Marco Costantini

List of Publications by Year in descending order

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54 papers	3,570 citations	172457 29 h-index	182427 51 g-index
56 all docs	56 docs citations	56 times ranked	4558 citing authors

#	Article	IF	Citations
1	Microfluidic Bioprinting of Heterogeneous 3D Tissue Constructs Using Lowâ€Viscosity Bioink. Advanced Materials, 2016, 28, 677-684.	21.0	677
2	A multi-cellular 3D bioprinting approach for vascularized heart tissue engineering based on HUVECs and iPSC-derived cardiomyocytes. Scientific Reports, 2018, 8, 13532.	3.3	268
3	Microfluidic-enhanced 3D bioprinting of aligned myoblast-laden hydrogels leads to functionally organized myofibers inÂvitro and inÂvivo. Biomaterials, 2017, 131, 98-110.	11.4	252
4	3D bioprinting of BM-MSCs-loaded ECM biomimetic hydrogels for in vitro neocartilage formation. Biofabrication, 2016, 8, 035002.	7.1	211
5	3D Bioprinting in Skeletal Muscle Tissue Engineering. Small, 2019, 15, e1805530.	10.0	192
6	3D bioprinting of hydrogel constructs with cell and material gradients for the regeneration of full-thickness chondral defect using a microfluidic printing head. Biofabrication, 2019, 11, 044101.	7.1	120
7	Extrusion and Microfluidicâ€Based Bioprinting to Fabricate Biomimetic Tissues and Organs. Advanced Materials Technologies, 2020, 5, 1901044.	5.8	110
8	Morphological Comparison of PVA Scaffolds Obtained by Gas Foaming and Microfluidic Foaming Techniques. Langmuir, 2013, 29, 82-91.	3.5	92
9	PLA short sub-micron fiber reinforcement of 3D bioprinted alginate constructs for cartilage regeneration. Biofabrication, 2017, 9, 044105.	7.1	88
10	Tendon Tissue Engineering: Effects of Mechanical and Biochemical Stimulation on Stem Cell Alignment on Cellâ€Laden Hydrogel Yarns. Advanced Healthcare Materials, 2019, 8, e1801218.	7.6	84
11	Naturally derived proteins and glycosaminoglycan scaffolds for tissue engineering applications. Materials Science and Engineering C, 2017, 78, 1277-1299.	7.3	82
12	3D bioprinted hydrogel model incorporating Î² -tricalcium phosphate for calcified cartilage tissue engineering. Biofabrication, 2019, 11, 035016.	7.1	82
13	Highly ordered and tunable polyHIPEs by using microfluidics. Journal of Materials Chemistry B, 2014, 2, 2290.	5.8	80
14	Co-axial wet-spinning in 3D bioprinting: state of the art and future perspective of microfluidic integration. Biofabrication, 2019, 11, 012001.	7.1	75
15	3Dâ€Printing of Functionally Graded Porous Materials Using Onâ€Demand Reconfigurable Microfluidics. Angewandte Chemie - International Edition, 2019, 58, 7620-7625.	13.8	73
16	Correlation between porous texture and cell seeding efficiency of gas foaming and microfluidic foaming scaffolds. Materials Science and Engineering C, 2016, 62, 668-677.	7.3	70
17	Rapid prototyping of chitosan-coated alginate scaffolds through the use of a 3D fiber deposition technique. Journal of Materials Chemistry B, 2014, 2, 6779-6791.	5.8	69
18	4D printing in biomedical applications: emerging trends and technologies. Journal of Materials Chemistry B, 2021, 9, 7608-7632.	5.8	65

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19	Polysaccharide based scaffolds obtained by freezing the external phase of gas-in-liquid foams. Soft Matter, 2010, 6, 5213.	2.7	60
20	Engineering Muscle Networks in 3D Gelatin Methacryloyl Hydrogels: Influence of Mechanical Stiffness and Geometrical Confinement. Frontiers in Bioengineering and Biotechnology, 2017, 5, 22.	4.1	60
21	Hydrogel-Based Fiber Biofabrication Techniques for Skeletal Muscle Tissue Engineering. ACS Biomaterials Science and Engineering, 2022, 8, 379-405.	5.2	57
22	Microfluidic Foaming: A Powerful Tool for Tailoring the Morphological and Permeability Properties of Sponge-like Biopolymeric Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 23660-23671.	8.0	55
23	Oxygen releasing materials: Towards addressing the hypoxia-related issues in tissue engineering. Materials Science and Engineering C, 2021, 122, 111896.	7.3	46
24	Nanotechnologyâ€Assisted RNA Delivery: From Nucleic Acid Therapeutics to COVIDâ€19 Vaccines. Small Methods, 2021, 5, 2100402.	8.6	45
25	3D Printing of Thermoresponsive Polyisocyanide (PIC) Hydrogels as Bioink and Fugitive Material for Tissue Engineering. Polymers, 2018, 10, 555.	4.5	38
26	Combination of biochemical and mechanical cues for tendon tissue engineering. Journal of Cellular and Molecular Medicine, 2017, 21, 2711-2719.	3.6	35
27	Recent advances in bioprinting technologies for engineering cardiac tissue. Materials Science and Engineering C, 2021, 124, 112057.	7.3	35
28	Electric Field Assisted Microfluidic Platform for Generation of Tailorable Porous Microbeads as Cell Carriers for Tissue Engineering. Advanced Functional Materials, 2018, 28, 1800874.	14.9	32
29	Synthesis and characterization of a novel poly(vinyl alcohol) 3D platform for the evaluation of hepatocytes' response to drug administration. Journal of Materials Chemistry B, 2013, 1, 3083.	5.8	31
30	Biofabricating murine and human myoâ€substitutes for rapid volumetric muscle loss restoration. EMBO Molecular Medicine, 2021, 13, e12778.	6.9	29
31	Recent advances in bioprinting technologies for engineering different cartilage-based tissues. Materials Science and Engineering C, 2021, 123, 112005.	7.3	29
32	Transition Metal Dichalcogenides (TMDC)-Based Nanozymes for Biosensing and Therapeutic Applications. Materials, 2022, 15, 337.	2.9	29
33	Microfluidic Bioprinting of Heterogeneous 3D Tissue Constructs. Methods in Molecular Biology, 2017, 1612, 369-380.	0.9	28
34	Tumor Extracellular Matrix Stiffness Promptly Modulates the Phenotype and Gene Expression of Infiltrating T Lymphocytes. International Journal of Molecular Sciences, 2021, 22, 5862.	4.1	25
35	Alginate-based tissue-specific bioinks for multi-material 3D-bioprinting of pancreatic islets and blood vessels: A step towards vascularized pancreas grafts. Bioprinting, 2021, 24, e00163.	5.8	25
36	Gas foaming technologies for 3D scaffold engineering. , 2018, , 127-149.		23

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37	Recent advances in chemically defined and tunable hydrogel platforms for organoid culture. Bio-Design and Manufacturing, 2021, 4, 641-674.	7.7	22
38	Extrusion 3D printing with Pectin-based ink formulations: Recent trends in tissue engineering and food manufacturing. Biomedical Engineering Advances, 2021, 2, 100018.	3.8	22
39	In vivo organized neovascularization induced by 3D bioprinted endothelial-derived extracellular vesicles. Biofabrication, 2021, 13, 035014.	7.1	21
40	Translational Application of Microfluidics and Bioprinting for Stem Cell-Based Cartilage Repair. Stem Cells International, 2018, 2018, 1-14.	2.5	19
41	Skeletal Muscle-Derived Human Mesenchymal Stem Cells: Influence of Different Culture Conditions on Proliferative and Myogenic Capabilities. Frontiers in Physiology, 2020, 11, 553198.	2.8	16
42	Anomalous Debye-like dielectric relaxation of water in micro-sized confined polymeric systems. Physical Chemistry Chemical Physics, 2013, 15, 20153.	2.8	14
43	3D printing of biphasic inks: beyond single-scale architectural control. Journal of Materials Chemistry C, 2021, 9, 12489-12508.	5.5	14
44	Electrospinning and microfluidics. , 2018, , 139-155.		12
45	Engineering Human-Scale Artificial Bone Grafts for Treating Critical-Size Bone Defects. ACS Applied Bio Materials, 2019, 2, 5077-5092.	4.6	12
46	Tackling Current Biomedical Challenges With Frontier Biofabrication and Organ-On-A-Chip Technologies. Frontiers in Bioengineering and Biotechnology, 2021, 9, 732130.	4.1	11
47	Recent advances in tissue engineering and anticancer modalities with photosynthetic microorganisms as potent oxygen generators. Biomedical Engineering Advances, 2021, 1, 100005.	3.8	10
48	Designing a 3D printed human derived artificial myo-structure for anal sphincter defects in anorectal malformations and adult secondary damage. Materials Today Communications, 2018, 15, 120-123.	1.9	7
49	3Dâ€Printing of Functionally Graded Porous Materials Using Onâ€Demand Reconfigurable Microfluidics. Angewandte Chemie, 2019, 131, 7702-7707.	2.0	6
50	Energy Harvesting: Electric Field Assisted Microfluidic Platform for Generation of Tailorable Porous Microbeads as Cell Carriers for Tissue Engineering (Adv. Funct. Mater. 20/2018). Advanced Functional Materials, 2018, 28, 1870133.	14.9	4
51	3D Tissue Modelling of Skeletal Muscle Tissue. Biomaterials Science Series, 2019, , 184-215.	0.2	4
52	Photocurable Biopolymers for Coaxial Bioprinting. Methods in Molecular Biology, 2021, 2147, 45-54.	0.9	3
53	Aligned Cellâ€Laden Yarns: Tendon Tissue Engineering: Effects of Mechanical and Biochemical Stimulation on Stem Cell Alignment on Cellâ€Laden Hydrogel Yarns (Adv. Healthcare Mater. 7/2019). Advanced Healthcare Materials, 2019, 8, 1970025.	7.6	1
54	Nanotechnologyâ€Assisted RNA Delivery: From Nucleic Acid Therapeutics to COVIDâ€19 Vaccines (Small) Tj ETQq0 0 0 rgBT /Overlock 10	8.6	0