
222	Theranostic biomaterials for tissue engineering. <i>Current Opinion in Biomedical Engineering</i> , 2021, 19, 100299.	1.8	8
223	Recent advancements in decellularized matrix technology for bone tissue engineering. <i>Differentiation</i> , 2021, 121, 25-34.	1.0	13
224	A pH-driven genipin gelator to engineer decellularized extracellular matrix-based tissue adhesives. <i>Acta Biomaterialia</i> , 2021, 131, 211-221.	4.1	20
226	Recent Advances in Cardiac Tissue Engineering for the Management of Myocardium Infarction. <i>Cells</i> , 2021, 10, 2538.	1.8	19
227	An Adipose-Derived Injectable Sustained-Release Collagen Scaffold of Adipokines Prepared Through a Fast Mechanical Processing Technique for Preventing Skin Photoaging in Mice. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 722427.	1.8	7
228	Bioengineering platforms for cell therapeutics derived from pluripotent and direct reprogramming. <i>APL Bioengineering</i> , 2021, 5, 031501.	3.3	4
229	A Comparative Study of Porcine Small Intestine Submucosa and Cross-Linked Bovine Type I Collagen as a Nerve Conduit. <i>Journal of Hand Surgery Global Online</i> , 2021, 3, 282-288.	0.3	5
230	Biomaterial-guided stem cell organoid engineering for modeling development and diseases. <i>Acta Biomaterialia</i> , 2021, 132, 23-36.	4.1	27
231	Engineering strategies to capture the biological and biophysical tumor microenvironment in vitro. <i>Advanced Drug Delivery Reviews</i> , 2021, 176, 113852.	6.6	13
232	Functionalization treatment of micro-arc oxidation coatings on magnesium alloys: a review. <i>Journal of Alloys and Compounds</i> , 2021, 879, 160453.	2.8	89
233	Biomaterials-based bioengineering strategies for bioelectronic medicine. <i>Materials Science and Engineering Reports</i> , 2021, 146, 100630.	14.8	18
234	Hybrid SMART spheroids to enhance stem cell therapy for CNS injuries. <i>Science Advances</i> , 2021, 7, eabj2281.	4.7	18
235	Capturing dynamic biological signals via bio-mimicking hydrogel for precise remodeling of soft tissue. <i>Bioactive Materials</i> , 2021, 6, 4506-4516.	8.6	36
236	Articular cartilage and osteochondral tissue engineering techniques: Recent advances and challenges. <i>Bioactive Materials</i> , 2021, 6, 4830-4855.	8.6	139
237	Challenges and recent trends with the development of hydrogel fiber for biomedical applications. <i>Chemosphere</i> , 2022, 287, 131956.	4.2	18

#	ARTICLE	IF	CITATIONS
238	Cell-free scaffolds functionalized with bionic cartilage acellular matrix microspheres to enhance the microfracture treatment of articular cartilage defects. <i>Journal of Materials Chemistry B</i> , 2021, 9, 1686-1697.	2.9	12
239	Nanoparticle-Assembled Vacuolated Coacervates Control Macromolecule Spatiotemporal Distribution to Provide a Stable Segregated Cell Microenvironment. <i>Advanced Materials</i> , 2021, 33, 2007209.	11.1	9
240	Chapter 3. Biomimetic and Collagen-based Biomaterials for Biomedical Applications. <i>RSC Soft Matter</i> , 2021, , 61-87.	0.2	1
241	Biomaterials and Microfluidics for Drug Discovery and Development. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1230, 121-135.	0.8	8
242	Design of Advanced Polymeric Hydrogels for Tissue Regenerative Medicine: Oxygen-Controllable Hydrogel Materials. <i>Advances in Experimental Medicine and Biology</i> , 2020, 1250, 63-78.	0.8	3
243	Manufacturing micropatterned collagen scaffolds with chemical-crosslinking for development of biomimetic tissue-engineered oral mucosa. <i>Scientific Reports</i> , 2020, 10, 22192.	1.6	25
244	ECM-Body: A Cell-Free 3D Biomimetic Scaffold Derived from Intact Planarian Body. <i>Zoological Science</i> , 2020, 37, 307.	0.3	3
245	Recent Advances in Extracellular Matrix for Engineering Stem Cell Responses. <i>Current Medicinal Chemistry</i> , 2019, 26, 6321-6338.	1.2	7
246	Recent Approaches for Angiogenesis in Search of Successful Tissue Engineering and Regeneration. <i>Current Stem Cell Research and Therapy</i> , 2020, 15, 111-134.	0.6	29
247	CURRENT STATE OF TISSUE ENGINEERING FOR CARTILAGE REGENERATION. <i>Genes and Cells</i> , 2019, 14, 12-20.	0.2	4
248	Freeform direct laser writing of versatile topological 3D scaffolds enabled by intrinsic support hydrogel. <i>Materials Horizons</i> , 2021, 8, 3334-3344.	6.4	6
249	Implantable nerve guidance conduits: Material combinations, multi-functional strategies and advanced engineering innovations. <i>Bioactive Materials</i> , 2022, 11, 57-76.	8.6	39
250	Cell-assembled extracellular matrix (CAM): a human biopaper for the biofabrication of pre-vascularized tissues able to connect to the host circulation in vivo. <i>Biofabrication</i> , 2022, 14, 015005.	3.7	5
251	Interindividual heterogeneity affects the outcome of human cardiac tissue decellularization. <i>Scientific Reports</i> , 2021, 11, 20834.	1.6	16
252	Extracellular Matrix-Based Biomaterials for Cardiovascular Tissue Engineering. <i>Journal of Cardiovascular Development and Disease</i> , 2021, 8, 137.	0.8	27
253	Regenerative medicine. , 2020, , 147-152.		0
255	Semiconductor Nanowire-Based Cellular and Subcellular Interfaces. <i>Advanced Functional Materials</i> , 2022, 32, 2107997.	7.8	7
256	Hylozoic by Design: Converging Material and Biological Complexities for Cell-Driven Living Materials with 4D Behaviors. <i>Advanced Functional Materials</i> , 2022, 32, 2108057.	7.8	9

#	ARTICLE	IF	CITATIONS
257	Membranous Extracellular Matrix-Based Scaffolds for Skin Wound Healing. <i>Pharmaceutics</i> , 2021, 13, 1796.	2.0	29
258	Mesenchymal stem cell-derived extracellular matrix (mECM): a bioactive and versatile scaffold for musculoskeletal tissue engineering. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 012002.	1.7	4
260	A rhabdomyosarcoma hydrogel model to unveil cell-extracellular matrix interactions. <i>Biomaterials Science</i> , 2021, 10, 124-137.	2.6	3
261	Development of Chitosan-Collagen/Substituted Hydroxyapatite-Polypyrrole Biocomposite with Prospective Application in Bone Tissue Engineering Scaffolds. <i>Asian Journal of Chemistry</i> , 2020, 33, 76-82.	0.1	0
262	Extracellular Matrix-based Materials for Bone Regeneration. , 2020, , 489-533.		0
263	Monitoring decellularization via absorbance spectroscopy during the derivation of extracellular matrix scaffolds. <i>Biomedical Materials (Bristol)</i> , 2022, 17, 015008.	1.7	8
264	Cryogenically 3D printed biomimetic scaffolds containing decellularized small intestinal submucosa and Sr <sup>2+</sup> /Fe <sup>3+</sup> co-substituted hydroxyapatite for bone tissue engineering. <i>Chemical Engineering Journal</i> , 2022, 431, 133459.	6.6	20
265	Bringing hydrogel-based craniofacial therapies to the clinic. <i>Acta Biomaterialia</i> , 2022, 138, 1-20.	4.1	7
266	A Bioprinted Tubular Intestine Model Using a Colon-Specific Extracellular Matrix Bioink. <i>Advanced Healthcare Materials</i> , 2022, 11, e2101768.	3.9	15
267	Biomimetic DNA Nanotechnology to Understand and Control Cellular Responses. <i>ChemBioChem</i> , 2022, 23, .	1.3	5
268	Construction of 3D hierarchical tissue platforms for modeling diabetes. <i>APL Bioengineering</i> , 2021, 5, 041506.	3.3	3
269	Interpenetrating Gallol Functionalized Tissue Adhesive Hyaluronic Acid Hydrogel Polarizes Macrophages to an Immunosuppressive Phenotype. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
270	Kinematic self-replication in reconfigurable organisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	57
271	The biomimetic extracellular matrix: a therapeutic tool for breast cancer research. <i>Translational Research</i> , 2022, 247, 117-136.	2.2	12
273	Recent Advances in Multicellular Tumor Spheroid Generation for Drug Screening. <i>Biosensors</i> , 2021, 11, 445.	2.3	36
274	Extracellular matrix-based combination scaffold for guided regeneration of large-area full-thickness rabbit burn wounds upon a single application. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2021, , .	1.6	3
275	Study of double-bonded carboxymethyl chitosan/cysteamine-modified chondroitin sulfate composite dressing for hemostatic application. <i>European Polymer Journal</i> , 2022, 162, 110875.	2.6	18
276	Benefit of coupling heparin to crosslinked collagen scaffolds for human dermal fibroblast subpopulations' tissue growth. <i>Journal of Biomedical Materials Research - Part A</i> , 2022, 110, 797-811.	2.1	8



#	ARTICLE	IF	CITATIONS
277	BMSC-derived extracellular matrix better optimizes the microenvironment to support nerve regeneration. <i>Biomaterials</i> , 2022, 280, 121251.	5.7	31
278	Adipose Collagen Fragment: A Novel Adipose-Derived Extracellular Matrix Concentrate for Skin Filling. <i>Aesthetic Surgery Journal</i> , 2022, 42, NP337-NP350.	0.9	3
279	Polysaccharide hydrogels: Functionalization, construction and served as scaffold for tissue engineering. <i>Carbohydrate Polymers</i> , 2022, 278, 118952.	5.1	91
280	Methods of Modification of Mesenchymal Stem Cells and Conditions of Their Culturing for Hyaline Cartilage Tissue Engineering. <i>Biomedicines</i> , 2021, 9, 1666.	1.4	5
281	Towards clinical translation of "second-generation"™ regenerative stroke therapies: hydrogels as game changers?. <i>Trends in Biotechnology</i> , 2022, 40, 708-720.	4.9	11
282	Biomaterials direct functional B cell response in a material-specific manner. <i>Science Advances</i> , 2021, 7, eabj5830.	4.7	18
283	Developing biomaterials to mediate the spatial distribution of integrins. <i>Biophysics Reviews</i> , 2021, 2, 041302.	1.0	3
284	Conductive Biomaterials as Bioactive Wound Dressing for Wound Healing and Skin Tissue Engineering. <i>Nano-Micro Letters</i> , 2022, 14, 1.	14.4	405
285	Human menstrual blood-derived stem cells combined with a new 3D bioprinted composite scaffold for spinal cord injury treatment. <i>Medical Hypotheses</i> , 2022, 159, 110755.	0.8	3
286	A regenerative approach to the pharmacological management of hard-to-heal wounds. <i>Biochimie</i> , 2022, 194, 67-78.	1.3	3
287	Decellularized liver ECM-based 3D scaffolds: Compositional, physical, chemical, rheological, thermal, mechanical, and in vitro biological evaluations. <i>International Journal of Biological Macromolecules</i> , 2022, 200, 110-123.	3.6	18
288	Aloe vera"eluting collagen I microgels: physicochemical characterization and in vitro biological performance. <i>Materials Today Chemistry</i> , 2022, 23, 100722.	1.7	1
289	Tissue-engineered vascular grafts and regeneration mechanisms. <i>Journal of Molecular and Cellular Cardiology</i> , 2022, 165, 40-53.	0.9	10
290	Development of biomaterials for constructing tumor microenvironment <i>in vitro</i> models. <i>Drug Delivery System</i> , 2021, 36, 256-264.	0.0	0
291	Fibrinogen improves liver function via promoting cell aggregation and fibronectin assembly in hepatic spheroids. <i>Biomaterials</i> , 2022, 280, 121266.	5.7	10
292	Scaffold-Based Tissue Engineering Strategies for Osteochondral Repair. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 812383.	2.0	25
293	State of the art of bone biomaterials and their interactions with stem cells: Current state and future directions. <i>Biotechnology Journal</i> , 2022, 17, e2100074.	1.8	3
294	Mechanically and biologically promoted cell-laden constructs generated using tissue-specific bioinks for tendon/ligament tissue engineering applications. <i>Biofabrication</i> , 2022, 14, 025013.	3.7	19

#	ARTICLE	IF	CITATIONS
295	Application of decellularized bone matrix as a bioscaffold in bone tissue engineering. <i>Journal of Biological Engineering</i> , 2022, 16, 1.	2.0	57
296	Osteosarcoma tumor microenvironment: the key for the successful development of biologically relevant 3D in vitro models. <i>In Vitro Models</i> , 2022, 1, 5-27.	1.0	9
297	Functionalized Microgel Rods Interlinked into Soft Macroporous Structures for 3D Cell Culture. <i>Advanced Science</i> , 2022, 9, e2103554.	5.6	29
298	Interpenetrating galloI functionalized tissue adhesive hyaluronic acid hydrogel polarizes macrophages to an immunosuppressive phenotype. <i>Acta Biomaterialia</i> , 2022, 142, 36-48.	4.1	16
299	Combination of 3D Printing and Electrospinning Techniques for Biofabrication. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	33
300	Cell-derived and enzyme-based decellularized extracellular matrix exhibit compositional and structural differences that are relevant for its use as a biomaterial. <i>Biotechnology and Bioengineering</i> , 2022, 119, 1142-1156.	1.7	9
301	A regenerative approach to the pharmacological management of hard-to-heal wounds. <i>Biochimie</i> , 2022, 196, 131-142.	1.3	9
302	Anisotropic Rod-Shaped Particles Influence Injectable Granular Hydrogel Properties and Cell Invasion. <i>Advanced Materials</i> , 2022, 34, e2109194.	11.1	48
303	Biomimetic porous scaffolds containing decellularized small intestinal submucosa and Sr <sup>2+</sup> /Fe <sup>3+</sup> co-doped hydroxyapatite accelerate angiogenesis/osteogenesis for bone regeneration. <i>Biomedical Materials (Bristol)</i> , 2022, 17, 025008.	1.7	8
304	Nanostructured hyaluronic acid-based hydrogels encapsulating synthetic/ natural hybrid nanogels as promising wound dressings. <i>Biochemical Engineering Journal</i> , 2022, 179, 108341.	1.8	16
305	Immunomodulatory matrix-bound nanovesicles mitigate acute and chronic pristane-induced rheumatoid arthritis. <i>Npj Regenerative Medicine</i> , 2022, 7, 13.	2.5	15
306	Preservation of the native features of mesenchymal stromal cells in vitro: Comparison of cell- and bone-derived decellularized extracellular matrix. <i>Journal of Tissue Engineering</i> , 2022, 13, 204173142210744.	2.3	8
307	A review of recent advances on osteogenic applications of Silk fibroin as a potential bio-scaffold in bone tissue engineering. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 0, , 1-16.	1.8	1
308	Skin Substitute Preparation Method Induces Immunomodulatory Changes in Co-Incubated Cells through Collagen Modification. <i>Pharmaceutics</i> , 2021, 13, 2164.	2.0	8
309	Abdominoplasty Skin-Based Dressing for Deep Wound Treatment—Evaluation of Different Methods of Preparation on Therapeutic Potential. <i>Pharmaceutics</i> , 2021, 13, 2118.	2.0	7
311	Photoactuating Artificial Muscles of Motor Amphiphiles as an Extracellular Matrix Mimetic Scaffold for Mesenchymal Stem Cells. <i>Journal of the American Chemical Society</i> , 2022, 144, 3543-3553.	6.6	27
312	Home Away From Home: Bioengineering Advancements to Mimic the Developmental and Adult Stem Cell Niche. <i>Frontiers in Chemical Engineering</i> , 2022, 4, .	1.3	1
313	Surface Viscosity-Dependent Neurite Initiation in Cortical Neurons. <i>Advanced Biology</i> , 2022, 6, e2101325.	1.4	2

#	ARTICLE	IF	CITATIONS
314	Predictive Biophysical Cue Mapping for Direct Cell Reprogramming Using Combinatorial Nanoarrays. <i>ACS Nano</i> , 2022, 16, 5577-5586.	7.3	5
315	Biosurfactant-Stabilized Micropore-Forming GelMA Inks Enable Improved Usability for 3D Printing Applications. <i>Regenerative Engineering and Translational Medicine</i> , 2022, 8, 471-481.	1.6	6
316	Biomaterial-Related Cell Microenvironment in Tissue Engineering and Regenerative Medicine. <i>Engineering</i> , 2022, 13, 31-45.	3.2	42
317	Mitomycin-Treated Endothelial and Smooth Muscle Cells Suitable for Safe Tissue Engineering Approaches. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 772981.	2.0	3
318	Skin-on-a-Chip Technology: Microengineering Physiologically Relevant In Vitro Skin Models. <i>Pharmaceutics</i> , 2022, 14, 682.	2.0	17
319	Recent Advances in Bioengineered Scaffolds for Cutaneous Wound Healing. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 841583.	2.0	23
320	Bioactive Decellularized Extracellular Matrix Hydrogel Microspheres Fabricated Using a Temperature-Controlling Microfluidic System. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 1644-1655.	2.6	9
321	Gremlin-1 Suppresses Hypertrophy of Engineered Cartilage <i>In Vitro</i> but Not Bone Formation <i>In Vivo</i> . <i>Tissue Engineering - Part A</i> , 2022, 28, 724-736.	1.6	6
322	Supramolecular Biomaterials in the Netherlands. <i>Tissue Engineering - Part A</i> , 2022, , .	1.6	3
323	A bioprinted complex tissue model for myotendinous junction with biochemical and biophysical cues. <i>Bioengineering and Translational Medicine</i> , 2022, 7, .	3.9	8
324	Design considerations of bioinks for laser bioprinting technique towards tissue regenerative applications. <i>Bioprinting</i> , 2022, 27, e00205.	2.9	15
325	Heterogeneous spheroids with tunable interior morphologies by droplet-based microfluidics. <i>Biofabrication</i> , 2022, 14, 025024.	3.7	8
326	Multifaceted tannin crosslinked bioinspired dECM decorated nanofibers modulating cell-scaffold biointerface for tympanic membrane perforation bioengineering. <i>Biomedical Materials (Bristol)</i> , 2022, 17, 034102.	1.7	11
327	Hydrogels derived from decellularized liver tissue support the growth and differentiation of cholangiocyte organoids. <i>Biomaterials</i> , 2022, 284, 121473.	5.7	33
328	Junctional epithelium and hemidesmosomes: Tape and rivets for solving the transcutaneous device dilemma in dental and other permanent implants. <i>Bioactive Materials</i> , 2022, 18, 178-198.	8.6	19
329	Peptide Amphiphile Hydrogels Based on Homoternary Cucurbit[8]uril Host-Guest Complexes. <i>Bioconjugate Chemistry</i> , 2022, 33, 111-120.	1.8	6
330	Flexible, Biocompatible PET Sheets: A Platform for Attachment, Proliferation and Differentiation of Eukaryotic Cells. <i>Surfaces</i> , 2021, 4, 306-322.	1.0	2
331	Decellularized extracellular matrix mediates tissue construction and regeneration. <i>Frontiers of Medicine</i> , 2022, 16, 56-82.	1.5	41

#	ARTICLE	IF	CITATIONS
332	Modern Approaches to Acellular Therapy in Bone and Dental Regeneration. International Journal of Molecular Sciences, 2021, 22, 13454.	1.8	8
333	Towards organoid culture without Matrigel. Communications Biology, 2021, 4, 1387.	2.0	127
334	Immune and Genome Engineering as the Future of Transplantable Tissue. New England Journal of Medicine, 2021, 385, 2451-2462.	13.9	28
335	Static and Dynamic Biomaterial Engineering for Cell Modulation. Nanomaterials, 2022, 12, 1377.	1.9	10
339	Preparation and properties investigation of biodegradable poly (glycerol sebacate-gelatin) containing nanoclay and graphene oxide for soft tissue engineering applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 2241-2257.	1.6	6
340	Inflammation Environment-Adaptive Patterned Surface for Spatiotemporal Immunomodulation of Macrophages. SSRN Electronic Journal, 0, , .	0.4	0
341	An In Silico Methodology That Facilitates Decision Making in the Engineering of Nanoscale Protein Materials. International Journal of Molecular Sciences, 2022, 23, 4958.	1.8	4
342	Dual-Cross-linked Liquid Crystal Hydrogels with Controllable Viscoelasticity for Regulating Cell Behaviors. ACS Applied Materials & Interfaces, 2022, 14, 21966-21977.	4.0	9
343	3D Biofabrication of a Cardiac Tissue Construct for Sustained Longevity and Function. ACS Applied Materials & Interfaces, 2022, 14, 21800-21813.	4.0	21
344	Recent Advancements on Three-Dimensional Electrospun Nanofiber Scaffolds for Tissue Engineering. Advanced Fiber Materials, 2022, 4, 959-986.	7.9	63
345	Extracellular Matrix-Oriented Proteomic Analysis of Periodontal Ligament Under Mechanical Stress. Frontiers in Physiology, 2022, 13, .	1.3	7
346	Preliminary Study on the Antigen-Removal from Extracellular Matrix via Different Decellularization. Tissue Engineering - Part C: Methods, 2022, 28, 250-263.	1.1	6
347	A cell retrievable strategy for harvesting extracellular matrix as active biointerface. Journal of Materials Science and Technology, 2022, , .	5.6	3
348	A sonication-induced silk-collagen hydrogel for functional cartilage regeneration. Journal of Materials Chemistry B, 2022, 10, 5045-5057.	2.9	9
349	Rational design of electrically conductive biomaterials toward excitable tissues regeneration. Progress in Polymer Science, 2022, 131, 101573.	11.8	21
350	Matrix-bound Cyr61/CCN1 is required to retain the properties of the bone marrow mesenchymal stem cell niche but is depleted with aging. Matrix Biology, 2022, 111, 108-132.	1.5	9
351	Detection of HOCl-driven degradation of the pericardium scaffolds by label-free multiphoton fluorescence lifetime imaging. Scientific Reports, 2022, 12, .	1.6	1
352	Efficient generation of functional pancreatic $\beta$ cells from dental-derived stem cells via laminin-induced differentiation. Journal of Genetic Engineering and Biotechnology, 2022, 20, 85.	1.5	1

#	ARTICLE	IF	CITATIONS
353	Nitric oxide improves regeneration and prevents calcification in bio-hybrid vascular grafts via regulation of vascular stem/progenitor cells. <i>Cell Reports</i> , 2022, 39, 110981.	2.9	17
354	Research progress of natural tissue-derived hydrogels for tissue repair and reconstruction. <i>International Journal of Biological Macromolecules</i> , 2022, 214, 480-491.	3.6	23
356	Recapitulating the liver niche in vitro. <i>Advances in Stem Cells and Their Niches</i> , 2022, , 1-55.	0.1	1
357	Jointly Optimized Spatial Histogram UNET Architecture (JOSHUA) for Adipose Tissue Segmentation. <i>BME Frontiers</i> , 2022, 2022, .	2.2	2
358	Application of Graphene Oxide-Based Hydrogels in Bone Tissue Engineering. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 2849-2857.	2.6	11
360	Transcriptomic Regulation of Macrophages by Matrix-Bound Nanovesicle-Associated Interleukin-33. <i>Tissue Engineering - Part A</i> , 2022, 28, 867-878.	1.6	3
361	Biomaterial-Based Schwann Cell Transplantation and Schwann Cell-Derived Biomaterials for Nerve Regeneration. <i>Frontiers in Cellular Neuroscience</i> , 0, 16, .	1.8	13
362	Exploiting Meltable Protein Hydrogels to Encapsulate and Culture Cells in 3D. <i>Macromolecular Bioscience</i> , 2022, 22, .	2.1	3
363	Improving Biological Functions of Three-Dimensional Printed Ti2448 Scaffolds by Decoration with Polydopamine and Extracellular Matrices. <i>ACS Applied Bio Materials</i> , 2022, 5, 3982-3990.	2.3	3
365	Material-driven fibronectin and vitronectin assembly enhances BMP-2 presentation and osteogenesis. <i>Materials Today Bio</i> , 2022, 16, 100367.	2.6	5
366	Constructing ECM-like Structure on the Plasma Membrane via Peptide Assembly to Regulate the Cellular Response. <i>Langmuir</i> , 2022, 38, 8733-8747.	1.6	6
367	Collagen gel contraction assays: From modelling wound healing to quantifying cellular interactions with three-dimensional extracellular matrices. <i>European Journal of Cell Biology</i> , 2022, 101, 151253.	1.6	17
368	3D Printing of Skin Equivalent with Hair Follicle Structures and Epidermalâ€‘Papillaryâ€‘Dermal Layers Using Gelatin/Hyaluronic Acid Hydrogels. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	16
369	Enhanced Adipogenic Differentiation of Human Dental Pulp Stem Cells in Enzymatically Decellularized Adipose Tissue Solid Foams. <i>Biology</i> , 2022, 11, 1099.	1.3	0
370	Bioactive Cell-Derived ECM Scaffold Forms a Unique Cellular Microenvironment for Lung Tissue Engineering. <i>Biomedicines</i> , 2022, 10, 1791.	1.4	8
371	Approaches to kidney replacement therapiesâ€‘opportunities and challenges. <i>Frontiers in Cell and Developmental Biology</i> , 0, 10, .	1.8	2
372	Dual-Bionic Regenerative Microenvironment for Peripheral Nerve Repairing. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
373	Extracellular Vesicles for Regenerative Medicine Applications. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 7472.	1.3	7

#	ARTICLE	IF	CITATIONS
374	Inflammation-mediated matrix remodeling of extracellular matrix-mimicking biomaterials in tissue engineering and regenerative medicine. <i>Acta Biomaterialia</i> , 2022, 151, 106-117.	4.1	21
375	Reduced Graphene Oxide-Extracellular Matrix Scaffolds as a Multifunctional and Highly Biocompatible Nanocomposite for Wound Healing: Insights into Characterization and Electroconductive Potential. <i>Nanomaterials</i> , 2022, 12, 2857.	1.9	3
376	An Overview of the Supramolecular Systems for Gene and Drug Delivery in Tissue Regeneration. <i>Pharmaceutics</i> , 2022, 14, 1733.	2.0	2
377	Electrochemical biosensors for the detection of matrix metalloproteinases. <i>International Journal of Electrochemical Science</i> , 0, , ArticleID:221034.	0.5	1
378	Decellularized extracellular matrix: New promising and challenging biomaterials for regenerative medicine. <i>Biomaterials</i> , 2022, 289, 121786.	5.7	62
379	Protein scaffolds in human clinics. <i>Biotechnology Advances</i> , 2022, 61, 108032.	6.0	7
380	Microtubes with gradient decellularized porcine sciatic nerve matrix from microfluidics for sciatic nerve regeneration. <i>Bioactive Materials</i> , 2023, 21, 511-519.	8.6	6
381	Fabrication of Multiscale Polymeric Fibres for Biomedical Applications. <i>Advances in Polymer Science</i> , 2022, , .	0.4	0
382	Electrospun nanofibers for bone regeneration: from biomimetic composition, structure to function. <i>Journal of Materials Chemistry B</i> , 2022, 10, 6078-6106.	2.9	12
383	In situ regeneration of nasal septal defects using acellular cartilage enhanced with platelet-derived growth factor. <i>Journal of Tissue Engineering</i> , 2022, 13, 204173142211144.	2.3	1
384	Titanate nanoribbon-based nanobiohybrid for potential applications in regenerative medicine. <i>RSC Advances</i> , 2022, 12, 26875-26881.	1.7	1
385	3D Bioprinted Patient-specific Extracellular Matrix Scaffolds for Soft Tissue Defects. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	17
386	Macrophage-mediated extracellular matrix remodeling after fat grafting in nude mice. <i>FASEB Journal</i> , 2022, 36, .	0.2	3
387	Engineering physical microenvironments to study innate immune cell biophysics. <i>APL Bioengineering</i> , 2022, 6, 031504.	3.3	1
388	Dynamic assembly and biocatalysis-selected gelation endow self-compartmentalized multienzyme superactivity. <i>Science China Chemistry</i> , 2022, 65, 1985-1993.	4.2	5
389	Establishment of decellularized extracellular matrix scaffold derived from caprine pancreas as a novel alternative template over porcine pancreatic scaffold for prospective biomedical application. <i>FASEB Journal</i> , 2022, 36, .	0.2	4
390	Biomaterials as regenerative medicine in Poly Cystic Ovarian Syndrome (PCOS) treatment. <i>Biochemical Engineering Journal</i> , 2022, 187, 108649.	1.8	3
391	Prospects and Challenges of Electrospun Cell and Drug Delivery Vehicles to Correct Urethral Stricture. <i>International Journal of Molecular Sciences</i> , 2022, 23, 10519.	1.8	8

#	ARTICLE	IF	CITATIONS
392	Inflammatory environment-adaptive patterned surface for spatiotemporal immunomodulation of macrophages. <i>Acta Biomaterialia</i> , 2022, 153, 139-148.	4.1	3
393	Recent Advances in Macroporous Hydrogels for Cell Behavior and Tissue Engineering. <i>Gels</i> , 2022, 8, 606.	2.1	23
394	Decellularized esophageal tubular scaffold microperforated by quantum molecular resonance technology and seeded with mesenchymal stromal cells for tissue engineering esophageal regeneration. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	0
395	Directed Conformational Switching of a Zinc Finger Analogue Regulates the Mechanosensing and Differentiation of Stem Cells. <i>Angewandte Chemie</i> , 0, , .	1.6	0
396	Directed Conformational Switching of a Zinc Finger Analogue Regulates the Mechanosensing and Differentiation of Stem Cells. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	1
397	High Strength and High Toughness Electrospun Multifibrillar Yarns with Highly Aligned Hierarchy Intended as Anisotropic Extracellular Matrix. <i>Macromolecular Bioscience</i> , 0, , 2200291.	2.1	0
398	Soft nano and microstructures for the photomodulation of cellular signaling and behavior. <i>Advanced Drug Delivery Reviews</i> , 2022, 190, 114554.	6.6	4
399	Curcumin-laden ECM-mimicking microfibers assemble with mesenchymal stem cells to generate heterospheroids and enhance cell viability and function. <i>Journal of Industrial and Engineering Chemistry</i> , 2022, 115, 500-509.	2.9	1
400	Progress in Application of Carrageenan Hydrogel in Biomedicine. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2021, 34, 615-622.	0.1	0
401	Extracellular matrix-inspired hydrogel of hyaluronan and gelatin crosslinked via a Link module with a transglutaminase reactive sequence. <i>Communications Materials</i> , 2022, 3, .	2.9	4
402	Biomaterial Design Inspired by Regenerative Research Organisms. <i>ACS Biomaterials Science and Engineering</i> , 2023, 9, 3860-3876.	2.6	5
403	Translating musculoskeletal bioengineering into tissue regeneration therapies. <i>Science Translational Medicine</i> , 2022, 14, .	5.8	5
404	Fabrication and in vitro evaluation of chitosan-gelatin based aceclofenac loaded scaffold. <i>International Journal of Biological Macromolecules</i> , 2023, 224, 223-232.	3.6	12
406	Advances in Regenerative Medicine and Biomaterials. <i>Methods in Molecular Biology</i> , 2023, , 127-152.	0.4	3
407	Subdiffusion equation with Caputo fractional derivative with respect to another function in modeling diffusion in a complex system consisting of a matrix and channels. <i>Physical Review E</i> , 2022, 106, .	0.8	3
408	Detergent-Free Decellularization Preserves the Mechanical and Biological Integrity of Murine Tendon. <i>Tissue Engineering - Part C: Methods</i> , 2022, 28, 646-655.	1.1	3
409	Cell-scaffold interactions in tissue engineering for oral and craniofacial reconstruction. <i>Bioactive Materials</i> , 2023, 23, 16-44.	8.6	17
410	Chemical modification of acellular fish skin as a promising biological scaffold by carbodiimide crosslinker for wound healing. <i>International Wound Journal</i> , 2023, 20, 1566-1577.	1.3	5

#	ARTICLE	IF	CITATIONS
411	Chapter 6. Mimicking Multicellular Features of the Tumor Microenvironment. Biomaterials Science Series, 2022, , 141-162.	0.1	0
412	Oxygen-supplying syringe to create hyperoxia-inducible hydrogels for in situ tissue regeneration. Biomaterials, 2023, 293, 121943.	5.7	9
413	Physico-biological evaluation of 3D printed dECM/TOCN/alginate hydrogel based scaffolds for cartilage tissue regeneration. , 2023, 145, 213239.		11
414	Chapter 3. Mimicking Fibrous Topographical Features of the Tumor Microenvironment. Biomaterials Science Series, 2022, , 30-59.	0.1	0
415	Collagen-Based Biomimetic Systems to Study the Biophysical Tumour Microenvironment. Cancers, 2022, 14, 5939.	1.7	1
416	Outcome of a novel porcine-derived UBM/SIS composite biological mesh in a rabbit vaginal defect model. International Urogynecology Journal, 0, , .	0.7	0
417	Evaluation of Biointegration and Inflammatory Response to Blood Vessels Produced by Tissue Engineeringâ€™Experimental Model in Rabbits. Biomolecules, 2022, 12, 1776.	1.8	0
418	Biocompatibility and biodistribution of matrix-bound nanovesicles in vitro and in vivo. Acta Biomaterialia, 2023, 155, 113-122.	4.1	6
419	Effects of decellularized extracellular matrix on Polyhydroxybutyrate electrospun scaffolds for cartilage tissue engineering. Polymer-Plastics Technology and Materials, 0, , 1-19.	0.6	1
420	Comparison of human acellular amniotic membranes with acellular amniotic membranes pretreated with MPLA for repair of fascia in rats. Cell and Tissue Banking, 0, , .	0.5	0
421	Adhesion and proliferation of bone marrow stromal cells on acellular spinal cord scaffolds. International Journal of Neuroscience, 0, , 1-10.	0.8	1
422	Regional and disease specific human lung extracellular matrix composition. Biomaterials, 2023, 293, 121960.	5.7	11
423	Extracellular matrix sheet modified with VEGF-loaded nanoparticles for bladder regeneration. NPG Asia Materials, 2022, 14, .	3.8	3
424	Human mini-bloodâ€™brain barrier models for biomedical neuroscience research: a review. Biomaterials Research, 2022, 26, .	3.2	6
425	Review: Scaffold Characteristics, Fabrication Methods, and Biomaterials for the Bone Tissue Engineering. International Journal of Precision Engineering and Manufacturing, 2023, 24, 511-529.	1.1	10
426	Design and engineering of organ-on-a-chip. Biomedical Engineering Letters, 2023, 13, 97-109.	2.1	11
427	Four-Dimensional Printing and Shape Memory Materials in Bone Tissue Engineering. International Journal of Molecular Sciences, 2023, 24, 814.	1.8	12
428	Engineering orthotopic tumor spheroids with organ-specific vasculatures for local chemoembolization evaluation. Biomaterials Science, 2023, 11, 2115-2128.	2.6	2



#	ARTICLE	IF	CITATIONS
429	Stereochemistry Determines Immune Cellular Responses to Polylactide Implants. ACS Biomaterials Science and Engineering, 2023, 9, 932-943.	2.6	8
430	Gold nanocluster decorated fibrous substrate for photo-modulated cellular growth. Journal of Materials Chemistry C, 2023, 11, 2600-2607.	2.7	4
431	Injectable Decellularized Extracellular Matrix Hydrogel Containing Stromal Cell-Derived Factor 1 Promotes Transplanted Cardiomyocyte Engraftment and Functional Regeneration after Myocardial Infarction. ACS Applied Materials & Interfaces, 2023, 15, 2578-2589.	4.0	15
432	Mechanical behavior and constitutive equations of porcine brain tissue considering both solution environment effect and strain rate effect. Mechanics of Advanced Materials and Structures, 0, , 1-15.	1.5	0
433	SAXS imaging reveals optimized osseointegration properties of bioengineered oriented 3D-PLGA/aCaP scaffolds in a critical size bone defect model. Biomaterials, 2023, 294, 121989.	5.7	5
434	Bone Scaffold Materials in Periodontal and Tooth-supporting Tissue Regeneration: A Review. Current Stem Cell Research and Therapy, 2024, 19, 449-460.	0.6	0
435	Functional biomaterials for biomimetic 3D in vitro tumor microenvironment modeling. In Vitro Models, 2023, 2, 1-23.	1.0	2
436	Cell culture techniques in microfluidic chips. , 2023, , 89-121.		0
437	Characterizing the extracellular matrix for regulating cell behaviors by atomic force microscopy. , 2023, , 269-288.		0
438	Dual-bionic regenerative microenvironment for peripheral nerve repair. Bioactive Materials, 2023, 26, 370-386.	8.6	2
439	Understanding the interplay between cell force and cell adhesion processes. Engineered Regeneration, 2023, 4, 277-288.	3.0	1
440	Bioactive wound powders as wound healing dressings and drug delivery systems. Powder Technology, 2023, 423, 118501.	2.1	1
441	Application of Mesh Materials and Effects of Representative Procedures in Pelvic Organ Prolapse Treatment. Science of Advanced Materials, 2022, 14, 1437-1448.	0.1	0
442	Polymeric Scaffolds for Regeneration of Central/Peripheral Nerves and Soft Connective Tissues. Advanced NanoBiomed Research, 2023, 3, .	1.7	2
443	Tissue engineering of skeletal muscle, tendons and nerves: A review of manufacturing strategies to meet structural and functional requirements. Applied Materials Today, 2023, 31, 101737.	2.3	3
444	Angiogenesis and Re-endothelialization in decellularized scaffolds: Recent advances and current challenges in tissue engineering. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	10
445	Electrospun Porcine Acellular Dermal Matrix and Polycaprolactone Composite Nanofibrous Scaffolds for Accelerating Wound Healing. Fibers and Polymers, 2023, 24, 589-601.	1.1	2
446	Long-term ultrasonographic and histologic changes in acellular dermal matrix in implant-based breast reconstructions. Plastic and Reconstructive Surgery, 0, Publish Ahead of Print, .	0.7	0

#	ARTICLE	IF	CITATIONS
447	Bioengineering liver tissue by repopulation of decellularised scaffolds. <i>World Journal of Hepatology</i> , 0, 15, 151-179.	0.8	1
448	Type-independent 3D Writing and Nano-Patterning of Confined Biopolymers. <i>Advanced Science</i> , 2023, 10, .	5.6	1
449	Fundamentals and methods of atomic force microscopy for biophysics. , 2023, , 1-42.		0
450	Carbazole-Based Anion Ionic Water-Soluble Two-Photon Initiator for Achieving 3D Hydrogel Structures. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	19
451	Systematic Comparison of Commercial Hydrogels Revealed That a Synergy of Laminin and Strain-Stiffening Promotes Directed Migration of Neural Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2023, 15, 12678-12695.	4.0	4
452	Tissue-Adhesive Decellularized Extracellular Matrix Patches Reinforced by a Supramolecular Gelator to Repair Abdominal Wall Defects. <i>Biomacromolecules</i> , 2023, 24, 1545-1554.	2.6	6
453	Understanding cell-extracellular matrix interactions for topology-guided tissue regeneration. <i>Biocell</i> , 2023, 47, 789-808.	0.4	0
454	3D bioprinting of human mesenchymal stem cells-laden hydrogels incorporating MXene for spontaneous osteodifferentiation. <i>Heliyon</i> , 2023, 9, e14490.	1.4	9
455	Exosomes combined with biomaterials in the treatment of spinal cord injury. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 11, .	2.0	5
456	Influence of Storage Conditions on Decellularized Porcine Conjunctiva. <i>Bioengineering</i> , 2023, 10, 350.	1.6	1
457	Omics-based approaches to guide the design of biomaterials. <i>Materials Today</i> , 2023, 64, 98-120.	8.3	5
458	Human-derived Biomaterials for Biomedical and Tissue Engineering Applications. <i>Current Pharmaceutical Design</i> , 2023, 29, 584-603.	0.9	1
459	Mechanical Regulation of Mitochondrial Dynamics and Function in a 3D-Engineered Liver Tumor Microenvironment. <i>ACS Biomaterials Science and Engineering</i> , 2023, 9, 2408-2425.	2.6	2
460	Revolutionizing Drug Delivery and Therapeutics: The Biomedical Applications of Conductive Polymers and Composites-Based Systems. <i>Pharmaceutics</i> , 2023, 15, 1204.	2.0	7
461	Methylcellulose/agarose hydrogel loaded with short electrospun PLLA/laminin fibers as an injectable scaffold for tissue engineering/3D cell culture model for tumour therapies. <i>RSC Advances</i> , 2023, 13, 11889-11902.	1.7	1
462	The histologic reaction and permanence of hyaluronic acid gel, calcium hydroxylapatite microspheres, and extracellular matrix bio gel. <i>Journal of Cosmetic Dermatology</i> , 2023, 22, 2685-2691.	0.8	2
473	Tissue-Derived Decellularized Materials for Biomedical Applications. , 2023, , 1-33.		1
474	Decellularized Extracellular Matrix: The Role of This Complex Biomaterial in Regeneration. <i>ACS Omega</i> , 2023, 8, 22256-22267.	1.6	2

#	ARTICLE	IF	CITATIONS
486	Decellularized Tissue-Derived Materials as Advanced Bioinks. , 2023, , 1-43.		0
517	Liposomal systems containing phytochemicals for cancer therapy. AIP Conference Proceedings, 2023, , .	0.3	0
518	The polymer and materials science of the bacterial fimbriae Caf1. Biomaterials Science, 0, , .	2.6	1
521	An overview of the production of tissue extracellular matrix and decellularization process. Cell and Tissue Banking, 2024, 25, 369-387.	0.5	0
525	Amnion-Based Biomaterials for Musculoskeletal Regenerative Engineering. Regenerative Engineering and Translational Medicine, 0, , .	1.6	0
531	Development of Cardiovascular Biomaterials From Collagenous Tissues. Engineering Materials, 2023, , 521-534.	0.3	0
540	Polymeric and Biomimetic ECM Scaffolds for Tissue Engineering Applications. , 2023, , 41-60.		0
543	Functionalized polysaccharide-based hydrogels: spanning accession in tissue engineering and regenerative medicines. , 2024, , 215-264.		0
544	Closer to nature. , 2024, , 47-92.		0
549	Role of silk fibroin biomaterials as artificial ECM for 3D inÂvitro modeling. , 2024, , 377-405.		0
550	Biomedical Applications of Marine Biopolymers in Tissue Engineering and Regenerative Medicine. , 2023, , 39-59.		0
556	Review: Human stem cell-based 3D in vitro angiogenesis models for preclinical drug screening applications. Molecular Biology Reports, 2024, 51, .	1.0	0
563	Endogenous In Situ Tissue Regeneration Using Inductive Bioscaffolds After Acute Brain Injury. Pancreatic Islet Biology, 2024, , 219-249.	0.1	0