

David J Mooney

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/621701/david-j-mooney-publications-by-year.pdf>

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

369 papers	64,388 citations	119 h-index	251 g-index
395 ext. papers	73,072 ext. citations	13.4 avg, IF	8.44 L-index

#	Paper	IF	Citations
369	Antiplatelet therapy for Staphylococcus aureus bacteremia: Will it stick?. <i>PLoS Pathogens</i> , 2022 , 18, e1010840	10.8	0
368	Enhanced tendon healing by a tough hydrogel with an adhesive side and high drug-loading capacity.. <i>Nature Biomedical Engineering</i> , 2022 ,	19	11
367	Development of a liposomal near-infrared fluorescence lactate assay for human blood.. <i>Biomaterials</i> , 2022 , 283, 121475	15.6	1
366	Quantifying Face Mask Comfort. <i>Journal of Occupational and Environmental Hygiene</i> , 2021 , 1-13	2.9	1
365	Ultrasound-triggered release reveals optimal timing of CpG-ODN delivery from a cryogel cancer vaccine. <i>Biomaterials</i> , 2021 , 279, 121240	15.6	2
364	EXTH-81. STING ACTIVATION PROMOTES ROBUST IMMUNE RESPONSE AND TUMOR REGRESSION IN GLIOBLASTOMA MODELS. <i>Neuro-Oncology</i> , 2021 , 23, vi182-vi182	1	
363	Mechanical Checkpoint Regulates Monocyte Differentiation in Fibrotic Matrix. <i>Blood</i> , 2021 , 138, 2539-2539	22.9	0
362	Cryogel vaccines effectively induce immune responses independent of proximity to the draining lymph nodes.. <i>Biomaterials</i> , 2021 , 281, 121329	15.6	2
361	Skeletal muscle regeneration with robotic actuation-mediated clearance of neutrophils. <i>Science Translational Medicine</i> , 2021 , 13, eabe8868	17.5	7
360	A Modular Biomaterial Scaffold-Based Vaccine Elicits Durable Adaptive Immunity to Subunit SARS-CoV-2 Antigens. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2101370	10.1	2
359	Materials for implantable surface electrode arrays: current status and future directions. <i>Advanced Materials</i> , 2021 , e2107207	24	4
358	Advanced bandages for diabetic wound healing. <i>Science Translational Medicine</i> , 2021 , 13,	17.5	31
357	Degradable and Removable Tough Adhesive Hydrogels. <i>Advanced Materials</i> , 2021 , 33, e2008553	24	22
356	Viscoelastic surface electrode arrays to interface with viscoelastic tissues. <i>Nature Nanotechnology</i> , 2021 , 16, 1019-1029	28.7	27
355	Anti-inflammatory nanoparticles significantly improve muscle function in a murine model of advanced muscular dystrophy. <i>Science Advances</i> , 2021 , 7,	14.3	5
354	Obstacles and opportunities in a forward vision for cancer nanomedicine. <i>Nature Materials</i> , 2021 , 20, 1469-1479	27	35
353	Biomaterial vaccines capturing pathogen-associated molecular patterns protect against bacterial infections and septic shock. <i>Nature Biomedical Engineering</i> , 2021 ,	19	5

352	A Novel Three-Dimensional Skin Disease Model to Assess Macrophage Function in Diabetes. <i>Tissue Engineering - Part C: Methods</i> , 2021 , 27, 49-58	2.9	6
351	A novel two-component, expandable bioadhesive for exposed defect coverage: Applicability to prenatal procedures. <i>Journal of Pediatric Surgery</i> , 2021 , 56, 165-169	2.6	4
350	Active biomaterials for mechanobiology. <i>Biomaterials</i> , 2021 , 267, 120497	15.6	28
349	Generation of the Compression-induced Dedifferentiated Adipocytes (CiDAs) Using Hypertonic Medium. <i>Bio-protocol</i> , 2021 , 11, e3920	0.9	1
348	Risk quantification for SARS-CoV-2 infection through airborne transmission in university settings. <i>Journal of Occupational and Environmental Hygiene</i> , 2021 , 1-14	2.9	1
347	Polymeric Tissue Adhesives. <i>Chemical Reviews</i> , 2021 , 121, 11336-11384	68.1	71
346	Steroid-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	6.3	3
345	Metabolic labeling and targeted modulation of dendritic cells. <i>Nature Materials</i> , 2020 , 19, 1244-1252	27	41
344	Extracellular matrix mechanics regulate transfection and SOX9-directed differentiation of mesenchymal stem cells. <i>Acta Biomaterialia</i> , 2020 , 110, 153-163	10.8	14
343	Tuning cytokines enriches dendritic cells and regulatory T cells in the periodontium. <i>Journal of Periodontology</i> , 2020 , 91, 1475-1485	4.6	4
342	Biomaterials functionalized with MSC secreted extracellular vesicles and soluble factors for tissue regeneration. <i>Advanced Functional Materials</i> , 2020 , 30, 1909125	15.6	78
341	Alginate Hydrogels for Bone Regeneration: The Immune Competence of the Animal Model Matters. <i>Tissue Engineering - Part A</i> , 2020 , 26, 852-862	3.9	14
340	Regenerating Antithrombotic Surfaces through Nucleic Acid Displacement. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 2159-2166	5.5	2
339	Filmed over with CAR-T cells. <i>Nature Biomedical Engineering</i> , 2020 , 4, 142-143	19	2
338	Activation and expansion of human T cells using artificial antigen-presenting cell scaffolds. <i>Nature Protocols</i> , 2020 , 15, 773-798	18.8	24
337	Compression-induced dedifferentiation of adipocytes promotes tumor progression. <i>Science Advances</i> , 2020 , 6, eaax5611	14.3	24
336	A biomaterial-based vaccine eliciting durable tumour-specific responses against acute myeloid leukaemia. <i>Nature Biomedical Engineering</i> , 2020 , 4, 40-51	19	46
335	Soft extracellular matrix enhances inflammatory activation of mesenchymal stromal cells to induce monocyte production and trafficking. <i>Science Advances</i> , 2020 , 6, eaaw0158	14.3	32

334	A nanoparticle ³ pathway into tumours. <i>Nature Materials</i> , 2020 , 19, 486-487	27	59
333	Near-Infrared Fluorescence Hydrogen Peroxide Assay for Versatile Metabolite Biosensing in Whole Blood. <i>Small</i> , 2020 , 16, e2000369	11	6
332	Clickable, acid labile immunosuppressive prodrugs for in vivo targeting. <i>Biomaterials Science</i> , 2020 , 8, 266-277	7.4	11
331	Niche-mimicking interactions in peptide-functionalized 3D hydrogels amplify mesenchymal stromal cell paracrine effects. <i>Biomaterials</i> , 2020 , 230, 119639	15.6	21
330	Engineered tissues and strategies to overcome challenges in drug development. <i>Advanced Drug Delivery Reviews</i> , 2020 , 158, 116-139	18.5	6
329	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	11.5	27
328	Single-Shot Mesoporous Silica Rods Scaffold for Induction of Humoral Responses Against Small Antigens. <i>Advanced Functional Materials</i> , 2020 , 30, 2002448	15.6	17
327	Metabolic glycan labelling for cancer-targeted therapy. <i>Nature Chemistry</i> , 2020 , 12, 1102-1114	17.6	34
326	Biomaterial-based scaffold for in situ chemo-immunotherapy to treat poorly immunogenic tumors. <i>Nature Communications</i> , 2020 , 11, 5696	17.4	32
325	Dual alginate crosslinking for local patterning of biophysical and biochemical properties. <i>Acta Biomaterialia</i> , 2020 , 115, 185-196	10.8	7
324	Multifunctional biomimetic hydrogel systems to boost the immunomodulatory potential of mesenchymal stromal cells. <i>Biomaterials</i> , 2020 , 257, 120266	15.6	21
323	Cell and tissue engineering in lymph nodes for cancer immunotherapy. <i>Advanced Drug Delivery Reviews</i> , 2020 , 161-162, 42-62	18.5	22
322	Biomaterials as Local Niches for Immunomodulation. <i>Accounts of Chemical Research</i> , 2020 , 53, 1749-1760	24.3	25
321	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	7.4	3
320	Effects of extracellular matrix viscoelasticity on cellular behaviour. <i>Nature</i> , 2020 , 584, 535-546	50.4	362
319	Topical Application of a Mast Cell Stabilizer Improves Impaired Diabetic Wound Healing. <i>Journal of Investigative Dermatology</i> , 2020 , 140, 901-911.e11	4.3	25
318	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	4.8	20
317	Enzymatically-degradable alginate hydrogels promote cell spreading and in vivo tissue infiltration. <i>Biomaterials</i> , 2019 , 217, 119294	15.6	53

316	Acetalated Dextran Nanoparticles Loaded into an Injectable Alginate Cryogel for Combined Chemotherapy and Cancer Vaccination. <i>Advanced Functional Materials</i> , 2019 , 29, 1903686	15.6	26
315	Combined delivery of VEGF and IGF-1 promotes functional innervation in mice and improves muscle transplantation in rabbits. <i>Biomaterials</i> , 2019 , 216, 119246	15.6	27
314	Design Molecular Topology for Wet-Dry Adhesion. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 24802-24814	9.5	14
313	Multi-flow channel bioreactor enables real-time monitoring of cellular dynamics in 3D engineered tissue. <i>Communications Biology</i> , 2019 , 2, 158	6.7	7
312	Macroscale biomaterials strategies for local immunomodulation. <i>Nature Reviews Materials</i> , 2019 , 4, 379-393	7.3	102
311	Biomaterials to Mimic and Heal Connective Tissues. <i>Advanced Materials</i> , 2019 , 31, e1806695	24	79
310	Modular soft robotic microdevices for dexterous biomanipulation. <i>Lab on A Chip</i> , 2019 , 19, 778-788	7.2	16
309	An injectable bone marrow-like scaffold enhances T cell immunity after hematopoietic stem cell transplantation. <i>Nature Biotechnology</i> , 2019 , 37, 293-302	44.5	62
308	Differentiation of diabetic foot ulcer-derived induced pluripotent stem cells reveals distinct cellular and tissue phenotypes. <i>FASEB Journal</i> , 2019 , 33, 1262-1277	0.9	17
307	Treating ischemia via recruitment of antigen-specific T cells. <i>Science Advances</i> , 2019 , 5, eaav6313	14.3	17
306	Programmable microencapsulation for enhanced mesenchymal stem cell persistence and immunomodulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 15392-15397	11.5	73
305	Bioinspired mechanically active adhesive dressings to accelerate wound closure. <i>Science Advances</i> , 2019 , 5, eaaw3963	14.3	189
304	Antibiotic-Containing Agarose Hydrogel for Wound and Burn Care. <i>Journal of Burn Care and Research</i> , 2019 , 40, 900-906	0.8	26
303	Delivery of targeted gene therapies using a hybrid cryogel-coated prosthetic vascular graft. <i>PeerJ</i> , 2019 , 7, e7377	3.1	4
302	Anti-tumor immunity induced by ectopic expression of viral antigens is transient and limited by immune escape. <i>Oncotmunology</i> , 2019 , 8, e1568809	7.2	15
301	Sequential modes of crosslinking tune viscoelasticity of cell-instructive hydrogels. <i>Biomaterials</i> , 2019 , 188, 187-197	15.6	55
300	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 4652-4656	16.4	22
299	A Ligand System for the Flexible Functionalization of Quantum Dots via Click Chemistry. <i>Angewandte Chemie</i> , 2018 , 130, 4742-4746	3.6	7

298	A facile approach to enhance antigen response for personalized cancer vaccination. <i>Nature Materials</i> , 2018 , 17, 528-534	27	215
297	FGF2 Enhances Odontoblast Differentiation by BMA Progenitors In Vivo. <i>Journal of Dental Research</i> , 2018 , 97, 1170-1177	8.1	13
296	Tough Composite Hydrogels with High Loading and Local Release of Biological Drugs. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1701393	10.1	37
295	Improved magnetic regulation of delivery profiles from ferrogels. <i>Biomaterials</i> , 2018 , 161, 179-189	15.6	35
294	Physical Polyurethane Hydrogels via Charge Shielding through Acids or Salts. <i>Macromolecular Rapid Communications</i> , 2018 , 39, e1700711	4.8	3
293	Injectable, Tough Alginate Cryogels as Cancer Vaccines. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1701469	10.1	63
292	Microfluidic Templated Multicompartment Microgels for 3D Encapsulation and Pairing of Single Cells. <i>Small</i> , 2018 , 14, 1702955	11	63
291	Scaffolds that mimic antigen-presenting cells enable ex vivo expansion of primary T cells. <i>Nature Biotechnology</i> , 2018 , 36, 160-169	44.5	173
290	Covalent Conjugation of Peptide Antigen to Mesoporous Silica Rods to Enhance Cellular Responses. <i>Bioconjugate Chemistry</i> , 2018 , 29, 733-741	6.3	16
289	Replenishable drug depot to combat post-resection cancer recurrence. <i>Biomaterials</i> , 2018 , 178, 373-382	15.6	27
288	Matrix stiffness and tumor-associated macrophages modulate epithelial to mesenchymal transition of human adenocarcinoma cells. <i>Biofabrication</i> , 2018 , 10, 035004	10.5	42
287	Flow-Induced Vascular Network Formation and Maturation in Three-Dimensional Engineered Tissue. <i>ACS Biomaterials Science and Engineering</i> , 2018 , 4, 1265-1271	5.5	22
286	RNA-seq reveals diverse effects of substrate stiffness on mesenchymal stem cells. <i>Biomaterials</i> , 2018 , 181, 182-188	15.6	40
285	Hydrolytically-degradable click-crosslinked alginate hydrogels. <i>Biomaterials</i> , 2018 , 181, 189-198	15.6	43
284	Targeting DEC-205DCIR2 dendritic cells promotes immunological tolerance in proteolipid protein-induced experimental autoimmune encephalomyelitis. <i>Molecular Medicine</i> , 2018 , 24, 17	6.2	16
283	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	11.5	67
282	Biomaterial-assisted targeted modulation of immune cells in cancer treatment. <i>Nature Materials</i> , 2018 , 17, 761-772	27	226
281	CD4 T-cells regulate angiogenesis and myogenesis. <i>Biomaterials</i> , 2018 , 178, 109-121	15.6	28

280	Sustained release of targeted cardiac therapy with a replenishable implanted epicardial reservoir. <i>Nature Biomedical Engineering</i> , 2018 , 2, 416-428	19	55
279	Synthetic Light-Curable Polymeric Materials Provide a Supportive Niche for Dental Pulp Stem Cells. <i>Advanced Materials</i> , 2018 , 30, 1704486	24	28
278	Injectable nanocomposite cryogels for versatile protein drug delivery. <i>Acta Biomaterialia</i> , 2018 , 65, 36-43	10.8	90
277	Evaluation of a bioengineered construct for tissue engineering applications. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018 , 106, 2345-2354	3.5	9
276	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	11.5	70
275	Force Control of Textile-Based Soft Wearable Robots for Mechanotherapy 2018 ,		12
274	Towards Alternative Approaches for Coupling of a Soft Robotic Sleeve to the Heart. <i>Annals of Biomedical Engineering</i> , 2018 , 46, 1534-1547	4.7	18
273	Soft robotic sleeve supports heart function. <i>Science Translational Medicine</i> , 2017 , 9,	17.5	191
272	Liposomal Delivery Enhances Immune Activation by STING Agonists for Cancer Immunotherapy. <i>Advanced Biology</i> , 2017 , 1, 1600013	3.5	122
271	Multicomponent Injectable Hydrogels for Antigen-Specific Tolerogenic Immune Modulation. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1600773	10.1	54
270	Single cell-laden protease-sensitive microniches for long-term culture in 3D. <i>Lab on A Chip</i> , 2017 , 17, 727-737	7.2	32
269	In Vivo Enrichment of Diabetogenic T Cells. <i>Diabetes</i> , 2017 , 66, 2220-2229	0.9	19
268	Biomaterials that promote cell-cell interactions enhance the paracrine function of MSCs. <i>Biomaterials</i> , 2017 , 140, 103-114	15.6	137
267	Emerging Trends in Micro- and Nanoscale Technologies in Medicine: From Basic Discoveries to Translation. <i>ACS Nano</i> , 2017 , 11, 5195-5214	16.7	78
266	Substrate Stress-Relaxation Regulates Scaffold Remodeling and Bone Formation In Vivo. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1601185	10.1	68
265	Mechanical confinement regulates cartilage matrix formation by chondrocytes. <i>Nature Materials</i> , 2017 , 16, 1243-1251	27	220
264	Cell volume change through water efflux impacts cell stiffness and stem cell fate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E8618-E8627	11.5	215
263	Hydrogel substrate stress-relaxation regulates the spreading and proliferation of mouse myoblasts. <i>Acta Biomaterialia</i> , 2017 , 62, 82-90	10.8	72

262	In-situ tissue regeneration through SDF-1 α -driven cell recruitment and stiffness-mediated bone regeneration in a critical-sized segmental femoral defect. <i>Acta Biomaterialia</i> , 2017 , 60, 50-63	10.8	47
261	Timed Delivery of Therapy Enhances Functional Muscle Regeneration. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700202	10.1	3
260	Tough adhesives for diverse wet surfaces. <i>Science</i> , 2017 , 357, 378-381	33.3	676
259	Leveraging advances in biology to design biomaterials. <i>Nature Materials</i> , 2017 , 16, 1178-1185	27	70
258	Mechanical forces direct stem cell behaviour in development and regeneration. <i>Nature Reviews Molecular Cell Biology</i> , 2017 , 18, 728-742	48.7	613
257	Biomaterials for skeletal muscle tissue engineering. <i>Current Opinion in Biotechnology</i> , 2017 , 47, 16-22	11.4	106
256	Deterministic encapsulation of single cells in thin tunable microgels for niche modelling and therapeutic delivery. <i>Nature Materials</i> , 2017 , 16, 236-243	27	199
255	Cell Microencapsulation by Droplet Microfluidic Templating. <i>Macromolecular Chemistry and Physics</i> , 2017 , 218, 1600380	2.6	26
254	Injectable Shape-Memorizing Three-Dimensional Hyaluronic Acid Cryogels for Skin Sculpting and Soft Tissue Reconstruction. <i>Tissue Engineering - Part A</i> , 2017 , 23, 243-251	3.9	21
253	Designing hydrogels for controlled drug delivery. <i>Nature Reviews Materials</i> , 2016 , 1,	73.3	1741
252	Adjuvant-Loaded Subcellular Vesicles Derived From Disrupted Cancer Cells for Cancer Vaccination. <i>Small</i> , 2016 , 12, 2321-33	11	37
251	Generation of Induced Pluripotent Stem Cells from Diabetic Foot Ulcer Fibroblasts Using a Nonintegrative Sendai Virus. <i>Cellular Reprogramming</i> , 2016 , 18, 214-23	2.1	20
250	Biologic-free mechanically induced muscle regeneration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1534-9	11.5	110
249	The effect of surface modification of mesoporous silica micro-rod scaffold on immune cell activation and infiltration. <i>Biomaterials</i> , 2016 , 83, 249-56	15.6	65
248	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, 1549-55	7.2	91
247	Biomaterials for enhancing anti-cancer immunity. <i>Current Opinion in Biotechnology</i> , 2016 , 40, 1-8	11.4	94
246	Reprogrammed Stomach Tissue as a Renewable Source of Functional β Cells for Blood Glucose Regulation. <i>Cell Stem Cell</i> , 2016 , 18, 410-21	18	81
245	Morphogenesis of 3D vascular networks is regulated by tensile forces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 3215-20	11.5	55

244	Advances in Therapeutic Cancer Vaccines. <i>Advances in Immunology</i> , 2016 , 130, 191-249	5.6	71
243	Biomaterials and emerging anticancer therapeutics: engineering the microenvironment. <i>Nature Reviews Cancer</i> , 2016 , 16, 56-66	31.3	266
242	Vaccines Combined with Immune Checkpoint Antibodies Promote Cytotoxic T-cell Activity and Tumor Eradication. <i>Cancer Immunology Research</i> , 2016 , 4, 95-100	12.5	103
241	Improving Stem Cell Therapeutics with Mechanobiology. <i>Cell Stem Cell</i> , 2016 , 18, 16-9	18	26
240	Hydrogels with tunable stress relaxation regulate stem cell fate and activity. <i>Nature Materials</i> , 2016 , 15, 326-34	27	1153
239	Sequential release of nanoparticle payloads from ultrasonically burstable capsules. <i>Biomaterials</i> , 2016 , 75, 91-101	15.6	37
238	Label-free bacterial detection using polydiacetylene liposomes. <i>Chemical Communications</i> , 2016 , 52, 10346-9	5.8	34
237	Altered ECM deposition by diabetic foot ulcer-derived fibroblasts implicates fibronectin in chronic wound repair. <i>Wound Repair and Regeneration</i> , 2016 , 24, 630-43	3.6	47
236	Click-Crosslinked Injectable Gelatin Hydrogels. <i>Advanced Healthcare Materials</i> , 2016 , 5, 541-7	10.1	92
235	Hydrogels in Vascular Tissue Engineering 2016 , 385-396		
234	CD44 alternative splicing in gastric cancer cells is regulated by culture dimensionality and matrix stiffness. <i>Biomaterials</i> , 2016 , 98, 152-62	15.6	29
233	Effects of substrate stiffness and cell-cell contact on mesenchymal stem cell differentiation. <i>Biomaterials</i> , 2016 , 98, 184-91	15.6	156
232	Synthetic niche to modulate regenerative potential of MSCs and enhance skeletal muscle regeneration. <i>Biomaterials</i> , 2016 , 99, 95-108	15.6	68
231	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 13470-13474	16.4	71
230	One-Step Microfluidic Fabrication of Polyelectrolyte Microcapsules in Aqueous Conditions for Protein Release. <i>Angewandte Chemie</i> , 2016 , 128, 13668-13672	3.6	26
229	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	11.5	87
228	In vivo targeting through click chemistry. <i>ChemMedChem</i> , 2015 , 10, 617-20	3.7	27
227	Alginate and DNA Gels Are Suitable Delivery Systems for Diabetic Wound Healing. <i>International Journal of Lower Extremity Wounds</i> , 2015 , 14, 146-53	1.6	25

226	Engineered Materials for Cancer Immunotherapy. <i>Nano Today</i> , 2015 , 10, 511-531	17.9	76
225	From Skeletal Development to Tissue Engineering: Lessons from the Micromass Assay. <i>Tissue Engineering - Part B: Reviews</i> , 2015 , 21, 427-37	7.9	12
224	Biomaterials based strategies for skeletal muscle tissue engineering: existing technologies and future trends. <i>Biomaterials</i> , 2015 , 53, 502-21	15.6	270
223	A light-reflecting balloon catheter for atraumatic tissue defect repair. <i>Science Translational Medicine</i> , 2015 , 7, 306ra149	17.5	28
222	On-demand drug delivery from local depots. <i>Journal of Controlled Release</i> , 2015 , 219, 8-17	11.7	101
221	Injectable cryogel-based whole-cell cancer vaccines. <i>Nature Communications</i> , 2015 , 6, 7556	17.4	237
220	Engineered composite fascia for stem cell therapy in tissue repair applications. <i>Acta Biomaterialia</i> , 2015 , 26, 1-12	10.8	21
219	Matrix elasticity of void-forming hydrogels controls transplanted-stem-cell-mediated bone formation. <i>Nature Materials</i> , 2015 , 14, 1269-77	27	302
218	Regenerative medicine: Current therapies and future directions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 14452-9	11.5	464
217	Manipulating the intersection of angiogenesis and inflammation. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 628-40	4.7	24
216	Injectable, spontaneously assembling, inorganic scaffolds modulate immune cells in vivo and increase vaccine efficacy. <i>Nature Biotechnology</i> , 2015 , 33, 64-72	44.5	340
215	The CLEC-2-podoplanin axis controls the contractility of fibroblastic reticular cells and lymph node microarchitecture. <i>Nature Immunology</i> , 2015 , 16, 75-84	19.1	173
214	Biomaterial-based delivery for skeletal muscle repair. <i>Advanced Drug Delivery Reviews</i> , 2015 , 84, 188-97	18.5	84
213	Vasculogenic dynamics in 3D engineered tissue constructs. <i>Scientific Reports</i> , 2015 , 5, 17840	4.9	42
212	Switchable Release of Entrapped Nanoparticles from Alginate Hydrogels. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1634-1639	10.1	40
211	Microfluidic Generation of Monodisperse, Structurally Homogeneous Alginate Microgels for Cell Encapsulation and 3D Cell Culture. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1628-33	10.1	208
210	Injectable, Pore-Forming Hydrogels for In Vivo Enrichment of Immature Dendritic Cells. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2677-87	10.1	61
209	3D Printed Microtransporters: Compound Micromachines for Spatiotemporally Controlled Delivery of Therapeutic Agents. <i>Advanced Materials</i> , 2015 , 27, 6644-50	24	148

208	The collagen I mimetic peptide DGEA enhances an osteogenic phenotype in mesenchymal stem cells when presented from cell-encapsulating hydrogels. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 3516-25	5.4	30
207	Substance P promotes wound healing in diabetes by modulating inflammation and macrophage phenotype. <i>American Journal of Pathology</i> , 2015 , 185, 1638-48	5.8	121
206	Substrate stress relaxation regulates cell spreading. <i>Nature Communications</i> , 2015 , 6, 6364	17.4	485
205	Versatile click alginate hydrogels crosslinked via tetrazine-norbornene chemistry. <i>Biomaterials</i> , 2015 , 50, 30-7	15.6	185
204	The effect of growth-mimicking continuous strain on the early stages of skeletal development in micromass culture. <i>PLoS ONE</i> , 2015 , 10, e0124948	3.7	6
203	Minimally invasive approach to the repair of injured skeletal muscle with a shape-memory scaffold. <i>Molecular Therapy</i> , 2014 , 22, 1441-1449	11.7	70
202	An integrated microrobotic platform for on-demand, targeted therapeutic interventions. <i>Advanced Materials</i> , 2014 , 26, 952-7	24	200
201	A bioinspired soft actuated material. <i>Advanced Materials</i> , 2014 , 26, 1200-6	24	158
200	Ultrasound-triggered disruption and self-healing of reversibly cross-linked hydrogels for drug delivery and enhanced chemotherapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 9762-7	11.5	282
199	Influence of the stiffness of three-dimensional alginate/collagen-I interpenetrating networks on fibroblast biology. <i>Biomaterials</i> , 2014 , 35, 8927-36	15.6	184
198	The Young Innovators of Cellular and Molecular Bioengineering. <i>Cellular and Molecular Bioengineering</i> , 2014 , 7, 291-292	3.9	
197	Biphasic ferrogels for triggered drug and cell delivery. <i>Advanced Healthcare Materials</i> , 2014 , 3, 1869-76	10.1	105
196	Identification of immune factors regulating antitumor immunity using polymeric vaccines with multiple adjuvants. <i>Cancer Research</i> , 2014 , 74, 1670-81	10.1	82
195	Effect of pore structure of macroporous poly(lactide-co-glycolide) scaffolds on the in vivo enrichment of dendritic cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 8505-12	9.5	33
194	Refilling drug delivery depots through the blood. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 12722-7	11.5	70
193	Multi-lineage MSC differentiation via engineered morphogen fields. <i>Journal of Dental Research</i> , 2014 , 93, 1250-7	8.1	17
192	Bone regeneration via novel macroporous CPC scaffolds in critical-sized cranial defects in rats. <i>Dental Materials</i> , 2014 , 30, e199-207	5.7	40
191	Extracellular matrix stiffness and composition jointly regulate the induction of malignant phenotypes in mammary epithelium. <i>Nature Materials</i> , 2014 , 13, 970-8	27	515

190	Comparison of biomaterial delivery vehicles for improving acute retention of stem cells in the infarcted heart. <i>Biomaterials</i> , 2014 , 35, 6850-6858	15.6	119
189	Changing the mindset in life sciences toward translation: a consensus. <i>Science Translational Medicine</i> , 2014 , 6, 264cm12	17.5	31
188	Sustained delivery of VEGF maintains innervation and promotes reperfusion in ischemic skeletal muscles via NGF/GDNF signaling. <i>Molecular Therapy</i> , 2014 , 22, 1243-1253	11.7	65
187	Self-folding mobile microrobots for biomedical applications 2014 ,		9
186	Targeted Delivery: An Integrated Microrobotic Platform for On-Demand, Targeted Therapeutic Interventions (Adv. Mater. 6/2014). <i>Advanced Materials</i> , 2014 , 26, 951-951	24	2
185	Photoactivation of endogenous latent transforming growth factor- β directs dental stem cell differentiation for regeneration. <i>Science Translational Medicine</i> , 2014 , 6, 238ra69	17.5	156
184	Rapid and extensive collapse from electrically responsive macroporous hydrogels. <i>Advanced Healthcare Materials</i> , 2014 , 3, 500-7	10.1	32
183	Injectable, porous, and cell-responsive gelatin cryogels. <i>Biomaterials</i> , 2014 , 35, 2477-87	15.6	205
182	In vivo time-gated fluorescence imaging with biodegradable luminescent porous silicon nanoparticles. <i>Nature Communications</i> , 2013 , 4, 2326	17.4	249
181	Ca(2+) released from calcium alginate gels can promote inflammatory responses in vitro and in vivo. <i>Acta Biomaterialia</i> , 2013 , 9, 9281-91	10.8	58
180	Performance and biocompatibility of extremely tough alginate/polyacrylamide hydrogels. <i>Biomaterials</i> , 2013 , 34, 8042-8	15.6	213
179	Macroscale delivery systems for molecular and cellular payloads. <i>Nature Materials</i> , 2013 , 12, 1004-17	27	217
178	Inflammatory cytokines presented from polymer matrices differentially generate and activate DCs. <i>Advanced Functional Materials</i> , 2013 , 23, 4621-4628	15.6	51
177	Enhancing microvascular formation and vessel maturation through temporal control over multiple pro-angiogenic and pro-maturation factors. <i>Biomaterials</i> , 2013 , 34, 9201-9	15.6	143
176	Materials based tumor immunotherapy vaccines. <i>Current Opinion in Immunology</i> , 2013 , 25, 238-45	7.8	49
175	Fibroblasts derived from human pluripotent stem cells activate angiogenic responses in vitro and in vivo. <i>PLoS ONE</i> , 2013 , 8, e83755	3.7	18
174	Alginate: properties and biomedical applications. <i>Progress in Polymer Science</i> , 2012 , 37, 106-126	29.6	4151
173	Injectable preformed scaffolds with shape-memory properties. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 19590-5	11.5	322

172	Highly stretchable and tough hydrogels. <i>Nature</i> , 2012 , 489, 133-6	50.4	3109
171	Design and fabrication of a biodegradable, covalently crosslinked shape-memory alginate scaffold for cell and growth factor delivery. <i>Tissue Engineering - Part A</i> , 2012 , 18, 2000-7	3.9	87
170	Surface modification with alginate-derived polymers for stable, protein-repellent, long-circulating gold nanoparticles. <i>ACS Nano</i> , 2012 , 6, 4796-805	16.7	48
169	Biomaterial delivery of morphogens to mimic the natural healing cascade in bone. <i>Advanced Drug Delivery Reviews</i> , 2012 , 64, 1257-76	18.5	184
168	Transcriptional profiling of stroma from inflamed and resting lymph nodes defines immunological hallmarks. <i>Nature Immunology</i> , 2012 , 13, 499-510	19.1	317
167	Chemotaxis of Mesenchymal Stem Cells in a Microfluidic Device. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1498, 67-72		
166	Growth factor delivery-based tissue engineering: general approaches and a review of recent developments. <i>Journal of the Royal Society Interface</i> , 2011 , 8, 153-70	4.1	996
165	Spatiotemporal delivery of bone morphogenetic protein enhances functional repair of segmental bone defects. <i>Bone</i> , 2011 , 49, 485-92	4.7	116
164	The efficacy of intracranial PLG-based vaccines is dependent on direct implantation into brain tissue. <i>Journal of Controlled Release</i> , 2011 , 154, 249-57	11.7	16
163	The role of multifunctional delivery scaffold in the ability of cultured myoblasts to promote muscle regeneration. <i>Biomaterials</i> , 2011 , 32, 8905-14	15.6	110
162	Targeted delivery of nanoparticles to ischemic muscle for imaging and therapeutic angiogenesis. <i>Nano Letters</i> , 2011 , 11, 694-700	11.5	113
161	Biomaterial-based vaccine induces regression of established intracranial glioma in rats. <i>Pharmaceutical Research</i> , 2011 , 28, 1074-80	4.5	31
160	Bioimaging: Metal-Enhanced Fluorescence to Quantify Bacterial Adhesion (Adv. Mater. 12/2011). <i>Advanced Materials</i> , 2011 , 23, H126-H126	24	
159	Immunologically active biomaterials for cancer therapy. <i>Current Topics in Microbiology and Immunology</i> , 2011 , 344, 279-97	3.3	10
158	An alginate-based hybrid system for growth factor delivery in the functional repair of large bone defects. <i>Biomaterials</i> , 2011 , 32, 65-74	15.6	397
157	Active scaffolds for on-demand drug and cell delivery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 67-72	11.5	505
156	Harnessing traction-mediated manipulation of the cell/matrix interface to control stem-cell fate. <i>Nature Materials</i> , 2010 , 9, 518-26	27	1126
155	Mimicking nature by codelivery of stimulant and inhibitor to create temporally stable and spatially restricted angiogenic zones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 17933-8	11.5	54

154	Functional muscle regeneration with combined delivery of angiogenesis and myogenesis factors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 3287-92	11.5	321
153	Stress-relaxation behavior in gels with ionic and covalent crosslinks. <i>Journal of Applied Physics</i> , 2010 , 107, 63509	2.5	230
152	Patterning alginate hydrogels using light-directed release of caged calcium in a microfluidic device. <i>Biomedical Microdevices</i> , 2010 , 12, 145-51	3.7	64
151	In situ regulation of DC subsets and T cells mediates tumor regression in mice. <i>Science Translational Medicine</i> , 2009 , 1, 8ra19	17.5	184
150	Controlled growth factor delivery for tissue engineering. <i>Advanced Materials</i> , 2009 , 21, 3269-85	24	320
149	Shear-reversibly crosslinked alginate hydrogels for tissue engineering. <i>Macromolecular Bioscience</i> , 2009 , 9, 895-901	5.5	87
148	Inspiration and application in the evolution of biomaterials. <i>Nature</i> , 2009 , 462, 426-32	50.4	605
147	Infection-mimicking materials to program dendritic cells in situ. <i>Nature Materials</i> , 2009 , 8, 151-8	27	327
146	Cancer cell angiogenic capability is regulated by 3D culture and integrin engagement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 399-404	11.5	253
145	Sustained GM-CSF and PEI condensed pDNA presentation increases the level and duration of gene expression in dendritic cells. <i>Journal of Controlled Release</i> , 2008 , 132, 273-8	11.7	29
144	Cell delivery mechanisms for tissue repair. <i>Cell Stem Cell</i> , 2008 , 2, 205-13	18	280
143	Material-based deployment enhances efficacy of endothelial progenitor cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 14347-52	11.5	180
142	Converging Cell Therapy with Biomaterials 2007 , 591-609		2
141	Breast Reconstruction 2007 , 519-534		
140	Regenerative medicine in orthopaedic surgery. <i>Journal of Orthopaedic Research</i> , 2007 , 25, 1261-8	3.8	27
139	Polymers for pro- and anti-angiogenic therapy. <i>Biomaterials</i> , 2007 , 28, 2069-76	15.6	78
138	Upregulation of bone cell differentiation through immobilization within a synthetic extracellular matrix. <i>Biomaterials</i> , 2007 , 28, 3644-55	15.6	128
137	Engineering tumors with 3D scaffolds. <i>Nature Methods</i> , 2007 , 4, 855-60	21.6	681

136	Spatiotemporal control of vascular endothelial growth factor delivery from injectable hydrogels enhances angiogenesis. <i>Journal of Thrombosis and Haemostasis</i> , 2007 , 5, 590-8	15.4	268
135	Spatiotemporal control over growth factor signaling for therapeutic neovascularization. <i>Advanced Drug Delivery Reviews</i> , 2007 , 59, 1340-50	18.5	100
134	Host immune competence and local ischemia affects the functionality of engineered vasculature. <i>Microcirculation</i> , 2007 , 14, 77-88	2.9	18
133	RGD Island Spacing Controls Phenotype of Primary Human Fibroblasts Adhered to Ligand-Organized Hydrogels. <i>Macromolecular Research</i> , 2007 , 15, 469-472	1.9	12
132	Spatio-temporal VEGF and PDGF delivery patterns blood vessel formation and maturation. <i>Pharmaceutical Research</i> , 2007 , 24, 258-64	4.5	319
131	Fluorescent resonance energy transfer: A tool for probing molecular cell-biomaterial interactions in three dimensions. <i>Biomaterials</i> , 2007 , 28, 2424-37	15.6	73
130	Angiogenic effects of sequential release of VEGF-A165 and PDGF-BB with alginate hydrogels after myocardial infarction. <i>Cardiovascular Research</i> , 2007 , 75, 178-85	9.9	294
129	Regulating myoblast phenotype through controlled gel stiffness and degradation. <i>Tissue Engineering</i> , 2007 , 13, 1431-42		174
128	Alginate hydrogels as biomaterials. <i>Macromolecular Bioscience</i> , 2006 , 6, 623-33	5.5	1282
127	Cell instructive polymers. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2006 , 102, 113-37	1.7	14
126	Gas Foaming to Fabricate Polymer Scaffolds in Tissue Engineering 2005 , 155-167		2
125	Controlling alginate gel degradation utilizing partial oxidation and bimodal molecular weight distribution. <i>Biomaterials</i> , 2005 , 26, 2455-65	15.6	488
124	Actively regulating bioengineered tissue and organ formation. <i>Orthodontics and Craniofacial Research</i> , 2005 , 8, 141-4	3	9
123	Sustained vascular endothelial growth factor delivery enhances angiogenesis and perfusion in ischemic hind limb. <i>Pharmaceutical Research</i> , 2005 , 22, 1110-6	4.5	108
122	Cellular cross-linking of peptide modified hydrogels. <i>Journal of Biomechanical Engineering</i> , 2005 , 127, 220-8	2.1	47
121	Modified Alginates for Tissue Engineering 2005 , 301-315		
120	Controlling Fracture Behavior of Polymeric Hydrogels. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 844, 1		
119	Nanoscale RGD Peptide Organization Regulates Cell Proliferation and Differentiation. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 845, 59		

118	Peptide and Protein Presenting Materials for Tissue Engineering. <i>Advanced Materials</i> , 2004 , 16, 17-25	24	107
117	Controlling Degradation of Hydrogels via the Size of Cross-Linked Junctions. <i>Advanced Materials</i> , 2004 , 16, 1917-1921	24	95
116	Controlled degradation of hydrogels using multi-functional cross-linking molecules. <i>Biomaterials</i> , 2004 , 25, 2461-6	15.6	134
115	The tensile properties of alginate hydrogels. <i>Biomaterials</i> , 2004 , 25, 3187-99	15.6	398
114	Nanoscale Adhesion Ligand Organization Regulates Osteoblast Proliferation and Differentiation. <i>Nano Letters</i> , 2004 , 4, 1501-1506	11.5	154
113	Shape retaining injectable hydrogels for minimally invasive bulking. <i>Journal of Urology</i> , 2004 , 172, 763-8	2.5	43
112	Biomaterials for Cell Immobilization. <i>Focus on Biotechnology</i> , 2004 , 15-32		6
111	Synthetic extracellular matrices for tissue engineering and regeneration. <i>Current Topics in Developmental Biology</i> , 2004 , 64, 181-205	5.3	62
110	Dual growth factor delivery and controlled scaffold degradation enhance in vivo bone formation by transplanted bone marrow stromal cells. <i>Bone</i> , 2004 , 35, 562-9	4.7	341
109	Controlling rigidity and degradation of alginate hydrogels via molecular weight distribution. <i>Biomacromolecules</i> , 2004 , 5, 1720-7	6.9	271
108	Shape-defining scaffolds for minimally invasive tissue engineering. <i>Transplantation</i> , 2004 , 77, 1798-803	1.8	74
107	Polysaccharide-Based Hydrogels in Tissue Engineering 2004 ,		1
106	Regulation of Cellular Response to Mechanical Signals by Matrix Design 2003 , 291-304		1
105	Controlled Growth Factor Delivery for Tissue Engineering. <i>ACS Symposium Series</i> , 2003 , 73-83	0.4	6
104	Protein-based signaling systems in tissue engineering. <i>Current Opinion in Biotechnology</i> , 2003 , 14, 559-65	1.4	151
103	Comparison of vascular endothelial growth factor and basic fibroblast growth factor on angiogenesis in SCID mice. <i>Journal of Controlled Release</i> , 2003 , 87, 49-56	11.7	143
102	Hydrogel Formation via Cell Crosslinking. <i>Advanced Materials</i> , 2003 , 15, 1828-1832	24	102
101	Designing alginate hydrogels to maintain viability of immobilized cells. <i>Biomaterials</i> , 2003 , 24, 4023-9	15.6	275

100	Hydrogels for tissue engineering: scaffold design variables and applications. <i>Biomaterials</i> , 2003 , 24, 4337-4351	5.6	3830
99	Cyclic strain enhances matrix mineralization by adult human mesenchymal stem cells via the extracellular signal-regulated kinase (ERK1/2) signaling pathway. <i>Journal of Biomechanics</i> , 2003 , 36, 1087-96	2.9	238
98	Nondestructively Probing the Cross-Linking Density of Polymeric Hydrogels. <i>Macromolecules</i> , 2003 , 36, 7887-7890	5.5	13
97	Regulating bone formation via controlled scaffold degradation. <i>Journal of Dental Research</i> , 2003 , 82, 903-8	8.1	279
96	Independent Control of Rigidity and Toughness of Polymeric Hydrogels. <i>Macromolecules</i> , 2003 , 36, 4582-4588	5.5	172
95	Cyclic strain inhibits switching of smooth muscle cells to an osteoblast-like phenotype. <i>FASEB Journal</i> , 2003 , 17, 455-7	0.9	52
94	Biomaterials to Spatially Regulate Cell Fate. <i>Advanced Materials</i> , 2002 , 14, 886	24	43
93	Engineering vascular networks in porous polymer matrices. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 60, 668-78		180
92	Alginate type and RGD density control myoblast phenotype. <i>Journal of Biomedical Materials Research Part B</i> , 2002 , 60, 217-23		321
91	Decoupling the dependence of rheological/mechanical properties of hydrogels from solids concentration. <i>Polymer</i> , 2002 , 43, 6239-6246	3.9	126
90	Engineering growing tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 12025-30	11.5	334
89	Evaluation of chain stiffness of partially oxidized polyguluronate. <i>Biomacromolecules</i> , 2002 , 3, 1129-34	6.9	53
88	Synthesis of Hydrogels 2002 , 653-662		5
87	Alginate type and RGD density control myoblast phenotype 2002 , 60, 217		7
86	Craniofacial tissue engineering. <i>Critical Reviews in Oral Biology and Medicine</i> , 2001 , 12, 64-75		148
85	Cell-interactive polymers for tissue engineering. <i>Fibers and Polymers</i> , 2001 , 2, 51-57	2	14
84	Hydrogels for combination delivery of antineoplastic agents. <i>Biomaterials</i> , 2001 , 22, 2625-33	15.6	140
83	Injection molding of chondrocyte/alginate constructs in the shape of facial implants. <i>Journal of Biomedical Materials Research Part B</i> , 2001 , 55, 503-11		229

82	Degradable and injectable poly(aldehyde guluronate) hydrogels for bone tissue engineering. <i>Journal of Biomedical Materials Research Part B</i> , 2001 , 56, 228-33		136
81	Controlled Drug Delivery from Polymers by Mechanical Signals. <i>Advanced Materials</i> , 2001 , 13, 837-839	24	84
80	Polymeric system for dual growth factor delivery. <i>Nature Biotechnology</i> , 2001 , 19, 1029-34	44.5	1505
79	Degradation of partially oxidized alginate and its potential application for tissue engineering. <i>Biotechnology Progress</i> , 2001 , 17, 945-50	2.8	478
78	Promoting angiogenesis in engineered tissues. <i>Journal of Drug Targeting</i> , 2001 , 9, 397-406	5.4	53
77	Using HSV-thymidine kinase for safety in an allogeneic salivary graft cell line. <i>Tissue Engineering</i> , 2001 , 7, 405-13		13
76	Hydrogels for tissue engineering. <i>Chemical Reviews</i> , 2001 , 101, 1869-79	68.1	4050
75	Controlled Growth Factor Delivery By Mechanical Stimulation. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 711, 1		
74	Growth of continuous bonelike mineral within porous poly(lactide-co-glycolide) scaffolds in vitro. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 50, 50-8		229
73	Comparative study of seeding methods for three-dimensional polymeric scaffolds. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 51, 642-9		100
72	Comparative study of seeding methods for three-dimensional polymeric scaffolds. <i>Journal of Biomedical Materials Research Part B</i> , 2000 , 52, 576		31
71	Sustained and controlled release of daunomycin from cross-linked poly(aldehyde guluronate) hydrogels. <i>Journal of Pharmaceutical Sciences</i> , 2000 , 89, 910-9	3.9	61
70	Porous carriers for biomedical applications based on alginate hydrogels. <i>Biomaterials</i> , 2000 , 21, 1921-7	15.6	281
69	Smooth muscle cell adhesion to tissue engineering scaffolds. <i>Biomaterials</i> , 2000 , 21, 2025-32	15.6	118
68	Sustained release of vascular endothelial growth factor from mineralized poly(lactide-co-glycolide) scaffolds for tissue engineering. <i>Biomaterials</i> , 2000 , 21, 2521-7	15.6	359
67	Controlled growth factor release from synthetic extracellular matrices. <i>Nature</i> , 2000 , 408, 998-1000	50.4	415
66	Delivering DNA with polymer matrices: applications in tissue engineering and gene therapy. <i>Pharmaceutical Science & Technology Today</i> , 2000 , 3, 381-384		19
65	Bioabsorbable polymer scaffolds for tissue engineering capable of sustained growth factor delivery. <i>Journal of Controlled Release</i> , 2000 , 64, 91-102	11.7	431

64	Growth Factor Delivery from Tissue Engineering Matrices: Inducing Angiogenesis to Enhance Transplanted Cell Engraftment. <i>ACS Symposium Series</i> , 2000 , 157-166	0.4	2
63	Dynamic seeding and in vitro culture of hepatocytes in a flow perfusion system. <i>Tissue Engineering</i> , 2000 , 6, 39-44		122
62	Scaffolds for engineering smooth muscle under cyclic mechanical strain conditions. <i>Journal of Biomechanical Engineering</i> , 2000 , 122, 210-5	2.1	137
61	Biomaterials in Liver Tissue Engineering 2000 , 1, 65-73		1
60	Engineered bone development from a pre-osteoblast cell line on three-dimensional scaffolds. <i>Tissue Engineering</i> , 2000 , 6, 605-17		193
59	Controlling Mechanical and Swelling Properties of Alginate Hydrogels Independently by Cross-Linker Type and Cross-Linking Density. <i>Macromolecules</i> , 2000 , 33, 4291-4294	5.5	359
58	The impact of tissue engineering on dentistry. <i>Journal of the American Dental Association</i> , 2000 , 131, 309-18	1.9	48
57	Degradation Behavior of Covalently Cross-Linked Poly(aldehyde guluronate) Hydrogels. <i>Macromolecules</i> , 2000 , 33, 97-101	5.5	179
56	BREAST RECONSTRUCTION 2000 , 409-423		11
55	GENITOURINARY SYSTEM 2000 , 655-667		2
54	Growth of continuous bonelike mineral within porous poly(lactide-co-glycolide) scaffolds in vitro 2000 , 50, 50		2
53	Growth of continuous bonelike mineral within porous poly(lactide-co-glycolide) scaffolds in vitro 2000 , 50, 50		13
52	Synthesis of cross-linked poly(aldehyde guluronate) hydrogels. <i>Polymer</i> , 1999 , 40, 3575-3584	3.9	198
51	Alginate hydrogels as synthetic extracellular matrix materials. <i>Biomaterials</i> , 1999 , 20, 45-53	15.6	1800
50	Cyclic mechanical strain regulates the development of engineered smooth muscle tissue. <i>Nature Biotechnology</i> , 1999 , 17, 979-83	44.5	379
49	Re-engineering the functions of a terminally differentiated epithelial cell in vivo. <i>Annals of the New York Academy of Sciences</i> , 1999 , 875, 294-300	6.5	47
48	Controlled delivery of inductive proteins, plasmid DNA and cells from tissue engineering matrices. <i>Journal of Periodontal Research</i> , 1999 , 34, 413-9	4.3	105
47	DNA delivery from polymer matrices for tissue engineering. <i>Nature Biotechnology</i> , 1999 , 17, 551-4	44.5	600

46	Growing new organs. <i>Scientific American</i> , 1999 , 280, 60-5	0.5	289
45	Parameters affecting cellular adhesion to polylactide films. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1999 , 10, 147-61	3.5	46
44	Rigidity of Two-Component Hydrogels Prepared from Alginate and Poly(ethylene glycol) Diamines. <i>Macromolecules</i> , 1999 , 32, 5561-5566	5.5	195
43	Vascular endothelial growth factor (VEGF)-mediated angiogenesis is associated with enhanced endothelial cell survival and induction of Bcl-2 expression. <i>American Journal of Pathology</i> , 1999 , 154, 375-84	5.8	544
42	Engineered smooth muscle tissues: regulating cell phenotype with the scaffold. <i>Experimental Cell Research</i> , 1999 , 251, 318-28	4.2	173
41	Development of technologies aiding large-tissue engineering. <i>Biotechnology Progress</i> , 1998 , 14, 134-40	2.8	86
40	In vitro and in vivo models for the reconstruction of intercellular signaling. <i>Annals of the New York Academy of Sciences</i> , 1998 , 842, 188-94	6.5	23
39	Development of biocompatible synthetic extracellular matrices for tissue engineering. <i>Trends in Biotechnology</i> , 1998 , 16, 224-30	15.1	751
38	Optimizing seeding and culture methods to engineer smooth muscle tissue on biodegradable polymer matrices 1998 , 57, 46-54		206
37	Engineering smooth muscle tissue with a predefined structure. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 41, 322-32		171
36	Cellular ingrowth and thickness changes in poly-L-lactide and polyglycolide matrices implanted subcutaneously in the rat. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 41, 412-21		50
35	Open pore biodegradable matrices formed with gas foaming. <i>Journal of Biomedical Materials Research Part B</i> , 1998 , 42, 396-402		626
34	Release from alginate enhances the biological activity of vascular endothelial growth factor. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998 , 9, 1267-78	3.5	159
33	Role of synthetic extracellular matrix in development of engineered dental pulp. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998 , 9, 749-64	3.5	94
32	PEG Cross-Linked Alginate Hydrogels with Controlled Mechanical Properties. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 530, 37		3
31	Biodegradable Polymer Matrices in Dental Tissue Engineering 1998 , 443-459		
30	Optimizing seeding and culture methods to engineer smooth muscle tissue on biodegradable polymer matrices 1998 , 57, 46		19
29	Open pore biodegradable matrices formed with gas foaming 1998 , 42, 396		1

28	Open pore biodegradable matrices formed with gas foaming 1998 , 42, 396		37
27	Increased Vascularization and Heterogeneity of Vascular Structures Occurring in Polyglycolide Matrices Containing Aortic Endothelial Cells Implanted in the Rat. <i>Tissue Engineering</i> , 1997 , 3, 149-160		61
26	Long-term engraftment of hepatocytes transplanted on biodegradable polymer sponges. <i>Journal of Biomedical Materials Research Part B</i> , 1997 , 37, 413-20		196
25	Localized delivery of epidermal growth factor improves the survival of transplanted hepatocytes. <i>Biotechnology and Bioengineering</i> , 1996 , 50, 422-9	4.9	80
24	Stabilized polyglycolic acid fibre-based tubes for tissue engineering. <i>Biomaterials</i> , 1996 , 17, 115-24	15.6	317
23	Novel approach to fabricate porous sponges of poly(D,L-lactic-co-glycolic acid) without the use of organic solvents. <i>Biomaterials</i> , 1996 , 17, 1417-22	15.6	911
22	Tissue engineering using synthetic extracellular matrices. <i>Nature Medicine</i> , 1996 , 2, 824-6	50.5	200
21	Engineering dental pulp-like tissue in vitro. <i>Biotechnology Progress</i> , 1996 , 12, 865-8	2.8	111
20	Fabricating tubular devices from polymers of lactic and glycolic Acid for tissue engineering. <i>Tissue Engineering</i> , 1995 , 1, 107-18		74
19	Integrating Cell Transplantation and Controlled Drug Delivery Technologies to Engineer Liver Tissue. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 385, 43		2
18	Integrating cell Transplantation and Controlled Drug Delivery Technologies to Engineer Liver Tissue. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 394, 105		4
17	Biodegradable sponges for hepatocyte transplantation. <i>Journal of Biomedical Materials Research Part B</i> , 1995 , 29, 959-65		158
16	Cytoskeletal filament assembly and the control of cell spreading and function by extracellular matrix. <i>Journal of Cell Science</i> , 1995 , 108 (Pt 6), 2311-20	5.3	57
15	Extracellular matrix controls tubulin monomer levels in hepatocytes by regulating protein turnover. <i>Molecular Biology of the Cell</i> , 1994 , 5, 1281-8	3.5	50
14	Design and fabrication of biodegradable polymer devices to engineer tubular tissues. <i>Cell Transplantation</i> , 1994 , 3, 203-10	4	138
13	The mesentery as a laminated vascular bed for hepatocyte transplantation. <i>Cell Transplantation</i> , 1994 , 3, 273-81	4	49
12	Cartilage Engineered in Predetermined Shapes Employing Cell Transplantation on Synthetic Biodegradable Polymers. <i>Plastic and Reconstructive Surgery</i> , 1994 , 94, 233-237	2.7	172
11	Transplantation of hepatocytes using porous, biodegradable sponges. <i>Transplantation Proceedings</i> , 1994 , 26, 3425-6	1.1	67

10	Tissue engineering using cells and synthetic polymers. <i>Transplantation Reviews</i> , 1993 , 7, 153-162	3.3	32
9	Stabilizing Fiber-Based Cell Delivery Devices by Physically Bonding Adjacent Fibers. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 331, 47		1
8	Switching from differentiation to growth in hepatocytes: control by extracellular matrix. <i>Journal of Cellular Physiology</i> , 1992 , 151, 497-505	7	394
7	Transplantation of enterocytes utilizing polymer-cell constructs to produce a neointestine. <i>Transplantation Proceedings</i> , 1992 , 24, 3009-11	1.1	29
6	Induction of Hepatocyte Differentiation by the Extracellular Matrix and an RGD-Containing Synthetic Peptide. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 252, 199		16
5	Principles of Tissue Engineering and Reconstruction Using Polymer-Cell Constructs. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 252, 345		23
4	Polymeric Systems for Bioinspired Delivery of Angiogenic Molecules 191-221		20
3	Scaffold Vaccines for Generating Robust and Tunable Antibody Responses. <i>Advanced Functional Materials</i> , 2110905	15.6	0
2	Modular biomaterials vaccine technology protects against multiple pathogens and septic shock		1
1	Scaffolds, Polymer: Gas Foaming Tissue Engineering 7036-7044		