Lorenzo Moroni

List of Publications by Year in Descending Order

277 papers	9,310 citations	50 h-index	85 g-index
316 ext. papers	11,331 ext. citations	8.5 avg, IF	6.68 L-index

#	Paper	IF	Citations
277	Development of a device useful to reproducibly produce large quantities of viable and uniform stem cell spheroids with controlled diameters.. *Materials Science and Engineering C*, **2022**, 112685	8.3	1
276	Universal Strategy for Designing Shape Memory Hydrogels **2022**, 4, 701-706		1
275	Static systems to obtain 3D spheroid cell models: a cost analysis comparing the implementation of four types of microwell array inserts. *Biochemical Engineering Journal*, **2022**, 108414	4.2	1
274	Regenerative therapies for tympanic membrane. *Progress in Materials Science*, **2022**, 127, 100942	42.2	0
273	Effect of high content nanohydroxyapatite composite scaffolds prepared via melt extrusion additive manufacturing on the osteogenic differentiation of human mesenchymal stromal cells **2022**, 212833		0
272	Soft, Dynamic Hydrogel Confinement Improves Kidney Organoid Lumen Morphology and Reduces Epithelial-Mesenchymal Transition in Culture.. *Advanced Science*, **2022**, e2200543	13.6	3
271	3D culture platform of human iPSCs-derived nociceptors for peripheral nerve modeling and tissue innervation. *Biofabrication*, **2021**, 14,	10.5	2
270	Neurovascular signals in amyotrophic lateral sclerosis. *Current Opinion in Biotechnology*, **2021**, 74, 75-83	11.4	0
269	Potential of CO-laser processing of quartz for fast prototyping of microfluidic reactors and templates for 3D cell assembly over large scale.. *Materials Today Bio*, **2021**, 12, 100163	9.9	2
268	Shaping and properties of thermoplastic scaffolds in tissue regeneration: The effect of thermal history on polymer crystallization, surface characteristics and cell fate. *Journal of Materials Research*, **2021**, 36, 3914	2.5	0
267	Biomimetic double network hydrogels: Combining dynamic and static crosslinks to enable biofabrication and control cell-matrix interactions. *Journal of Polymer Science*, **2021**, 59, 2832	2.4	2
266	Parallels between the Developing Vascular and Neural Systems: Signaling Pathways and Future Perspectives for Regenerative Medicine. *Advanced Science*, **2021**, 8, e2101837	13.6	2
265	Tuning Hydrogels by Mixing Dynamic Cross-Linkers: Enabling Cell-Instructive Hydrogels and Advanced Bioinks. *Advanced Healthcare Materials*, **2021**, 11, e2101576	10.1	8
264	3D Printed Dual-Porosity Scaffolds: The Combined Effect of Stiffness and Porosity in the Modulation of Macrophage Polarization. *Advanced Healthcare Materials*, **2021**, e2101415	10.1	4
263	Biomimetic Mechanically Strong One-Dimensional Hydroxyapatite/Poly(d,l-lactide) Composite Inducing Formation of Anisotropic Collagen Matrix. *ACS Nano*, **2021**,	16.7	2
262	Control Delivery of Multiple Growth Factors to Actively Steer Differentiation and Extracellular Matrix Protein Production. *Advanced Biology*, **2021**, 5, e2000205		0
261	Fabrication of hybrid scaffolds obtained from combinations of PCL with gelatin or collagen via electrospinning for skeletal muscle tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2021**, 109, 1600-1612	5.4	15

260	Evolution of Metastasis Study Models toward Metastasis-On-A-Chip: The Ultimate Model?. *Small*, **2021**, 17, e2006009	11	2
259	The convergence of high-tech emerging technologies into the next stage of organ-on-a-chips. *Biomaterials and Biosystems*, **2021**, 1, 100012		4
258	Realizing tissue integration with supramolecular hydrogels. *Acta Biomaterialia*, **2021**, 124, 1-14	10.8	7
257	Bioprinting Via a Dual-Gel Bioink Based on Poly(Vinyl Alcohol) and Solubilized Extracellular Matrix towards Cartilage Engineering. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	3
256	3D porous Ti6Al4V-beta-tricalcium phosphate scaffolds directly fabricated by additive manufacturing. *Acta Biomaterialia*, **2021**, 126, 496-510	10.8	7
255	Glycosaminoglycans: From Vascular Physiology to Tissue Engineering Applications. *Frontiers in Chemistry*, **2021**, 9, 680836	5	2
254	Recent Advancements in Regenerative Approaches for Thymus Rejuvenation. *Advanced Science*, **2021**, 8, 2100543	13.6	2
253	Mimicking the Human Tympanic Membrane: The Significance of Scaffold Geometry. *Advanced Healthcare Materials*, **2021**, 10, e2002082	10.1	4
252	Safe-by-design strategies applied to scaffold hybrid manufacturing. *Journal of Physics: Conference Series*, **2021**, 1953, 012009	0.3	1
251	(Macro)Molecular Imprinting of Proteins on PCL Electrospun Scaffolds. *ACS Applied Materials & Interfaces*, **2021**, 13, 29293-29302	9.5	2
250	Electrospinning for drug delivery applications: A review. *Journal of Controlled Release*, **2021**, 334, 463-484	11.7	107
249	Size Effects in Finite Element Modelling of 3D Printed Bone Scaffolds Using Hydroxyapatite PEOT/PBT Composites. *Mathematics*, **2021**, 9, 1746	2.3	1
248	Controllable four axis extrusion-based additive manufacturing system for the fabrication of tubular scaffolds with tailorable mechanical properties. *Materials Science and Engineering C*, **2021**, 119, 111472	8.3	6
247	3D additive manufactured composite scaffolds with antibiotic-loaded lamellar fillers for bone infection prevention and tissue regeneration. *Bioactive Materials*, **2021**, 6, 1073-1082	16.7	18
246	Steering cell behavior through mechanobiology in 3D: A regenerative medicine perspective. *Biomaterials*, **2021**, 268, 120572	15.6	17
245	Tuning Cell Behavior on 3D Scaffolds Fabricated by Atmospheric Plasma-Assisted Additive Manufacturing. *ACS Applied Materials & Interfaces*, **2021**, 13, 3631-3644	9.5	7
244	Effect of the reduced graphene oxide (rGO) compaction degree and concentration on rGO-polymer composite printability and cell interactions. *Nanoscale*, **2021**, 13, 14382-14398	7.7	0
243	Ultrahigh-water-content biocompatible gelatin-based hydrogels: Toughened through micro-sized dissipative morphology as an effective strategy. *Materials Science and Engineering C*, **2021**, 120, 111750	8.3	4

242	A hybrid additive manufacturing platform to create bulk and surface composition gradients on scaffolds for tissue regeneration. *Nature Communications*, **2021**, 12, 500	17.4	12
241	Trends in Double Networks as Bioprintable and Injectable Hydrogel Scaffolds for Tissue Regeneration. *ACS Biomaterials Science and Engineering*, **2021**, 7, 4077-4101	5.5	11
240	Long-term preservation effects on biological properties of acellular placental sponge patches. *Materials Science and Engineering C*, **2021**, 121, 111814	8.3	1
239	Cell spheroids as a versatile research platform: formation mechanisms, high throughput production, characterization and applications. *Biofabrication*, **2021**,	10.5	9
238	Janus 3D printed dynamic scaffolds for nanovibration-driven bone regeneration. *Nature Communications*, **2021**, 12, 1031	17.4	15
237	Additive Manufactured Scaffolds for Bone Tissue Engineering: Physical Characterization of Thermoplastic Composites with Functional Fillers. *ACS Applied Polymer Materials*, **2021**, 3, 3788-3799	4.3	4
236	Bioprinting of kidney in vitro models: cells, biomaterials, and manufacturing techniques. *Essays in Biochemistry*, **2021**, 65, 587-602	7.6	6
235	Biomimetic Scaffolds Obtained by Electrospinning of Collagen-Based Materials: Strategies to Hinder the Protein Denaturation. *Materials*, **2021**, 14,	3.5	1
234	Peripheral neurovascular link: an overview of interactions and in vitro models. *Trends in Endocrinology and Metabolism*, **2021**, 32, 623-638	8.8	0
233	Chitin Nanofibril Application in Tympanic Membrane Scaffolds to Modulate Inflammatory and Immune Response. *Pharmaceutics*, **2021**, 13,	6.4	6
232	What can biofabrication do for space and what can space do for biofabrication?. *Trends in Biotechnology*, **2021**,	15.1	2
231	PEOT/PBT Polymeric Pastes to Fabricate Additive Manufactured Scaffolds for Tissue Engineering. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 704185	5.8	
230	An efficient and easily adjustable heating stage for digital light processing set-ups. *Additive Manufacturing*, **2021**, 46, 102102	6.1	5
229	A thermo-sensitive chitosan/pectin hydrogel for long-term tumor spheroid culture. *Carbohydrate Polymers*, **2021**, 274, 118633	10.3	6
228	Thermosensitive chitosan-based hydrogels supporting motor neuron-like NSC-34 cell differentiation. *Biomaterials Science*, **2021**, 9, 7492-7503	7.4	2
227	Additive Manufacturing Using Melt Extruded Thermoplastics for Tissue Engineering. *Methods in Molecular Biology*, **2021**, 2147, 75-99	1.4	4
226	Mechanosensitive regulation of stanniocalcin-1 by zyxin and actin-myosin in human mesenchymal stromal cells. *Stem Cells*, **2020**, 38, 948-959	5.8	4
225	Bioprinting: From Tissue and Organ Development to Models. *Chemical Reviews*, **2020**, 120, 10547-10607	68.1	86

224	Strategies to Improve Nanofibrous Scaffolds for Vascular Tissue Engineering. *Nanomaterials*, **2020**, 10,	5.4	13
223	Tuning the conformation and mechanical properties of silk fibroin hydrogels. *European Polymer Journal*, **2020**, 134, 109842	5.2	35
222	Fabrication of a self-assembled honeycomb nanofibrous scaffold to guide endothelial morphogenesis. *Biofabrication*, **2020**, 12, 045001	10.5	5
221	Multivalency Enables Dynamic Supramolecular Host-Guest Hydrogel Formation. *Biomacromolecules*, **2020**, 21, 2208-2217	6.9	14
220	Modulating Alginate Hydrogels for Improved Biological Performance as Cellular 3D Microenvironments. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 665	5.8	34
219	Probing the pH Microenvironment of Mesenchymal Stromal Cell Cultures on Additive-Manufactured Scaffolds. *Small*, **2020**, 16, e2002258	11	7
218	Ciprofloxacin-loaded polymeric nanoparticles incorporated electrospun fibers for drug delivery in tissue engineering applications. *Drug Delivery and Translational Research*, **2020**, 10, 706-720	6.2	33
217	Dynamic Bioinks to Advance Bioprinting. *Advanced Healthcare Materials*, **2020**, 9, e1901798	10.1	73
216	Glycosaminoglycan-Inspired Biomaterials for the Development of Bioactive Hydrogel Networks. *Molecules*, **2020**, 25,	4.8	17
215	Dimensionality changes actin network through lamin A/C and zyxin. *Biomaterials*, **2020**, 240, 119854	15.6	7
214	Scaffold-free and label-free biofabrication technology using levitational assembly in a high magnetic field. *Biofabrication*, **2020**, 12, 045022	10.5	11
213	Tandem electrospinning for heterogeneous nanofiber patterns. *Biofabrication*, **2020**, 12, 025010	10.5	3
212	The bioprinting roadmap. *Biofabrication*, **2020**, 12, 022002	10.5	137
211	Bio-Fabrication: Convergence of 3D Bioprinting and Nano-Biomaterials in Tissue Engineering and Regenerative Medicine. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 326	5.8	30
210	SCREENED: A Multistage Model of Thyroid Gland Function for Screening Endocrine-Disrupting Chemicals in a Biologically Sex-Specific Manner. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	6
209	Autologous Mandril-Based Vascular Grafts **2020**, 1-23		
208	Fiber diameter, porosity and functional group gradients in electrospun scaffolds. *Biomedical Materials (Bristol)*, **2020**, 15, 045020	3.5	5
207	Improving cell distribution on 3D additive manufactured scaffolds through engineered seeding media density and viscosity. *Acta Biomaterialia*, **2020**, 101, 183-195	10.8	23

206	A novel method for engineering autologous non-thrombogenic in situ tissue-engineered blood vessels for arteriovenous grafting. *Biomaterials*, **2020**, 229, 119577	15.6	16
205	Decellularized Porcine Achilles Tendon Induces Anti-inflammatory Macrophage Phenotype In Vitro and Tendon Repair In Vivo. *Journal of Immunology and Regenerative Medicine*, **2020**, 8, 100027	2.8	5
204	The role of calcium phosphate surface structure in osteogenesis and the mechanisms involved. *Acta Biomaterialia*, **2020**, 106, 22-33	10.8	47
203	Tissue Engineering and Regenerative Medicine 2019: The Role of Biofabrication-A Year in Review. *Tissue Engineering - Part C: Methods*, **2020**, 26, 91-106	2.9	24
202	Decellularization of porcine heart tissue to obtain extracellular matrix based hydrogels. *Methods in Cell Biology*, **2020**, 157, 3-21	1.8	3
201	Effects of Fiber Alignment and Coculture with Endothelial Cells on Osteogenic Differentiation of Mesenchymal Stromal Cells. *Tissue Engineering - Part C: Methods*, **2020**, 26, 11-22	2.9	4
200	Additive manufacturing of an elastic poly(ester)urethane for cartilage tissue engineering. *Acta Biomaterialia*, **2020**, 102, 192-204	10.8	16
199	Leveling Up Hydrogels: Hybrid Systems in Tissue Engineering. *Trends in Biotechnology*, **2020**, 38, 292-315	15.1	24
198	Development of Injectable Thermosensitive Chitosan-Based Hydrogels for Cell Encapsulation. *Applied Sciences (Switzerland)*, **2020**, 10, 6550	2.6	7
197	Microfluidic bioprinting towards a renal in vitro model. *Bioprinting*, **2020**, 20, e00108	7	9
196	A three-dimensional biomimetic peripheral nerve model for drug testing and disease modelling. *Biomaterials*, **2020**, 257, 120230	15.6	12
195	A One-Step Biofunctionalization Strategy of Electrospun Scaffolds Enables Spatially Selective Presentation of Biological Cues. *Advanced Materials Technologies*, **2020**, 5, 2000269	6.8	1
194	Fundamentals of light-cell-polymer interactions in photo-cross-linking based bioprinting. *APL Bioengineering*, **2020**, 4, 041502	6.6	9
193	Actomyosin and the MRTF-SRF pathway downregulate FGFR1 in mesenchymal stromal cells. *Communications Biology*, **2020**, 3, 576	6.7	2
192	Biofabrication of Hepatic Constructs by 3D Bioprinting of a Cell-Laden Thermogel: An Effective Tool to Assess Drug-Induced Hepatotoxic Response. *Advanced Healthcare Materials*, **2020**, 9, e2001163	10.1	21
191	pH Monitoring: Probing the pH Microenvironment of Mesenchymal Stromal Cell Cultures on Additive-Manufactured Scaffolds (Small 34/2020). *Small*, **2020**, 16, 2070187	11	
190	Autologous Mandril-Based Vascular Grafts **2020**, 271-293		
189	Additive manufactured, highly resilient, elastic, and biodegradable poly(ester)urethane scaffolds with chondroinductive properties for cartilage tissue engineering. *Materials Today Bio*, **2020**, 6, 100051	9.9	10

188	A quantitative method to analyse F-actin distribution in cells. *MethodsX*, **2019**, 6, 2562-2569	1.9	12
187	Bioprinting Vasculature: Materials, Cells and Emergent Techniques. *Materials*, **2019**, 12,	3.5	50
186	Shape-defined solid micro-objects from poly(d,l-lactic acid) as cell-supportive counterparts in bottom-up tissue engineering. *Materials Today Bio*, **2019**, 4, 100025	9.9	8
185	Hybrid Polyester-Hydrogel Electrospun Scaffolds for Tissue Engineering Applications. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 231	5.8	7
184	Biological activity of human mesenchymal stromal cells on polymeric electrospun scaffolds. *Biomaterials Science*, **2019**, 7, 1088-1100	7.4	16
183	Self-assembly of electrospun nanofibers into gradient honeycomb structures. *Materials and Design*, **2019**, 168, 107614	8.1	26
182	Hybrid and Composite Scaffolds Based on Extracellular Matrices for Cartilage Tissue Engineering. *Tissue Engineering - Part B: Reviews*, **2019**, 25, 202-224	7.9	36
181	Multiwell three-dimensional systems enable in vivo screening of immune reactions to biomaterials: a new strategy toward translational biomaterial research. *Journal of Materials Science: Materials in Medicine*, **2019**, 30, 61	4.5	1
180	Ultraviolet Functionalization of Electrospun Scaffolds to Activate Fibrous Runways for Targeting Cell Adhesion. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 159	5.8	3
179	From fiber curls to mesh waves: a platform for the fabrication of hierarchically structured nanofibers mimicking natural tissue formation. *Nanoscale*, **2019**, 11, 14312-14321	7.7	5
178	Chondrogenesis of human adipose-derived mesenchymal stromal cells on the [devitalized costal cartilage matrix/poly(vinyl alcohol)/fibrin] hybrid scaffolds. *European Polymer Journal*, **2019**, 118, 528-541	5.2	13
177	Conductive hydrogel based on chitosan-aniline pentamer/gelatin/agarose significantly promoted motor neuron-like cells differentiation of human olfactory ecto-mesenchymal stem cells. *Materials Science and Engineering C*, **2019**, 101, 243-253	8.3	55
176	Biofabrication: From Additive Manufacturing to Bioprinting **2019**, 41-41		1
175	Glycosaminoglycan functionalization of electrospun scaffolds enhances Schwann cell activity. *Acta Biomaterialia*, **2019**, 96, 188-202	10.8	17
174	Sustained delivery of growth factors with high loading efficiency in a layer by layer assembly. *Biomaterials Science*, **2019**, 8, 174-188	7.4	10
173	Cranioplasty with patient-specific implants in repeatedly reconstructed cases. *Journal of Cranio-Maxillo-Facial Surgery*, **2019**, 47, 709-714	3.6	6
172	Lab-on-a-brane for spheroid formation. *Biofabrication*, **2019**, 11, 021002	10.5	3
171	Poly(caprolactone-co-trimethylenecarbonate) urethane acrylate resins for digital light processing of bioresorbable tissue engineering implants. *Biomaterials Science*, **2019**, 7, 4984-4989	7.4	19

170	3D-printed bioactive scaffolds from nanosilicates and PEOT/PBT for bone tissue engineering. *International Journal of Energy Production and Management*, **2019**, 6, 29-37	5.3	17
169	Contribution of bone marrow-derived cells to in situ engineered tissue capsules in a rat model of chronic kidney disease. *Biomaterials*, **2019**, 194, 47-56	15.6	7
168	Acrylic Acid Plasma Coated 3D Scaffolds for Cartilage tissue engineering applications. *Scientific Reports*, **2018**, 8, 3830	4.9	28
167	Influence of the nanofiber chemistry and orientation of biodegradable poly(butylene succinate)-based scaffolds on osteoblast differentiation for bone tissue regeneration. *Nanoscale*, **2018**, 10, 8689-8703	7.7	50
166	Biomimetic Architectures for Peripheral Nerve Repair: A Review of Biofabrication Strategies. *Advanced Healthcare Materials*, **2018**, 7, e1701164	10.1	64
165	Nerve Repair: Biomimetic Architectures for Peripheral Nerve Repair: A Review of Biofabrication Strategies (Adv. Healthcare Mater. 8/2018). *Advanced Healthcare Materials*, **2018**, 7, 1870035	10.1	3
164	Biofabrication strategies for 3D in vitro models and regenerative medicine. *Nature Reviews Materials*, **2018**, 3, 21-37	73.3	317
163	An antibody based approach for multi-coloring osteogenic and chondrogenic proteins in tissue engineered constructs. *Biomedical Materials (Bristol)*, **2018**, 13, 044102	3.5	2
162	Soft-molecular imprinted electrospun scaffolds to mimic specific biological tissues. *Biofabrication*, **2018**, 10, 045005	10.5	15
161	Geometric constraints of endothelial cell migration on electrospun fibres. *Scientific Reports*, **2018**, 8, 6386	4.9	17
160	3D fiber deposited polymeric scaffolds for external auditory canal wall. *Journal of Materials Science: Materials in Medicine*, **2018**, 29, 63	4.5	7
159	Biofabrication: A Guide to Technology and Terminology. *Trends in Biotechnology*, **2018**, 36, 384-402	15.1	309
158	Viscoelastic Oxidized Alginates with Reversible Imine Type Crosslinks: Self-Healing, Injectable, and Bioprintable Hydrogels. *Gels*, **2018**, 4,	4.2	44
157	Nanoroughness, Surface Chemistry, and Drug Delivery Control by Atmospheric Plasma Jet on Implantable Devices. *ACS Applied Materials & Interfaces*, **2018**, 10, 39512-39523	9.5	32
156	Enhancement of synthesis of extracellular matrix proteins on retinoic acid loaded electrospun scaffolds. *Journal of Materials Chemistry B*, **2018**, 6, 6468-6480	7.3	3
155	Characterization of Additive Manufactured Scaffolds **2018**, 55-78		1
154	Thiol-Ene Alginate Hydrogels as Versatile Bioinks for Bioprinting. *Biomacromolecules*, **2018**, 19, 3390-3400	6.9	103
153	Utilizing the Foreign Body Response to Grow Tissue Engineered Blood Vessels in Vivo. *Journal of Cardiovascular Translational Research*, **2017**, 10, 167-179	3.3	34

152	Cells responding to surface structure of calcium phosphate ceramics for bone regeneration. *Journal of Tissue Engineering and Regenerative Medicine*, **2017**, 11, 3273-3283	4.4	11
151	Tricalcium phosphate nanofiber scaffolds with fine unidirectional grains. *Materials Letters*, **2017**, 208, 118-121	3.3	5
150	Topography of calcium phosphate ceramics regulates primary cilia length and TGF receptor recruitment associated with osteogenesis. *Acta Biomaterialia*, **2017**, 57, 487-497	10.8	29
149	3D screening device for the evaluation of cell response to different electrospun microtopographies. *Acta Biomaterialia*, **2017**, 55, 310-322	10.8	13
148	Micro-fabricated scaffolds lead to efficient remission of diabetes in mice. *Biomaterials*, **2017**, 135, 10-22	15.6	23
147	PEOT/PBT Guides Enhance Nerve Regeneration in Long Gap Defects. *Advanced Healthcare Materials*, **2017**, 6, 1600298	10.1	31
146	Hydrogels that listen to cells: a review of cell-responsive strategies in biomaterial design for tissue regeneration. *Materials Horizons*, **2017**, 4, 1020-1040	14.4	106
145	Direct Writing Electrospinning of Scaffolds with Multidimensional Fiber Architecture for Hierarchical Tissue Engineering. *ACS Applied Materials & Interfaces*, **2017**, 9, 38187-38200	9.5	68
144	Covalent Binding of Bone Morphogenetic Protein-2 and Transforming Growth Factor- to 3D Plotted Scaffolds for Osteochondral Tissue Regeneration. *Biotechnology Journal*, **2017**, 12, 1700072	5.6	36
143	Towards 4D printed scaffolds for tissue engineering: exploiting 3D shape memory polymers to deliver time-controlled stimulus on cultured cells. *Biofabrication*, **2017**, 9, 031001	10.5	83
142	Tailorable Surface Morphology of 3D Scaffolds by Combining Additive Manufacturing with Thermally Induced Phase Separation. *Macromolecular Rapid Communications*, **2017**, 38, 1700186	4.8	9
141	Multimaterial, heterogeneous, and multicellular three-dimensional bioprinting. *MRS Bulletin*, **2017**, 42, 578-584	3.2	15
140	Layered PEGDA hydrogel for islet of Langerhans encapsulation and improvement of vascularization. *Journal of Materials Science: Materials in Medicine*, **2017**, 28, 195	4.5	20
139	Tailoring surface nanoroughness of electrospun scaffolds for skeletal tissue engineering. *Acta Biomaterialia*, **2017**, 59, 82-93	10.8	64
138	Influence of Solution Properties and Process Parameters on the Formation and Morphology of YSZ and NiO Ceramic Nanofibers by Electrospinning. *Nanomaterials*, **2017**, 7,	5.4	29
137	Influence of Additive Manufactured Scaffold Architecture on the Distribution of Surface Strains and Fluid Flow Shear Stresses and Expected Osteochondral Cell Differentiation. *Frontiers in Bioengineering and Biotechnology*, **2017**, 5, 6	5.8	28
136	The Use of Finite Element Analyses to Design and Fabricate Three-Dimensional Scaffolds for Skeletal Tissue Engineering. *Frontiers in Bioengineering and Biotechnology*, **2017**, 5, 30	5.8	19
135	Characterization of Additive Manufactured Scaffolds **2017**, 1-25		

134	Increased cell seeding efficiency in bioplotted three-dimensional PEOT/PBT scaffolds. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, 679-89	4.4	30
133	Osteochondral Regeneration: Tuning Cell Differentiation into a 3D Scaffold Presenting a Pore Shape Gradient for Osteochondral Regeneration (Adv. Healthcare Mater. 14/2016). *Advanced Healthcare Materials*, **2016**, 5, 1832-1832	10.1	4
132	Promoting Tropoelastin Expression in Arterial and Venous Vascular Smooth Muscle Cells and Fibroblasts for Vascular Tissue Engineering. *Tissue Engineering - Part C: Methods*, **2016**, 22, 923-931	2.9	10
131	Flexible Yttrium-Stabilized Zirconia Nanofibers Offer Bioactive Cues for Osteogenic Differentiation of Human Mesenchymal Stromal Cells. *ACS Nano*, **2016**, 10, 5789-99	16.7	45
130	Stem-Cell Clinging by a Thread: AFM Measure of Polymer-Brush Lateral Deformation. *Advanced Materials Interfaces*, **2016**, 3, 1500456	4.6	33
129	Biofabrication: reappraising the definition of an evolving field. *Biofabrication*, **2016**, 8, 013001	10.5	387
128	Influencing chondrogenic differentiation of human mesenchymal stromal cells in scaffolds displaying a structural gradient in pore size. *Acta Biomaterialia*, **2016**, 36, 210-9	10.8	71
127	Triphasic scaffolds for the regeneration of the bone-ligament interface. *Biofabrication*, **2016**, 8, 015009	10.5	55
126	Methods of Monitoring Cell Fate and Tissue Growth in Three-Dimensional Scaffold-Based Strategies for In Vitro Tissue Engineering. *Tissue Engineering - Part B: Reviews*, **2016**, 22, 265-83	7.9	14
125	Surface energy and stiffness discrete gradients in additive manufactured scaffolds for osteochondral regeneration. *Biofabrication*, **2016**, 8, 015014	10.5	36
124	Tailoring chemical and physical properties of fibrous scaffolds from block copolyesters containing ether and thio-ether linkages for skeletal differentiation of human mesenchymal stromal cells. *Biomaterials*, **2016**, 76, 261-72	15.6	24
123	Chondrocytes Cocultured with Stromal Vascular Fraction of Adipose Tissue Present More Intense Chondrogenic Characteristics Than with Adipose Stem Cells. *Tissue Engineering - Part A*, **2016**, 22, 336-48	3.9	19
122	Development and evaluation of in vivo tissue engineered blood vessels in a porcine model. *Biomaterials*, **2016**, 75, 82-90	15.6	58
121	A Protocol to Enhance INS1E and MIN6 Functionality-The Use of Theophylline. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	5
120	Patterning Vasculature: The Role of Biofabrication to Achieve an Integrated Multicellular Ecosystem. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1694-1709	5.5	21
119	Influence of internal pore architecture on biological and mechanical properties of three-dimensional fiber deposited scaffolds for bone regeneration. *Journal of Biomedical Materials Research - Part A*, **2016**, 104, 991-1001	5.4	38
118	Biological and Tribological Assessment of Poly(Ethylene Oxide Terephthalate)/Poly(Butylene Terephthalate), Polycaprolactone, and Poly (LDL) Lactic Acid Plotted Scaffolds for Skeletal Tissue Regeneration. *Advanced Healthcare Materials*, **2016**, 5, 232-43	10.1	8
117	Hybrid Polycaprolactone/Alginate Scaffolds Functionalized with VEGF to Promote de Novo Vessel Formation for the Transplantation of Islets of Langerhans. *Advanced Healthcare Materials*, **2016**, 5, 1606-16	10.1	41

116	Tuning Cell Differentiation into a 3D Scaffold Presenting a Pore Shape Gradient for Osteochondral Regeneration. *Advanced Healthcare Materials*, **2016**, 5, 1753-63	10.1	44
115	Gradients in pore size enhance the osteogenic differentiation of human mesenchymal stromal cells in three-dimensional scaffolds. *Scientific Reports*, **2016**, 6, 22898	4.9	105
114	Additive manufactured polymeric 3D scaffolds with tailored surface topography influence mesenchymal stromal cells activity. *Biofabrication*, **2016**, 8, 025012	10.5	27
113	Mimicking natural cell environments: design, fabrication and application of bio-chemical gradients on polymeric biomaterial substrates. *Journal of Materials Chemistry B*, **2016**, 4, 4244-4257	7.3	35
112	Toward mimicking the bone structure: design of novel hierarchical scaffolds with a tailored radial porosity gradient. *Biofabrication*, **2016**, 8, 045007	10.5	47
111	Cell Adhesion: Stem-Cell Clinging by a Thread: AFM Measure of Polymer-Brush Lateral Deformation (Adv. Mater. Interfaces 3/2016). *Advanced Materials Interfaces*, **2016**, 3,	4.6	2
110	Mold-Based Application of Laser-Induced Periodic Surface Structures (LIPSS) on Biomaterials for Nanoscale Patterning. *Macromolecular Bioscience*, **2016**, 16, 43-9	5.5	11
109	Back Cover: Macromol. Biosci. 1/2016. *Macromolecular Bioscience*, **2016**, 16, 168-168	5.5	
108	Creeping proteins in microporous structures: polymer brush-assisted fabrication of 3D gradients for tissue engineering. *Advanced Healthcare Materials*, **2015**, 4, 1169-74	10.1	33
107	Poly(amido amine)-based multilayered thin films on 2D and 3D supports for surface-mediated cell transfection. *Journal of Controlled Release*, **2015**, 205, 181-9	11.7	7
106	Myoblast differentiation of human mesenchymal stem cells on graphene oxide and electrospun graphene oxide-polymer composite fibrous meshes: importance of graphene oxide conductivity and dielectric constant on their biocompatibility. *Biofabrication*, **2015**, 7, 015009	10.5	75
105	The osteochondral interface as a gradient tissue: from development to the fabrication of gradient scaffolds for regenerative medicine. *Birth Defects Research Part C: Embryo Today Reviews*, **2015**, 105, 34-52		81
104	Multiscale fabrication of biomimetic scaffolds for tympanic membrane tissue engineering. *Biofabrication*, **2015**, 7, 025005	10.5	51
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9	Upscaling of high-throughput material platforms in two and three dimensions133-154		1

List of Publications

8	3D Additive Manufactured Composite Scaffolds with Antibiotic-loaded Lamellar Fillers for Bone Infection Prevention and Tissue Regeneration		1
7	A hybrid additive manufacturing platform to create bulk and surface composition gradients on scaffolds for tissue regeneration		3
6	Mimicking the Human Tympanic Membrane: the Significance of Geometry		1
5	Improving cell distribution on 3D additive manufactured scaffolds through engineered seeding media density and viscosity		1
4	Additive manufactured scaffolds for bone tissue engineering: physical characterization of thermoplastic composites with functional fillers		2
3	Effect of reduced graphene oxide (rGO) compaction degree and concentration on rGO-polymer composites printability and cell interactions		1
2	Effect of Highly Loaded Nanohydroxyapatite Composite Scaffolds Prepared via Melt Extrusion Additive Manufacturing on the Osteogenic Differentiation of Human Mesenchymal Stromal Cells		1
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