Cathal D O'connell

List of Publications by Year
in descending order

37 papers	1,707 citations	346980 22 h-index	371746 37 g-index
37 all docs	37 docs citations	37 times ranked	2618 citing authors

#	Article	IF	Citations
1	Assessment of Native Human Articular Cartilage: A Biomechanical Protocol. Cartilage, 2021, 13, 427S-437S.	1.4	24
2	FLASH: Fluorescently LAbelled Sensitive Hydrogel to monitor bioscaffolds degradation during neocartilage generation. Biomaterials, 2021, 264, 120383.	5.7	32
3	Formation of alginate microspheres prepared by optimized microfluidics parameters for high encapsulation of bioactive molecules. Journal of Colloid and Interface Science, 2021, 587, 240-251.	5.0	25
4	Shining a light on the hidden structure of gelatin methacryloyl bioinks using small-angle X-ray scattering (SAXS). Materials Chemistry Frontiers, 2021, 5, 8025-8036.	3.2	5
5	Characterization of Polycaprolactone Nanohydroxyapatite Composites with Tunable Degradability Suitable for Indirect Printing. Polymers, 2021, 13, 295.	2.0	22
6	Enhanced Electroactivity, Mechanical Properties, and Printability through the Addition of Graphene Oxide to Photo-Cross-linkable Gelatin Methacryloyl Hydrogel. ACS Biomaterials Science and Engineering, 2021, 7, 2279-2295.	2.6	29
7	Printing between the Lines: Intricate Biomaterial Structures Fabricated via Negative Embodied Sacrificial Template 3D (NEST3D) Printing. Advanced Materials Technologies, 2021, 6, 2100189.	3.0	14
8	Electrostatic Distortion of Meltâ€Electrowritten Patterns by 3D Objects: Quantification, Modeling, and Toolpath Correction. Advanced Materials Technologies, 2021, 6, 2100345.	3.0	13
9	Towards bioengineered skeletal muscle: recent developments in vitro and in vivo. Essays in Biochemistry, 2021, 65, 555-567.	2.1	4
10	Advances in biofabrication techniques towards functional bioprinted heterogeneous engineered tissues: A comprehensive review. Bioprinting, 2021, 23, e00147.	2.9	35
11	Matured Myofibers in Bioprinted Constructs with In Vivo Vascularization and Innervation. Gels, 2021, 7, 171.	2.1	9
12	Microbial Transglutaminase Improves ex vivo Adhesion of Gelatin Methacryloyl Hydrogels to Human Cartilage. Frontiers in Medical Technology, 2021, 3, 773673.	1.3	10
13	Gelatin Methacryloyl Hydrogels for the Localized Delivery of Cefazolin. Polymers, 2021, 13, 3960.	2.0	12
14	3D Printed Multiphasic Scaffolds for Osteochondral Repair: Challenges and Opportunities. International Journal of Molecular Sciences, 2021, 22, 12420.	1.8	18
15	Human articular cartilage repair: Sources and detection of cytotoxicity and genotoxicity in photo-crosslinkable hydrogel bioscaffolds. Stem Cells Translational Medicine, 2020, 9, 302-315.	1.6	45
16	Free-form co-axial bioprinting of a gelatin methacryloyl bio-ink by direct in situ photo-crosslinking during extrusion. Bioprinting, 2020, 19, e00087.	2.9	24
17	Characterizing Bioinks for Extrusion Bioprinting: Printability and Rheology. Methods in Molecular Biology, 2020, 2140, 111-133.	0.4	32
18	Layer-By-Layer: The Case for 3D Bioprinting Neurons to Create Patient-Specific Epilepsy Models. Materials, 2019, 12, 3218.	1.3	32

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19	Evaluation of sterilisation methods for bio-ink components: gelatin, gelatin methacryloyl, hyaluronic acid and hyaluronic acid methacryloyl. Biofabrication, 2019, 11, 035003.	3.7	44
20	Controlled release from PCLâ€“alginate microspheres via secondary encapsulation using GelMA/HAMA hydrogel scaffolds. Soft Matter, 2019, 15, 3779-3787.	1.2	17
21	Protocols for Culturing and Imaging a Human Ex Vivo Osteochondral Model for Cartilage Biomanufacturing Applications. Materials, 2019, 12, 640.	1.3	14
22	Tailoring the mechanical properties of gelatin methacryloyl hydrogels through manipulation of the photocrosslinking conditions. Soft Matter, 2018, 14, 2142-2151.	1.2	123
23	Print Me an Organ? Ethical and Regulatory Issues Emerging from 3D Bioprinting in Medicine. Science and Engineering Ethics, 2018, 24, 73-91.	1.7	105
24	<i>In situ</i> handheld threeâ€dimensional bioprinting for cartilage regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 611-621.	1.3	232
25	Threeâ€dimensional neural cultures produce networks that mimic native brain activity. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 490-493.	1.3	29
26	Enthusiastic portrayal of 3D bioprinting in the media: Ethical side effects. Bioethics, 2018, 32, 94-102.	0.7	19
27	Biofabrication of human articular cartilage: a path towards the development of a clinical treatment. Biofabrication, 2018, 10, 045006.	3.7	71
28	Handheld Co-Axial Bioprinting: Application to in situ surgical cartilage repair. Scientific Reports, 2017, 7, 5837.	1.6	160
29	Development of the Biopen: a handheld device for surgical printing of adipose stem cells at a chondral wound site. Biofabrication, 2016, 8, 015019.	3.7	186
30	Nano-bioelectronics via dip-pen nanolithography. Journal of Materials Chemistry C, 2015, 3, 6431-6444.	2.7	23
31	Inertial imaging with nanomechanical systems. Nature Nanotechnology, 2015, 10, 339-344.	15.6	141
32	Liquid Ink Deposition from an Atomic Force Microscope Tip: Deposition Monitoring and Control of Feature Size. Langmuir, 2014, 30, 2712-2721.	1.6	46
33	Inkâ€onâ€Probe Hydrodynamics in Atomic Force Microscope Deposition of Liquid Inks. Small, 2014, 10, 3717-3728.	5.2	22
34	Synthesis and optimization of PEDOT:PSS based ink for printing nanoarrays using Dip-Pen Nanolithography. Synthetic Metals, 2013, 181, 64-71.	2.1	9
35	Nanoscale platinum printing on insulating substrates. Nanotechnology, 2013, 24, 505301.	1.3	8
36	Vapor Phase Polymerization of EDOT from Submicrometer Scale Oxidant Patterned by Dip-Pen Nanolithography. Langmuir, 2012, 28, 9953-9960.	1.6	28

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37	Liquid Deposition Patterning of Conducting Polymer Ink onto Hard and Soft Flexible Substrates via Dip-Pen Nanolithography. Langmuir, 2012, 28, 804-811.	1.6	45