

David J Mooney

List of Publications by Year in descending order

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Version: 2024-02-01

396
papers

82,566
citations

383

131
h-index

360

277
g-index

431
all docs

431
docs citations

431
times ranked

57023
citing authors

#	ARTICLE	IF	CITATIONS
1	Perivascular CLICK-gelatin delivery of thrombospondin-2 small interfering RNA decreases development of intimal hyperplasia after arterial injury. <i>FASEB Journal</i> , 2024, 38, .	0.4	1
2	Mechanical forces amplify TCR mechanotransduction in T cell activation and function. <i>Applied Physics Reviews</i> , 2024, 11, .	11.4	1
3	Mechanical forces amplify TCR mechanotransduction in T cell activation and function. <i>Applied Physics Reviews</i> , 2024, 11, .	11.4	0
4	Natural Polymer-Polyphenol Bioadhesive Coacervate with Stable Wet Adhesion, Antibacterial Activity, and On-Demand Detachment. <i>Advanced Healthcare Materials</i> , 2024, 13, .	8.3	1
5	Instant tough adhesion of polymer networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2024, 121, .	7.4	1
6	Neutrophils bearing adhesive polymer micropatches as a drug-free cancer immunotherapy. <i>Nature Biomedical Engineering</i> , 2024, 8, 579-592.	21.9	7
7	Dynamic injectable tissue adhesives with strong adhesion and rapid self-healing for regeneration of large muscle injury. <i>Biomaterials</i> , 2024, 309, 122597.	11.5	0
8	Matrix stiffness-dependent regulation of immunomodulatory genes in human MSCs is associated with the lncRNA CYTOR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2024, 121, .	7.4	0
9	Immune-responsive biodegradable scaffolds for enhancing neutrophil regeneration. <i>Bioengineering and Translational Medicine</i> , 2023, 8, .	7.6	3
10	Self-Healing Injectable Hydrogels for Tissue Regeneration. <i>Chemical Reviews</i> , 2023, 123, 834-873.	49.4	287
11	Active tissue adhesive activates mechanosensors and prevents muscle atrophy. <i>Nature Materials</i> , 2023, 22, 249-259.	25.8	34
12	Matrix viscoelasticity controls spatiotemporal tissue organization. <i>Nature Materials</i> , 2023, 22, 117-127.	25.8	108
13	Cytokine conjugation to enhance T cell therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	7.4	18
14	Hydrogel viscoelasticity modulates migration and fusion of mesenchymal stem cell spheroids. <i>Bioengineering and Translational Medicine</i> , 2023, 8, .	7.6	12
15	Enhancing CAR-T cell functionality in a patient-specific manner. <i>Nature Communications</i> , 2023, 14, .	12.8	32
16	Optimizing the manufacturing and antitumour response of CAR-T therapy. <i>Nature Reviews Bioengineering</i> , 2023, 1, 271-285.	0.0	16
17	Anti-inflammatory therapy enables robot-actuated regeneration of aged muscle. <i>Science Robotics</i> , 2023, 8, .	17.7	4
18	Breakthrough treatments for accelerated wound healing. <i>Science Advances</i> , 2023, 9, .	10.7	84

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19	Adoptive T cell transfer and host antigen-presenting cell recruitment with cryogel scaffolds promotes long-term protection against solid tumors. <i>Nature Communications</i> , 2023, 14, .	12.8	20
20	Generation of functionally distinct T-cell populations by altering the viscoelasticity of their extracellular matrix. <i>Nature Biomedical Engineering</i> , 2023, 7, 1374-1391.	21.9	26
21	Biomaterial vaccines capturing pathogen-associated molecular patterns protect against bacterial infections and septic shock. <i>Nature Biomedical Engineering</i> , 2022, 6, 8-18.	21.9	39
22	Materials for Implantable Surface Electrode Arrays: Current Status and Future Directions. <i>Advanced Materials</i> , 2022, 34, e2107207.	23.6	26
23	Quantifying face mask comfort. <i>Journal of Occupational and Environmental Hygiene</i> , 2022, 19, 23-34.	1.2	8
24	Enhanced tendon healing by a tough hydrogel with an adhesive side and high drug-loading capacity. <i>Nature Biomedical Engineering</i> , 2022, 6, 1167-1179.	21.9	124
25	Cryogel vaccines effectively induce immune responses independent of proximity to the draining lymph nodes. <i>Biomaterials</i> , 2022, 281, 121329.	11.5	14
26	Scaffold Vaccines for Generating Robust and Tunable Antibody Responses. <i>Advanced Functional Materials</i> , 2022, 32, .	16.0	16
27	Recent and Future Strategies of Mechanotherapy for Tissue Regenerative Rehabilitation. <i>ACS Biomaterials Science and Engineering</i> , 2022, 8, 4639-4642.	5.2	10
28	Antiplatelet therapy for Staphylococcus aureus bacteremia: Will it stick?. <i>PLoS Pathogens</i> , 2022, 18, e1010240.	4.0	2
29	Aging and matrix viscoelasticity affect multiscale tendon properties and tendon derived cell behavior. <i>Acta Biomaterialia</i> , 2022, 143, 63-71.	8.5	20
30	Development of a liposomal near-infrared fluorescence lactate assay for human blood. <i>Biomaterials</i> , 2022, 283, 121475.	11.5	7
31	Actuated 3D microgels for single cell mechanobiology. <i>Lab on A Chip</i> , 2022, 22, 1962-1970.	5.9	10
32	Viscoelastic Biomaterials for Tissue Regeneration. <i>Tissue Engineering - Part C: Methods</i> , 2022, 28, 289-300.	2.2	33
33	Nanoparticle Properties Influence Transendothelial Migration of Monocytes. <i>Langmuir</i> , 2022, 38, 5603-5616.	3.6	5
34	Targeting tumor extracellular matrix activates the tumor-draining lymph nodes. <i>Cancer Immunology, Immunotherapy</i> , 2022, 71, 2957-2968.	4.4	9
35	A vaccine targeting resistant tumours by dual T cell plus NK cell attack. <i>Nature</i> , 2022, 606, 992-998.	35.3	83
36	Development of a physiological insulin resistance model in human stem cell-derived adipocytes. <i>Science Advances</i> , 2022, 8, .	10.7	12

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37	STING activation promotes robust immune response and NK cell-mediated tumor regression in glioblastoma models. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.4	55
38	Mechanical checkpoint regulates monocyte differentiation in fibrotic niches. Nature Materials, 2022, 21, 939-950.	25.8	31
39	Murine macrophages or their secretome delivered in alginate dressings enhance impaired wound healing in diabetic mice. Biomaterials, 2022, 288, 121692.	11.5	37
40	Chemical strategies to engineer hydrogels for cell culture. Nature Reviews Chemistry, 2022, 6, 726-744.	21.7	116
41	Chemotherapy Dose Shapes the Expression of Immune-Interacting Markers on Cancer Cells. Cellular and Molecular Bioengineering, 2022, 15, 535-551.	2.1	5
42	The future of engineered immune cell therapies. Science, 2022, 378, 853-858.	19.6	62
43	A combination microparticle strategy for achieving antigen-specific tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.4	0
44	A Novel Three-Dimensional Skin Disease Model to Assess Macrophage Function in Diabetes. Tissue Engineering - Part C: Methods, 2021, 27, 49-58.	2.2	21
45	A novel two-component, expandable bioadhesive for exposed defect coverage: Applicability to prenatal procedures. Journal of Pediatric Surgery, 2021, 56, 165-169.	1.7	11
46	Active biomaterials for mechanobiology. Biomaterials, 2021, 267, 120497.	11.5	67
47	Generation of the Compression-induced Dedifferentiated Adipocytes (CiDAs) Using Hypertonic Medium. Bio-protocol, 2021, 11, e3920.	0.4	3
48	Advanced bandages for diabetic wound healing. Science Translational Medicine, 2021, 13, .	13.2	230
49	Degradable and Removable Tough Adhesive Hydrogels. Advanced Materials, 2021, 33, e2008553.	23.6	121
50	Viscoelastic surface electrode arrays to interface with viscoelastic tissues. Nature Nanotechnology, 2021, 16, 1019-1029.	29.6	180
51	Anti-inflammatory nanoparticles significantly improve muscle function in a murine model of advanced muscular dystrophy. Science Advances, 2021, 7, .	10.7	37
52	Obstacles and opportunities in a forward vision for cancer nanomedicine. Nature Materials, 2021, 20, 1469-1479.	25.8	249
53	Risk quantification for SARS-CoV-2 infection through airborne transmission in university settings. Journal of Occupational and Environmental Hygiene, 2021, 18, 590-603.	1.2	6
54	Delivery of Thrombospondin-2 Small Interfering RNA for Suppression of Intimal Hyperplasia. Journal of Vascular Surgery, 2021, 74, e297.	1.1	0

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55	Polymeric Tissue Adhesives. <i>Chemical Reviews</i> , 2021, 121, 11336-11384.	49.4	384
56	Skeletal muscle regeneration with robotic actuation-mediated clearance of neutrophils. <i>Science Translational Medicine</i> , 2021, 13, eabe8868.	13.2	48
57	A Modular Biomaterial Scaffold-Based Vaccine Elicits Durable Adaptive Immunity to Subunit SARS-CoV-2 Antigens. <i>Advanced Healthcare Materials</i> , 2021, 10, e2101370.	8.3	10
58	Ultrasound-triggered release reveals optimal timing of CpG-ODN delivery from a cryogel cancer vaccine. <i>Biomaterials</i> , 2021, 279, 121240.	11.5	19
59	EXTH-81. STING ACTIVATION PROMOTES ROBUST IMMUNE RESPONSE AND TUMOR REGRESSION IN GLIOBLASTOMA MODELS. <i>Neuro-Oncology</i> , 2021, 23, vi182-vi182.	1.2	0
60	Mechanical Checkpoint Regulates Monocyte Differentiation in Fibrotic Matrix. <i>Blood</i> , 2021, 138, 2539-2539.	1.4	5
61	Torticollis as a Sole Presentation of Spondyloarthritis in a 4-Year-Old Child. <i>Clinical Medicine and Research</i> , 2021, 19, 203-207.	0.9	1
62	Topical Application of a Mast Cell Stabilizer Improves Impaired Diabetic Wound Healing. <i>Journal of Investigative Dermatology</i> , 2020, 140, 901-911.e11.	0.7	66
63	Immediate Treatment of Burn Wounds with High Concentrations of Topical Antibiotics in an Alginate Hydrogel Using a Platform Wound Device. <i>Advances in Wound Care</i> , 2020, 9, 48-60.	5.2	40
64	Clickable, acid labile immunosuppressive prodrugs for <i>in vivo</i> targeting. <i>Biomaterials Science</i> , 2020, 8, 266-277.	5.4	16
65	Niche-mimicking interactions in peptide-functionalized 3D hydrogels amplify mesenchymal stromal cell paracrine effects. <i>Biomaterials</i> , 2020, 230, 119639.	11.5	46
66	Engineered tissues and strategies to overcome challenges in drug development. <i>Advanced Drug Delivery Reviews</i> , 2020, 158, 116-139.	14.0	36
67	Extracellular matrix plasticity as a driver of cell spreading. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 25999-26007.	7.4	73
68	Single-Shot Mesoporous Silica Rods Scaffold for Induction of Humoral Responses Against Small Antigens. <i>Advanced Functional Materials</i> , 2020, 30, 2002448.	16.0	36
69	Metabolic glycan labelling for cancer-targeted therapy. <i>Nature Chemistry</i> , 2020, 12, 1102-1114.	13.7	113
70	Biomaterial-based scaffold for in situ chemo-immunotherapy to treat poorly immunogenic tumors. <i>Nature Communications</i> , 2020, 11, 5696.	12.8	112
71	Dual alginate crosslinking for local patterning of biophysical and biochemical properties. <i>Acta Biomaterialia</i> , 2020, 115, 185-196.	8.5	18
72	Multifunctional biomimetic hydrogel systems to boost the immunomodulatory potential of mesenchymal stromal cells. <i>Biomaterials</i> , 2020, 257, 120266.	11.5	49

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73	Cell and tissue engineering in lymph nodes for cancer immunotherapy. <i>Advanced Drug Delivery Reviews</i> , 2020, 161-162, 42-62.	14.0	49
74	Biomaterials as Local Niches for Immunomodulation. <i>Accounts of Chemical Research</i> , 2020, 53, 1749-1760.	15.7	90
75	3D encapsulation and inflammatory licensing of mesenchymal stromal cells alter the expression of common reference genes used in real-time RT-qPCR. <i>Biomaterials Science</i> , 2020, 8, 6741-6753.	5.4	6
76	Effects of extracellular matrix viscoelasticity on cellular behaviour. <i>Nature</i> , 2020, 584, 535-546.	35.8	1,231
77	Steroidâ€“Peptide Immunoconjugates for Attenuating T Cell Responses in an Experimental Autoimmune Encephalomyelitis Murine Model of Multiple Sclerosis. <i>Bioconjugate Chemistry</i> , 2020, 31, 2779-2788.	3.7	6
78	Metabolic labeling and targeted modulation of dendritic cells. <i>Nature Materials</i> , 2020, 19, 1244-1252.	25.8	114
79	Extracellular matrix mechanics regulate transfection and SOX9-directed differentiation of mesenchymal stem cells. <i>Acta Biomaterialia</i> , 2020, 110, 153-163.	8.5	38
80	Tuning cytokines enriches dendritic cells and regulatory T cells in the periodontium. <i>Journal of Periodontology</i> , 2020, 91, 1475-1485.	3.5	14
81	Biomaterials Functionalized with MSC Secreted Extracellular Vesicles and Soluble Factors for Tissue Regeneration. <i>Advanced Functional Materials</i> , 2020, 30, 1909125.	16.0	233
82	Alginate Hydrogels for <i>In Vivo</i> Bone Regeneration: The Immune Competence of the Animal Model Matters. <i>Tissue Engineering - Part A</i> , 2020, 26, 852-862.	3.2	24
83	Regenerating Antithrombotic Surfaces through Nucleic Acid Displacement. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 2159-2166.	5.2	2
84	Filmed over with CAR-T cells. <i>Nature Biomedical Engineering</i> , 2020, 4, 142-143.	21.9	2
85	Compression-induced dedifferentiation of adipocytes promotes tumor progression. <i>Science Advances</i> , 2020, 6, eaax5611.	10.7	61
86	A biomaterial-based vaccine eliciting durable tumour-specific responses against acute myeloid leukaemia. <i>Nature Biomedical Engineering</i> , 2020, 4, 40-51.	21.9	91
87	Soft extracellular matrix enhances inflammatory activation of mesenchymal stromal cells to induce monocyte production and trafficking. <i>Science Advances</i> , 2020, 6, eaaw0158.	10.7	85
88	A nanoparticleâ€™s pathway into tumours. <i>Nature Materials</i> , 2020, 19, 486-487.	25.8	129
89	Nearâ€“Infrared Fluorescence Hydrogen Peroxide Assay for Versatile Metabolite Biosensing in Whole Blood. <i>Small</i> , 2020, 16, e2000369.	10.9	13
90	Differentiation of diabetic foot ulcerâ€“derived induced pluripotent stem cells reveals distinct cellular and tissue phenotypes. <i>FASEB Journal</i> , 2019, 33, 1262-1277.	0.4	42

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91	Treating ischemia via recruitment of antigen-specific T cells. <i>Science Advances</i> , 2019, 5, eaav6313.	10.7	26
92	Intrinsically motivated collective motion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15362-15367.	7.4	38
93	Bioinspired mechanically active adhesive dressings to accelerate wound closure. <i>Science Advances</i> , 2019, 5, eaaw3963.	10.7	369
94	Antibiotic-Containing Agarose Hydrogel for Wound and Burn Care. <i>Journal of Burn Care and Research</i> , 2019, 40, 900-906.	0.5	50
95	Root-specific camalexin biosynthesis controls the plant growth-promoting effects of multiple bacterial strains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15735-15744.	7.4	146
96	Enzymatically-degradable alginate hydrogels promote cell spreading and in vivo tissue infiltration. <i>Biomaterials</i> , 2019, 217, 119294.	11.5	103
97	Acetalated Dextran Nanoparticles Loaded into an Injectable Alginate Cryogel for Combined Chemotherapy and Cancer Vaccination. <i>Advanced Functional Materials</i> , 2019, 29, 1903686.	16.0	47
98	Combined delivery of VEGF and IGF-1 promotes functional innervation in mice and improves muscle transplantation in rabbits. <i>Biomaterials</i> , 2019, 216, 119246.	11.5	42
99	Design Molecular Topology for Wet-Dry Adhesion. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24802-24811.	8.1	82
100	Multi-flow channel bioreactor enables real-time monitoring of cellular dynamics in 3D engineered tissue. <i>Communications Biology</i> , 2019, 2, 158.	4.4	19
101	Macroscale biomaterials strategies for local immunomodulation. <i>Nature Reviews Materials</i> , 2019, 4, 379-397.	39.0	191
102	Biomaterials to Mimic and Heal Connective Tissues. <i>Advanced Materials</i> , 2019, 31, e1806695.	23.6	147
103	Modular soft robotic microdevices for dexterous biomanipulation. <i>Lab on A Chip</i> , 2019, 19, 778-788.	5.9	33
104	An injectable bone marrow-like scaffold enhances T cell immunity after hematopoietic stem cell transplantation. <i>Nature Biotechnology</i> , 2019, 37, 293-302.	20.4	87
105	Anti-tumor immunity induced by ectopic expression of viral antigens is transient and limited by immune escape. <i>Oncolmmunology</i> , 2019, 8, e1568809.	4.7	23
106	Sequential modes of crosslinking tune viscoelasticity of cell-instructive hydrogels. <i>Biomaterials</i> , 2019, 188, 187-197.	11.5	100
107	Delivery of targeted gene therapies using a hybrid cryogel-coated prosthetic vascular graft. <i>PeerJ</i> , 2019, 7, e7377.	2.0	6
108	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4652-4656.	14.2	28

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109	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie</i> , 2018, 130, 4742-4746.	2.1	7
110	A facile approach to enhance antigen response for personalized cancer vaccination. <i>Nature Materials</i> , 2018, 17, 528-534.	25.8	338
111	FGF2 Enhances Odontoblast Differentiation by α SMA ⁺ Progenitors In Vivo. <i>Journal of Dental Research</i> , 2018, 97, 1170-1177.	5.1	19
112	Tough Composite Hydrogels with High Loading and Local Release of Biological Drugs. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701393.	8.3	57
113	Improved magnetic regulation of delivery profiles from ferrogels. <i>Biomaterials</i> , 2018, 161, 179-189.	11.5	49
114	Physical Polyurethane Hydrogels via Charge Shielding through Acids or Salts. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1700711.	4.3	5
115	Injectable, Tough Alginate Cryogels as Cancer Vaccines. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701469.	8.3	103
116	Microfluidic Templated Multicompartment Microgels for 3D Encapsulation and Pairing of Single Cells. <i>Small</i> , 2018, 14, 1702955.	10.9	135
117	Scaffolds that mimic antigen-presenting cells enable ex vivo expansion of primary T cells. <i>Nature Biotechnology</i> , 2018, 36, 160-169.	20.4	296
118	Covalent Conjugation of Peptide Antigen to Mesoporous Silica Rods to Enhance Cellular Responses. <i>Bioconjugate Chemistry</i> , 2018, 29, 733-741.	3.7	28
119	Replenishable drug depot to combat post-resection cancer recurrence. <i>Biomaterials</i> , 2018, 178, 373-382.	11.5	42
120	Matrix stiffness and tumor-associated macrophages modulate epithelial to mesenchymal transition of human adenocarcinoma cells. <i>Biofabrication</i> , 2018, 10, 035004.	7.3	68
121	Flow-Induced Vascular Network Formation and Maturation in Three-Dimensional Engineered Tissue. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 1265-1271.	5.2	35
122	Synthetic Light-Curable Polymeric Materials Provide a Supportive Niche for Dental Pulp Stem Cells. <i>Advanced Materials</i> , 2018, 30, 1704486.	23.6	37
123	Injectable nanocomposite cryogels for versatile protein drug delivery. <i>Acta Biomaterialia</i> , 2018, 65, 36-43.	8.5	139
124	Evaluation of a bioengineered construct for tissue engineering applications. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 2345-2354.	3.6	13
125	Functional muscle recovery with nanoparticle-directed M2 macrophage polarization in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 10648-10653.	7.4	124
126	Force Control of Textile-Based Soft Wearable Robots for Mechanotherapy. , 2018, , .		24

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127	Towards Alternative Approaches for Coupling of a Soft Robotic Sleeve to the Heart. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1534-1547.	2.5	31
128	RNA-seq reveals diverse effects of substrate stiffness on mesenchymal stem cells. <i>Biomaterials</i> , 2018, 181, 182-188.	11.5	71
129	Hydrolytically-degradable click-crosslinked alginate hydrogels. <i>Biomaterials</i> , 2018, 181, 189-198.	11.5	84
130	Targeting DEC-205 ⁺ DCIR2 ⁺ dendritic cells promotes immunological tolerance in proteolipid protein-induced experimental autoimmune encephalomyelitis. <i>Molecular Medicine</i> , 2018, 24, 17.	4.4	32
131	Material microenvironmental properties couple to induce distinct transcriptional programs in mammalian stem cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8368-E8377.	7.4	101
132	Biomaterial-assisted targeted modulation of immune cells in cancer treatment. <i>Nature Materials</i> , 2018, 17, 761-772.	25.8	381
133	Two-dimensional itinerant ferromagnetism in atomically thin Fe ₃ GeTe ₂ . <i>Nature Materials</i> , 2018, 17, 778-782.	25.8	1,088
134	CD4 T-cells regulate angiogenesis and myogenesis. <i>Biomaterials</i> , 2018, 178, 109-121.	11.5	44
135	Sustained release of targeted cardiac therapy with a replenishable implanted epicardial reservoir. <i>Nature Biomedical Engineering</i> , 2018, 2, 416-428.	21.9	80
136	Soft robotic sleeve supports heart function. <i>Science Translational Medicine</i> , 2017, 9, .	13.2	310
137	Liposomal Delivery Enhances Immune Activation by STING Agonists for Cancer Immunotherapy. <i>Advanced Biology</i> , 2017, 1, 1600013.	3.4	188
138	Multicomponent Injectable Hydrogels for Antigen-Specific Tolerogenic Immune Modulation. <i>Advanced Healthcare Materials</i> , 2017, 6, 1600773.	8.3	83
139	Single cell-laden protease-sensitive microniches for long-term culture in 3D. <i>Lab on A Chip</i> , 2017, 17, 727-737.	5.9	47
140	In Vivo Enrichment of Diabetogenic T Cells. <i>Diabetes</i> , 2017, 66, 2220-2229.	0.9	23
141	Biomaterials that promote cell-cell interactions enhance the paracrine function of MSCs. <i>Biomaterials</i> , 2017, 140, 103-114.	11.5	236
142	Emerging Trends in Micro- and Nanoscale Technologies in Medicine: From Basic Discoveries to Translation. <i>ACS Nano</i> , 2017, 11, 5195-5214.	14.9	109
143	Substrate Stress-Relaxation Regulates Scaffold Remodeling and Bone Formation In Vivo. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601185.	8.3	110
144	Mechanical confinement regulates cartilage matrix formation by chondrocytes. <i>Nature Materials</i> , 2017, 16, 1243-1251.	25.8	379

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145	Cell volume change through water efflux impacts cell stiffness and stem cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8618-E8627.	7.4	395
146	Hydrogel substrate stress-relaxation regulates the spreading and proliferation of mouse myoblasts. Acta Biomaterialia, 2017, 62, 82-90.	8.5	129
147	In-situ tissue regeneration through SDF-1 β driven cell recruitment and stiffness-mediated bone regeneration in a critical-sized segmental femoral defect. Acta Biomaterialia, 2017, 60, 50-63.	8.5	64
148	Timed Delivery of Therapy Enhances Functional Muscle Regeneration. Advanced Healthcare Materials, 2017, 6, 1700202.	8.3	6
149	Leveraging advances in biology to design biomaterials. Nature Materials, 2017, 16, 1178-1185.	25.8	103
150	Mechanical forces direct stem cell behaviour in development and regeneration. Nature Reviews Molecular Cell Biology, 2017, 18, 728-742.	36.5	1,132
151	Biomaterials for skeletal muscle tissue engineering. Current Opinion in Biotechnology, 2017, 47, 16-22.	6.7	161
152	Deterministic encapsulation of single cells in thin tunable microgels for niche modelling and therapeutic delivery. Nature Materials, 2017, 16, 236-243.	25.8	303
153	Cell Microencapsulation by Droplet Microfluidic Templating. Macromolecular Chemistry and Physics, 2017, 218, 1600380.	2.4	37
154	Injectable Shape-Memorizing Three-Dimensional Hyaluronic Acid Cryogels for Skin Sculpting and Soft Tissue Reconstruction. Tissue Engineering - Part A, 2017, 23, 243-251.	3.2	29
155	Label-free bacterial detection using polydiacetylene liposomes. Chemical Communications, 2016, 52, 10346-10349.	4.1	48
156	Altered ECM deposition by diabetic foot ulcer-derived fibroblasts implicates fibronectin in chronic wound repair. Wound Repair and Regeneration, 2016, 24, 630-643.	3.1	89
157	Click-Crosslinked Injectable Gelatin Hydrogels. Advanced Healthcare Materials, 2016, 5, 541-547.	8.3	135
158	Hydrogels in Vascular Tissue Engineering. , 2016, , 385-396.		0
159	CD44 alternative splicing in gastric cancer cells is regulated by culture dimensionality and matrix stiffness. Biomaterials, 2016, 98, 152-162.	11.5	37
160	Effects of substrate stiffness and cell-cell contact on mesenchymal stem cell differentiation. Biomaterials, 2016, 98, 184-191.	11.5	217
161	Synthetic niche to modulate regenerative potential of MSCs and enhance skeletal muscle regeneration. Biomaterials, 2016, 99, 95-108.	11.5	90
162	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. Angewandte Chemie - International Edition, 2016, 55, 13470-13474.	14.2	98

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163	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie</i> , 2016, 128, 13668-13672.	2.1	34
164	Extracellular matrix stiffness causes systematic variations in proliferation and chemosensitivity in myeloid leukemias. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12126-12131.	7.4	125
165	Designing hydrogels for controlled drug delivery. <i>Nature Reviews Materials</i> , 2016, 1, .	39.0	3,098
166	Vasculogenic dynamics in 3D engineered tissue constructs. <i>Scientific Reports</i> , 2016, 5, 17840.	3.4	56
167	Adjuvant-Loaded Subcellular Vesicles Derived From Disrupted Cancer Cells for Cancer Vaccination. <i>Small</i> , 2016, 12, 2321-2333.	10.9	39
168	Generation of Induced Pluripotent Stem Cells from Diabetic Foot Ulcer Fibroblasts Using a Nonintegrative Sendai Virus. <i>Cellular Reprogramming</i> , 2016, 18, 214-223.	0.9	30
169	Biologic-free mechanically induced muscle regeneration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1534-1539.	7.4	149
170	The effect of surface modification of mesoporous silica micro-rod scaffold on immune cell activation and infiltration. <i>Biomaterials</i> , 2016, 83, 249-256.	11.5	93
171	One-step generation of cell-laden microgels using double emulsion drops with a sacrificial ultra-thin oil shell. <i>Lab on A Chip</i> , 2016, 16, 1549-1555.	5.9	123
172	Biomaterials for enhancing anti-cancer immunity. <i>Current Opinion in Biotechnology</i> , 2016, 40, 1-8.	6.7	119
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