Jennifer H Elisseeff

List of Publications by Year
in descending order

218 papers	18,121 citations	9784 73 h-index	14758 127 g-index
244 all docs	244 docs citations	244 times ranked	19549 citing authors

#	Article	IF	Citations
1	Local clearance of senescent cells attenuates the development of post-traumatic osteoarthritis and creates a pro-regenerative environment. Nature Medicine, 2017, 23, 775-781.	30.7	994
2	Variable cytocompatibility of six cell lines with photoinitiators used for polymerizing hydrogels and cell encapsulation. Biomaterials, 2005, 26, 1211-1218.	11.4	760
3	Multifunctional chondroitin sulphate for cartilage tissueâ€"biomaterial integration. Nature Materials, 2007, 6, 385-392.	27.5	609
4	Engineering Complex Tissues. Tissue Engineering, 2006, 12, 3307-3339.	4.6	513
5	Developing a pro-regenerative biomaterial scaffold microenvironment requires T helper 2 cells. Science, 2016, 352, 366-370.	12.6	464
6	The effect of incorporating RGD adhesive peptide in polyethylene glycol diacrylate hydrogel on osteogenesis of bone marrow stromal cells. Biomaterials, 2005, 26, 5991-5998.	11.4	434
7	In situ forming degradable networks and their application in tissue engineering and drug delivery. Journal of Controlled Release, 2002, 78, 199-209.	9.9	430
8	Mimicking biological functionality with polymers for biomedical applications. Nature, 2016, 540, 386-394.	27.8	389
9	In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Stem Cells in a Photopolymerizing Hydrogel. Tissue Engineering, 2003, 9, 679-688.	4.6	371
10	Chondroitin sulfate based niches for chondrogenic differentiation of mesenchymal stem cells. Matrix Biology, 2008, 27, 12-21.	3.6	331
11	Controlled differentiation of stem cells. Advanced Drug Delivery Reviews, 2008, 60, 199-214.	13.7	296
12	A versatile pH sensitive chondroitin sulfateâ€"PEG tissue adhesive and hydrogel. Biomaterials, 2010, 31, 2788-2797.	11.4	280
13	Engineering Structurally Organized Cartilage and Bone Tissues. Annals of Biomedical Engineering, 2004, 32, 148-159.	2.5	277
14	Human Cartilage Repair with a Photoreactive Adhesive-Hydrogel Composite. Science Translational Medicine, 2013, 5, 167ra6.	12.4	270
15	Controlled-release of IGF-I and TGF-Î²1 in a photopolymerizing hydrogel for cartilage tissue engineering. Journal of Orthopaedic Research, 2001, 19, 1098-1104.	2.3	268
16	In vivo commitment and functional tissue regeneration using human embryonic stem cell-derived mesenchymal cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20641-20646.	7.1	261
17	Key players in the immune response to biomaterial scaffolds for regenerative medicine. Advanced Drug Delivery Reviews, 2017, 114, 184-192.	13.7	259
18	Chondrogenic Differentiation of Human Embryonic Stem Cellâ€"Derived Cells in Arginine-Glycine-Aspartateâ€"Modified Hydrogels. Tissue Engineering, 2006, 12, 2695-2706.	4.6	255

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19	Effects of Three-Dimensional Culture and Growth Factors on the Chondrogenic Differentiation of Murine Embryonic Stem Cells. Stem Cells, 2006, 24, 284-291.	3.2	233
20	Senescent cells and osteoarthritis: a painful connection. Journal of Clinical Investigation, 2018, 128, 1229-1237.	8.2	215
21	Synthesis and characterization of a novel degradable phosphate-containing hydrogel. Biomaterials, 2003, 24, 3969-3980.	11.4	213
22	Differential Response of Adult and Embryonic Mesenchymal Progenitor Cells to Mechanical Compression in Hydrogels. Stem Cells, 2007, 25, 2730-2738.	3.2	208
23	Design, clinical translation and immunological response of biomaterials in regenerative medicine. Nature Reviews Materials, 2016, 1, .	48.7	208
24	Bioinspired nanofibers support chondrogenesis for articular cartilage repair. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10012-10017.	7.1	189
25	Photocrosslinkable polysaccharides based on chondroitin sulfate. Journal of Biomedical Materials Research Part B, 2004, 68A, 28-33.	3.1	183
26	Enhanced lubrication on tissue and biomaterial surfaces through peptide-mediated binding of hyaluronic acid. Nature Materials, 2014, 13, 988-995.	27.5	183
27	Collagen mimetic peptide-conjugated photopolymerizable PEG hydrogel. Biomaterials, 2006, 27, 5268-5276.	11.4	178
28	Biodegradable and photocrosslinkable polyphosphoester hydrogel. Biomaterials, 2006, 27, 1027-1034.	11.4	176
29	Divergent immune responses to synthetic and biological scaffolds. Biomaterials, 2019, 192, 405-415.	11.4	176
30	Abnormalities in cartilage and bone development in the Apert syndrome FGFR2+/S252W mouse. Development (Cambridge), 2005, 132, 3537-3548.	2.5	172
31	Bioresponsive Phosphoester Hydrogels for Bone Tissue Engineering. Tissue Engineering, 2005, 11, 201-213.	4.6	172
32	Adult Stem Cell Driven Genesis of Human-Shaped Articular Condyle. Annals of Biomedical Engineering, 2004, 32, 911-923.	2.5	169
33	Transdermal Photopolymerization of Poly (Ethylene Oxide)-Based Injectable Hydrogels for Tissue-Engineered Cartilage. Plastic and Reconstructive Surgery, 1999, 104, 1014-1022.	1.4	164
34	A Tissue-Engineered Conduit for Peripheral Nerve Repair. JAMA Otolaryngology, 1998, 124, 1081.	1.2	154
35	Glycolysis is the primary bioenergetic pathway for cell motility and cytoskeletal remodeling in human prostate and breast cancer cells. Oncotarget, 2015, 6, 130-143.	1.8	151
36	Three-Dimensional Printing of Bone Extracellular Matrix for Craniofacial Regeneration. ACS Biomaterials Science and Engineering, 2016, 2, 1806-1816.	5.2	141

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37	Using proteolysis-targeting chimera technology to reduce navitoclax platelet toxicity and improve its senolytic activity. Nature Communications, 2020, 11, 1996.	12.8	141
38	Tissue matrix arrays for high-throughput screening and systems analysis of cell function. Nature Methods, 2015, 12, 1197-1204.	19.0	140
39	Designing Zonal Organization into Tissue-Engineered Cartilage. Tissue Engineering, 2007, 13, 405-414.	4.6	139
40	Transdermal Photopolymerization of Poly (Ethylene Oxide)-Based Injectable Hydrogels for Tissue-Engineered Cartilage. Plastic and Reconstructive Surgery, 1999, 104, 1014-1022.	1.4	136
41	Hydrogels for Musculoskeletal Tissue Engineering. Advances in Polymer Science, 2006, , 95-144.	0.8	133
42	Human iPSC-derived osteoblasts and osteoclasts together promote bone regeneration in 3D biomaterials. Scientific Reports, 2016, 6, 26761.	3.3	124
43	Interleukin-36Î³â€"producing macrophages drive IL-17â€"mediated fibrosis. Science Immunology, 2019, 4, .	11.9	123
44	IL-17 and immunologically induced senescence regulate response to injury in osteoarthritis. Journal of Clinical Investigation, 2020, 130, 5493-5507.	8.2	119
45	Biomimetics of the extracellular matrix: an integrated three-dimensional fiber-hydrogel composite for cartilage tissue engineering. Smart Structures and Systems, 2011, 7, 213-222.	1.9	119
46	Decellularization of bovine corneas for tissue engineering applications. Acta Biomaterialia, 2009, 5, 1839-1847.	8.3	117
47	In Vivo Chondrogenesis of Mesenchymal Stem Cells in a Photopolymerized Hydrogel. Plastic and Reconstructive Surgery, 2007, 119, 112-120.	1.4	116
48	Morphogenetic signals from chondrocytes promote chondrogenic and osteogenic differentiation of mesenchymal stem cells. Journal of Cellular Physiology, 2007, 212, 281-284.	4.1	115
49	Derivation of Chondrogenically-Committed Cells from Human Embryonic Cells for Cartilage Tissue Regeneration. PLoS ONE, 2008, 3, e2498.	2.5	115
50	Injectable cartilage tissue engineering. Expert Opinion on Biological Therapy, 2004, 4, 1849-1859.	3.1	114
51	Evolution of Autologous Chondrocyte Repair and Comparison to Other Cartilage Repair Techniques. BioMed Research International, 2014, 2014, 1-11.	1.9	112
52	An Injectable Adipose Matrix for Soft-Tissue Reconstruction. Plastic and Reconstructive Surgery, 2012, 129, 1247-1257.	1.4	109
53	Structure starts to gel. Nature Materials, 2008, 7, 271-273.	27.5	108
54	PEG hydrogel degradation and the role of the surrounding tissue environment. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 315-318.	2.7	108

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55	Regulation of osteogenic and chondrogenic differentiation of mesenchymal stem cells in PEG-ECM hydrogels. Cell and Tissue Research, 2011, 344, 499-509.	2.9	107
56	Enhanced chondrogenic differentiation of murine embryonic stem cells in hydrogels with glucosamine. Biomaterials, 2006, 27, 6015-6023.	11.4	106
57	Senescence cellâ€“associated extracellular vesicles serve as osteoarthritis disease and therapeutic markers. JCI Insight, 2019, 4, .	5.0	103
58	The independent roles of mechanical, structural and adhesion characteristics of 3D hydrogels on the regulation of cancer invasion and dissemination. Biomaterials, 2013, 34, 9486-9495.	11.4	101
59	Enhanced Chondrogenesis of Mesenchymal Stem Cells in Collagen Mimetic Peptide-Mediated Microenvironment. Tissue Engineering - Part A, 2008, 14, 1843-1851.	3.1	99
60	Interleukin 17 and senescent cells regulate the foreign body response to synthetic material implants in mice and humans. Science Translational Medicine, 2020, 12, .	12.4	99
61	A biologic scaffoldâ€“associated type 2 immune microenvironment inhibits tumor formation and synergizes with checkpoint immunotherapy. Science Translational Medicine, 2019, 11, .	12.4	96
62	In Vitro Prefabrication of Human Cartilage Shapes Using Fibrin Glue and Human Chondrocytes. Annals of Plastic Surgery, 1998, 40, 413-429.	0.9	90
63	Photoactivated Composite Biomaterial for Soft Tissue Restoration in Rodents and in Humans. Science Translational Medicine, 2011, 3, 93ra67.	12.4	88
64	Heterogeneous-Phase Reaction of Glycidyl Methacrylate and Chondroitin Sulfate:Â Mechanism of Ring-Openingâˆ'Transesterification Competition. Macromolecules, 2003, 36, 2556-2562.	4.8	87
65	The Role of Biomaterials in Stem Cell Differentiation: Applications in the Musculoskeletal System. Stem Cells and Development, 2006, 15, 295-303.	2.1	87
66	Comparison of 3 Techniques of Fat Grafting and Cell-Supplemented Lipotransfer in Athymic Rats. Aesthetic Surgery Journal, 2013, 33, 713-721.	1.6	84
67	Response of zonal chondrocytes to extracellular matrixâ€hydrogels. FEBS Letters, 2007, 581, 4172-4178.	2.8	82
68	Hyaluronic Acid-Binding Scaffold for Articular Cartilage Repair. Tissue Engineering - Part A, 2012, 18, 2497-2506.	3.1	80
69	Synthesis and Characterization of Photo-Cross-Linked Polymers Based on Poly(l-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 1	4.8	79
70	In Situ Immobilization of Proteins and RGD Peptide on Polyurethane Surfaces via Poly(ethylene oxide) Coupling Polymers for Human Endothelial Cell Growth. Biomacromolecules, 2002, 3, 1286-1295.	5.4	79
71	Biomaterials engineered for integration. Materials Today, 2008, 11, 44-51.	14.2	79
72	Integration and application of vitrified collagen in multilayered microfluidic devices for corneal microtissue culture. Lab on A Chip, 2009, 9, 3221.	6.0	79

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73	Collagen vitrigel membranes for the <i>in vitro</i> reconstruction of separate corneal epithelial, stromal, and endothelial cell layers. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 818-831.	3.4	77
74	Proteomic composition and immunomodulatory properties of urinary bladder matrix scaffolds in homeostasis and injury. Seminars in Immunology, 2017, 29, 14-23.	5.6	73
75	A Modified Chondroitin Sulfate Aldehyde Adhesive for Sealing Corneal Incisions. , 2005, 46, 1247.		71
76	Structure and properties of collagen vitrigel membranes for ocular repair and regeneration applications. Biomaterials, 2012, 33, 8286-8295.	11.4	69
77	The Scaffold Immune Microenvironment: Biomaterial-Mediated Immune Polarization in Traumatic and Nontraumatic Applications<sup />. Tissue Engineering - Part A, 2017, 23, 1044-1053.	3.1	69
78	A hyaluronic acid binding peptide-polymer system for treating osteoarthritis. Biomaterials, 2018, 183, 93-101.	11.4	69
79	Musculoskeletal Differentiation of Cells Derived from Human Embryonic Germ Cells. Stem Cells, 2005, 23, 113-123.	3.2	64
80	The differential effect of scaffold composition and architecture on chondrocyte response to mechanical stimulation. Biomaterials, 2009, 30, 518-525.	11.4	64
81	Determination of crosslinking density of hydrogels prepared from microcrystalline cellulose. Journal of Applied Polymer Science, 2013, 127, 4537-4541.	2.6	60
82	Metabolic Changes in Mesenchymal Stem Cells in Osteogenic Medium Measured by Autofluorescence Spectroscopy. Stem Cells, 2006, 24, 1213-1217.	3.2	58
83	Cellular senescence in musculoskeletal homeostasis, diseases, and regeneration. Bone Research, 2021, 9, 41.	11.4	58
84	The influence of biological motifs and dynamic mechanical stimulation in hydrogel scaffold systems on the phenotype of chondrocytes. Biomaterials, 2011, 32, 1508-1516.	11.4	56
85	Hyaluronic acid-human blood hydrogels for stem cell transplantation. Biomaterials, 2012, 33, 8026-8033.	11.4	56
86	Entanglement-Based Thermoplastic Shape Memory Polymeric Particles with Photothermal Actuation for Biomedical Applications. ACS Applied Materials & Interfaces, 2018, 10, 13333-13341.	8.0	56
87	Cartilage Tissue Engineering. Methods in Molecular Biology, 2007, 407, 351-373.	0.9	56
88	Extracellular matrix particleâ€“glycosaminoglycan composite hydrogels for regenerative medicine applications. Journal of Biomedical Materials Research - Part A, 2018, 106, 147-159.	4.0	54
89	Size of the embryoid body influences chondrogenesis of mouse embryonic stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 499-506.	2.7	52
90	Immobilized fibrinogen in PEG hydrogels does not improve chondrocyte-mediated matrix deposition in response to mechanical stimulation. Biotechnology and Bioengineering, 2006, 95, 1061-1069.	3.3	50

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91	Keratocyte behavior in three-dimensional photopolymerizable poly(ethylene glycol) hydrogels. Acta Biomaterialia, 2008, 4, 1139-1147.	8.3	50
92	Modular Multifunctional Poly(ethylene glycol) Hydrogels for Stem Cell Differentiation. Advanced Functional Materials, 2013, 23, 575-582.	14.9	50
93	Biomaterials Directed <i>In Vivo</i> Osteogenic Differentiation of Mesenchymal Cells Derived from Human Embryonic Stem Cells. Tissue Engineering - Part A, 2013, 19, 1723-1732.	3.1	48
94	A hyaluronic acid-binding contact lens with enhanced water retention. Contact Lens and Anterior Eye, 2015, 38, 79-84.	1.7	47
95	Biomaterials for stem cell differentiation. Journal of Materials Chemistry, 2010, 20, 8832.	6.7	46
96	An In Situ, In Vivo Murine Model for the Study of Laryngotracheal Stenosis. JAMA Otolaryngology - Head and Neck Surgery, 2014, 140, 961.	2.2	44
97	Application of Stem Cells for Articular Cartilage Regeneration. Journal of Knee Surgery, 2009, 22, 60-71.	1.6	42
98	Synthesis and characterization of a chondroitin sulfate-polyethylene glycol corneal adhesive. Journal of Cataract and Refractive Surgery, 2009, 35, 567-576.	1.5	42
99	Engineering Musculoskeletal Tissues with Human Embryonic Germ Cell Derivatives. Stem Cells, 2010, 28, 765-774.	3.2	42
100	Serum NT/CT SIRT1 ratio reflects early osteoarthritis and chondrosenescence. Annals of the Rheumatic Diseases, 2020, 79, 1370-1380.	0.9	42
101	Stem cells in musculoskeletal engineered tissue. Current Opinion in Biotechnology, 2009, 20, 537-544.	6.6	41
102	An analysis of the integration between articular cartilage and nondegradable hydrogel using magnetic resonance imaging. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 77B, 144-148.	3.4	40
103	Regeneration of corneal epithelium utilizing a collagen vitrigel membrane in rabbit models for corneal stromal wound and limbal stem cell deficiency. Acta Ophthalmologica, 2015, 93, e57-66.	1.1	40
104	Computational reconstruction of the signalling networks surrounding implanted biomaterials from single-cell transcriptomics. Nature Biomedical Engineering, 2021, 5, 1228-1238.	22.5	40
105	Multifunctional aliphatic polyester nanofibers for tissue engineering. Biomatter, 2012, 2, 202-212.	2.6	39
106	Modulation of keratocyte phenotype by collagen fibril nanoarchitecture in membranes for corneal repair. Biomaterials, 2013, 34, 9365-9372.	11.4	39
107	Bonding and Fusion of Meniscus Fibrocartilage Using a Novel Chondroitin Sulfate Bone Marrow Tissue Adhesive. Tissue Engineering - Part A, 2013, 19, 1843-1851.	3.1	37
108	Cyclodextrin Modulated Type I Collagen Selfâ€Assembly to Engineer Biomimetic Cornea Implants. Advanced Functional Materials, 2018, 28, 1804076.	14.9	37

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109	The study of abnormal bone development in the Apert syndrome Fgfr2 +/S252W mouse using a 3D hydrogel culture model. Bone, 2008, 43, 55-63.	2.9	36
110	Vitrified collagen-based conjunctival equivalent for ocular surface reconstruction. Biomaterials, 2014, 35, 7398-7406.	11.4	36
111	Reorganization of actin filaments enhances chondrogenic differentiation of cells derived from murine embryonic stem cells. Biochemical and Biophysical Research Communications, 2006, 348, 421-427.	2.1	35
112	Regulating synthetic gene networks in 3D materials. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15217-15222.	7.1	34
113	Synthetic Nanofiber-Reinforced Amniotic Membrane via Interfacial Bonding. ACS Applied Materials & Interfaces, 2018, 10, 14559-14569.	8.0	34
114	Orthopedic tissue regeneration: cells, scaffolds, and small molecules. Drug Delivery and Translational Research, 2016, 6, 105-120.	5.8	32
115	Targeted delivery of hyaluronic acid to the ocular surface by a polymer-peptide conjugate system for dry eye disease. Acta Biomaterialia, 2017, 55, 163-171.	8.3	32
116	Metabolic variations in normal and fibrotic human laryngotrachealâ€derived fibroblasts: A Warburgâ€like effect. Laryngoscope, 2017, 127, E107-E113.	2.0	32
117	Development of a PEG Derivative Containing Hydrolytically Degradable Hemiacetals. Macromolecules, 2010, 43, 9588-9590.	4.8	31
118	Tissue Extracellular Matrix Nanoparticle Presentation in Electrospun Nanofibers. BioMed Research International, 2014, 2014, 1-13.	1.9	31
119	Transdermal Photopolymerized Adhesive for Seroma Prevention. Plastic and Reconstructive Surgery, 1999, 103, 531-535.	1.4	30
120	Novel human endothelial cell-engineered polyurethane biomaterials for cardiovascular biomedical applications. Journal of Biomedical Materials Research Part B, 2003, 65A, 498-510.	3.1	30
121	An Adhesive Bone Marrow Scaffold and Bone Morphogenetic-2 Protein Carrier for Cartilage Tissue Engineering. Biomacromolecules, 2013, 14, 637-643.	5.4	30
122	Hyaluronic acid-serum hydrogels rapidly restore metabolism of encapsulated stem cells and promote engraftment. Biomaterials, 2015, 73, 1-11.	11.4	30
123	Two-Year Follow-Up and Remodeling Kinetics of ChonDux Hydrogel for Full-Thickness Cartilage Defect Repair in the Knee. Cartilage, 2020, 11, 447-457.	2.7	29
124	Thermal denaturation of type I collagen vitrified gels. Thermochimica Acta, 2012, 527, 172-179.	2.7	28
125	Immune and Genome Engineering as the Future of Transplantable Tissue. New England Journal of Medicine, 2021, 385, 2451-2462.	27.0	28
126	Modified Microkeratome-Assisted Posterior Lamellar Keratoplasty Using a Tissue Adhesive. JAMA Ophthalmology, 2006, 124, 210.	2.4	27

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127	Light activated cell migration in synthetic extracellular matrices. Biomaterials, 2012, 33, 8040-8046.	11.4	26
128	Characterization of Human Mesenchymal Stem Cell-Engineered Cartilage: Analysis of Its Ultrastructure, Cell Density and Chondrocyte Phenotype Compared to Native Adult and Fetal Cartilage. Cells Tissues Organs, 2010, 191, 12-20.	2.3	25
129	Tissue Engineering for In Vitro Analysis of Matrix Metalloproteinases in the Pathogenesis of Keloid Lesions. JAMA Facial Plastic Surgery, 2013, 15, 448-456.	2.1	25
130	Three-Dimensional Culture of Functional Adult Rabbit Lacrimal Gland Epithelial Cells on Decellularized Scaffold. Tissue Engineering - Part A, 2016, 22, 65-74.	3.1	25
131	An orthopedic tissue adhesive for targeted delivery of intraoperative biologics. Journal of Orthopaedic Research, 2013, 31, 392-400.	2.3	24
132	Fibre-reinforced hydrogels with high optical transparency. International Materials Reviews, 2014, 59, 264-296.	19.3	24
133	Biodynamic performance of hyaluronic acid versus synovial fluid of the knee in osteoarthritis. Methods, 2015, 84, 90-98.	3.8	24
134	An In Vitro Model for the Ocular Surface and Tear Film System. Scientific Reports, 2017, 7, 6163.	3.3	24
135	Improving Long-Term Projection in Nipple Reconstruction Using Human Acellular Dermal Matrix. Annals of Plastic Surgery, 2005, 55, 304-309.	0.9	23
136	Enhanced Chondrogenic Differentiation of Embryonic Stem Cells by Coculture with Hepatic Cells. Stem Cells and Development, 2008, 17, 555-564.	2.1	23
137	Mesenchymal Stem Cell Stimulation of Tissue Growth Depends on Differentiation State. Stem Cells and Development, 2011, 20, 405-414.	2.1	23
138	Evaluation of the biocompatibility of regenerated cellulose hydrogels with high strength and transparency for ocular applications. Journal of Biomaterials Applications, 2016, 30, 1049-1059.	2.4	23
139	Engineering an immunomodulatory drug-eluting stent to treat laryngotracheal stenosis. Biomaterials Science, 2019, 7, 1863-1874.	5.4	23
140	Local delivery of a carbohydrate analog for reducing arthritic inflammation and rebuilding cartilage. Biomaterials, 2016, 83, 93-101.	11.4	22
141	Tissue-derived microparticles reduce inflammation and fibrosis in cornea wounds. Acta Biomaterialia, 2019, 85, 192-202.	8.3	22
142	Type 2 immunity induced by bladder extracellular matrix enhances corneal wound healing. Science Advances, 2021, 7, .	10.3	22
143	Biomaterials and tissue engineering strategies for conjunctival reconstruction and dry eye treatment. Middle East African Journal of Ophthalmology, 2015, 22, 428.	0.3	22
144	Realâ€time Monitoring of Force Response Measured in Mechanically Stimulated Tissueâ€Engineered Cartilage. Artificial Organs, 2009, 33, 318-327.	1.9	21

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145	A Comparison of the Rheologic Properties of an Adipose-Derived Extracellular Matrix Biomaterial, Lipoaspirate, Calcium Hydroxylapatite, and Cross-linked Hyaluronic Acid. JAMA Facial Plastic Surgery, 2014, 16, 405-409.	2.1	21
146	Use of a chondroitin sulfate bioadhesive to enhance integration of bioglass particles for repairing critical-size bone defects. Journal of Biomedical Materials Research - Part A, 2015, 103, 235-242.	4.0	21
147	Physical and Biological Characterization of the Gamma-Irradiated Human Cornea. Cornea, 2015, 34, 1287-1294.	1.7	20
148	Electrospun Microfiber Scaffolds with Anti-Inflammatory Tributanoylated N-Acetyl-<scp>d</scp>-Glucosamine Promote Cartilage Regeneration. Tissue Engineering - Part A, 2016, 22, 689-697.	3.1	19
149	Metabolically Active Three-Dimensional Brown Adipose Tissue Engineered from White Adipose-Derived Stem Cells. Tissue Engineering - Part A, 2017, 23, 253-262.	3.1	19
150	The Immune System and Its Contribution to Variability in Regenerative Medicine. Tissue Engineering - Part B: Reviews, 2021, 27, 39-47.	4.8	19
151	An immunologically active, adipose-derived extracellular matrix biomaterial for soft tissue reconstruction: concept to clinical trial. Npj Regenerative Medicine, 2022, 7, 6.	5.2	19
152	Embryonic Germ Cells Are Capable of Adipogenic Differentiation<i>In Vitro</i>and<i>In Vivo</i>. Tissue Engineering - Part A, 2009, 15, 479-486.	3.1	18
153	Time to Relax: Mechanical Stress Release Guides Stem Cell Responses. Cell Stem Cell, 2016, 18, 166-167.	11.1	18
154	Biomaterials direct functional B cell response in a material-specific manner. Science Advances, 2021, 7, eabj5830.	10.3	18
155	A Tale of Two Tissues: Stem Cells in Cartilage and Corneal Tissue Engineering. Current Stem Cell Research and Therapy, 2010, 5, 37-48.	1.3	17
156	Validation of a Small Animal Model for Soft Tissue Filler Characterization. Dermatologic Surgery, 2012, 38, 471-478.	0.8	17
157	Future perspectives for regenerative medicine in ophthalmology. Middle East African Journal of Ophthalmology, 2013, 20, 38.	0.3	17
158	Application of a Collagen-Based Membrane and Chondroitin Sulfate-Based Hydrogel Adhesive for the Potential Repair of Severe Ocular Surface Injuries. Military Medicine, 2014, 179, 686-694.	0.8	17
159	Chondroitin Sulfateâ€"Based Biocompatible Crosslinker Restores Corneal Mechanics and Collagen Alignment. , 2017, 58, 3887.		17
160	Human fibroblast-macrophage tissue spheroids demonstrate ratio-dependent fibrotic activity for <i>in vitro</i> fibrogenesis model development. Biomaterials Science, 2020, 8, 1951-1960.	5.4	17
161	Embryonic stem cells: potential for more impact. Trends in Biotechnology, 2004, 22, 155-156.	9.3	16
162	Photomodulation of Cellular Gene Expression in Hydrogels. ACS Macro Letters, 2013, 2, 269-272.	4.8	16

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163	Intraâ€articular delivery of glucosamine for treatment of experimental osteoarthritis created by a medial meniscectomy in a rat model. Journal of Orthopaedic Research, 2014, 32, 302-309.	2.3	16
164	Influence of collagen source on fibrillar architecture and properties of vitrified collagen membranes. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 300-307.	3.4	16
165	Biomanufacturing Seamless Tubular and Hollow Collagen Scaffolds with Unique Design Features and Biomechanical Properties. Advanced Healthcare Materials, 2017, 6, 1601136.	7.6	16
166	Intra-articular Injection of Urinary Bladder Matrix Reduces Osteoarthritis Development. AAPS Journal, 2017, 19, 141-149.	4.4	15
167	An extracellular matrix extract for tissue-engineered cartilage - Cartrigel modulates the chondrogenic effect of TGF-B3 on mesenchymal stem cells in photopolymerizing hydrogels. IEEE Engineering in Medicine and Biology Magazine, 2003, 22, 71-76.	0.8	14
168	Noninvasive Mitochondrial Imaging in Live Cell Culture. Photochemistry and Photobiology, 2005, 81, 1569.	2.5	14
169	Moxifloxacin in situ gelling microparticlesâ€"bioadhesive delivery system. Results in Pharma Sciences, 2012, 2, 66-71.	4.2	14
170	Carnitine and acetylcarnitine modulate mesenchymal differentiation of adult stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1352-1362.	2.7	14
171	Biological scaffoldâ€"mediated delivery of myostatin inhibitor promotes a regenerative immune response in an animal model of Duchenne muscular dystrophy. Journal of Biological Chemistry, 2018, 293, 15594-15605.	3.4	14
172	Multifunctional synthetic Bowman's membrane-stromal biomimetic for corneal reconstruction. Biomaterials, 2020, 241, 119880.	11.4	14
173	Short-Chain Fatty Acid-Modified Hexosamine for Tissue-Engineering Osteoarthritic Cartilage. Tissue Engineering - Part A, 2013, 19, 2035-2044.	3.1	13
174	Enhanced Tissue Production through Redox Control in Stem Cell-Laden Hydrogels. Tissue Engineering - Part A, 2013, 19, 2014-2023.	3.1	13
175	Microarray Embedding/Sectioning for Parallel Analysis of 3D Cell Spheroids. Scientific Reports, 2019, 9, 16287.	3.3	13
176	Matrix metalloproteinases and inhibitors in cartilage tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 144-154.	2.7	12
177	Differential Response of Chondrocytes and Chondrogenic-Induced Mesenchymal Stem Cells to C1-OH Tributanoylated N-Acetylhexosamines. PLoS ONE, 2013, 8, e58899.	2.5	12
178	Protective Effects of Soluble Collagen during Ultraviolet-A Crosslinking on Enzyme-Mediated Corneal Ectatic Models. PLoS ONE, 2015, 10, e0136999.	2.5	11
179	Biomaterials and Tissue Engineering for Soft Tissue Reconstruction. , 2014, , 235-241.		10
180	Characterizing ECM Production by Cells Encapsulated in Hydrogels. Methods in Molecular Biology, 2009, 522, 349-362.	0.9	10

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