Eoin O'Cearbhaill

List of Publications by Year
in descending order

48	2,113	279701	243529
papers	citations	23 h-index	44 g-index

50	50	50	3716
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparing threeâ€dimensional models of placenta accreta spectrum with surgical findings. International Journal of Gynecology and Obstetrics, 2022, 157, 188-197.	1.0	12
2	An Intraoral Non-Occlusal MEMS Sensor for Bruxism Detection. IEEE Sensors Journal, 2022, 22, 153-161.	2.4	7
3	Fused filament fabrication of polycaprolactone bioscaffolds: Influence of fabrication parameters and thermal environment on geometric fidelity and mechanical properties. Bioprinting, 2022, 27, e00206.	2.9	4
4	Development of a 3D Printed Benchtop Model of the Pulmonary System to Assist in the Development of Device to Treat Large Pulmonary Thrombo-embolic Disease. Procedia CIRP, 2022, 110, 162-167.	1.0	0
5	In silico design of additively manufacturable composite synthetic vascular conduits and grafts with tuneable compliance. Biomaterials Science, 2021, 9, 4343-4355.	2.6	7
6	Additive Manufacturing of Multiâ€Scale Porous Soft Tissue Implants That Encourage Vascularization and Tissue Ingrowth. Advanced Healthcare Materials, 2021, 10, e2100229.	3.9	14
7	Insights into the mechanics of solid conical microneedle array insertion into skin using the finite element method. Acta Biomaterialia, 2021, 135, 403-413.	4.1	41
8	A therapeutic convectionâ€“enhanced macroencapsulation device for enhancing Î² cell viability and insulin secretion. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
9	Assessing the Effects of VEGF Releasing Microspheres on the Angiogenic and Foreign Body Response to a 3D Printed Silicone-Based Macroencapsulation Device. Pharmaceutics, 2021, 13, 2077.	2.0	7
10	Vascular Endothelial Growth Factorâ€“Releasing Microspheres Based on Poly(Îµ-Caprolactone-PEG-Îµ-Caprolactone)-b-Poly(L-Lactide) Multiblock Copolymers Incorporated in a Three-Dimensional Printed Poly(Dimethylsiloxane) Cell Macroencapsulation Device. Journal of Pharmaceutical Sciences, 2020, 109, 863-870.	1.6	15
11	Outcome of congenital tracheal stenosis in children over two decades in a national cardiothoracic surgical unit. Cardiology in the Young, 2020, 30, 34-38.	0.4	5
12	Development and Evaluation of 3Dâ€Printed Dry Microneedle Electrodes for Surface Electromyography. Advanced Materials Technologies, 2020, 5, 2000518.	3.0	27
13	A biomimetic urethral model to evaluate urinary catheter lubricity and epithelial micro-trauma. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 108, 103792.	1.5	11
14	Angling for a bug-inspired method of coating therapeutics onto microneedles. Science Translational Medicine, 2020, 12, .	5.8	1
15	Simple and customizable method for fabrication of high-aspect ratio microneedle molds using low-cost 3D printing. Microsystems and Nanoengineering, 2019, 5, 42.	3.4	156
16	Synthetic bioresorbable poly-Î±-hydroxyesters as peripheral nerve guidance conduits; a review of material properties, design strategies and their efficacy to date. Biomaterials Science, 2019, 7, 4912-4943.	2.6	31
17	A radial clutch needle for facile and safe tissue compartment access. Medical Devices & Sensors, 2019, 2, e10049.	2.7	1
18	3D bioprinting chips away at glioblastomal resistance. Science Translational Medicine, 2019, 11, .	5.8	2

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19	Shedding light on implant-associated infection. Science Translational Medicine, 2019, 11, .	5.8	6
20	Patching up a wounded heart. Science Translational Medicine, 2019, 11, .	5.8	0
21	A new approach to local drug delivery bubbling under the surface. Science Translational Medicine, 2019, 11, .	5.8	0
22	Bound to get to the heart of a sticky problem. Science Translational Medicine, 2019, 11, .	5.8	0
23	Touch-actuated transdermal delivery patch for quantitative skin permeation control. Sensors and Actuators B: Chemical, 2018, 256, 18-26.	4.0	27
24	Kinematic error modeling and error compensation of desktop 3D printer. Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering, 2018, 1, 180-186.	1.7	12
25	Additive Manufacture of Composite Soft Pneumatic Actuators. Soft Robotics, 2018, 5, 726-736.	4.6	41
26	Metallic microneedles with interconnected porosity: A scalable platform for biosensing and drug delivery. Acta Biomaterialia, 2018, 80, 401-411.	4.1	71
27	Bio-resorbable polymer stents: a review of material progress and prospects. Progress in Polymer Science, 2018, 83, 79-96.	11.8	123
28	A self-adherent, bullet-shaped microneedle patch for controlled transdermal delivery of insulin. Journal of Controlled Release, 2017, 265, 48-56.	4.8	123
29	A growth-accommodating implant for paediatric applications. Nature Biomedical Engineering, 2017, 1, 818-825.	11.6	28
30	Bulk Metallic Glasses for Implantable Medical Devices and Surgical Tools. Advanced Materials, 2016, 28, 5755-5762.	11.1	113
31	Hydrolytically Degradable Hyperbranched PEGâ€Polyester Adhesive with Low Swelling and Robust Mechanical Properties. Advanced Healthcare Materials, 2015, 4, 2260-2268.	3.9	37
32	Toward Biofunctional Microneedles for Stimulus Responsive Drug Delivery. Bioconjugate Chemistry, 2015, 26, 1289-1296.	1.8	50
33	On-demand and negative-thermo-swelling tissue adhesive based on highly branched ambivalent PEGâ€“catechol copolymers. Journal of Materials Chemistry B, 2015, 3, 6420-6428.	2.9	65
34	A light-reflecting balloon catheter for atraumatic tissue defect repair. Science Translational Medicine, 2015, 7, 306ra149.	5.8	34
35	A Stent with Customizable Length for Treatment of Critical Limb Ischemia: Clinical Need, Device Development and Pre-clinical Testing. Cardiovascular Engineering and Technology, 2014, 5, 317-333.	0.7	1
36	A Blood-Resistant Surgical Glue for Minimally Invasive Repair of Vessels and Heart Defects. Science Translational Medicine, 2014, 6, 218ra6.	5.8	253

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37	Emerging Medical Devices for Minimally Invasive Cell Therapy. Mayo Clinic Proceedings, 2014, 89, 259-273.	1.4	36
38	A bio-inspired swellable microneedle adhesive for mechanical interlocking with tissue. Nature Communications, 2013, 4, 1702.	5.8	316
39	A Portable Chemotaxis Platform for Short and Long Term Analysis. PLoS ONE, 2012, 7, e44995.	1.1	12
40	The electrical stimulation of carbon nanotubes to provide a cardiomimetic cue to MSCs. Biomaterials, 2012, 33, 6132-6139.	5.7	189
41	Behavior of Human Mesenchymal Stem Cells in Fibrin-Based Vascular Tissue Engineering Constructs. Annals of Biomedical Engineering, 2010, 38, 649-657.	1.3	32
42	Evaluation of Human Endothelial Cells Post Stent Deployment in a Cardiovascular Simulator In Vitro. Annals of Biomedical Engineering, 2009, 37, 1322-1330.	1.3	24
43	Response of mesenchymal stem cells to the biomechanical environment of the endothelium on a flexible tubular silicone substrate. Biomaterials, 2008, 29, 1610-1619.	5.7	72
44	Development of a co-culture system for tissue engineered vascular grafts. Bio-Medical Materials and Engineering, 2008, 18, 291-294.	0.4	0
45	Development of a co-culture system for tissue engineered vascular grafts. Bio-Medical Materials and Engineering, 2008, 18, 291-4.	0.4	0
46	Computational Examination of the Effect of Material Inhomogeneity on the Necking of Stent Struts Under Tensile Loading. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 978-989.	1.1	26
47	Endothelial cell response to biomechanical forces under simulated vascular loading conditions. Journal of Biomechanics, 2007, 40, 3146-3154.	0.9	41
48	Characterisation of a collagen membrane for its potential use in cardiovascular tissue engineering applications. Journal of Materials Science: Materials in Medicine, 2006, 17, 195-201.	1.7	9