Garry Duffy

List of Publications by Year
in descending order

92 papers	3,506 citations	126907 33 h-index	149698 56 g-index
93 all docs	93 docs citations	93 times ranked	5394 citing authors

#	Article	IF	Citations
1	A method of characterising the complex anatomy of vascular occlusions and <scp>3D</scp> printing biomimetic analogues. Journal of Anatomy, 2022, , .	1.5	1
2	Medical devices, smart drug delivery, wearables and technology for the treatment of Diabetes Mellitus. Advanced Drug Delivery Reviews, 2022, 185, 114280.	13.7	32
3	Collagen and Endothelial Cell Coculture Improves Î²-Cell Functionality and Rescues Pancreatic Extracellular Matrix. Tissue Engineering - Part A, 2021, 27, 977-991.	3.1	15
4	Nidogenâ€1 Mitigates Ischemia and Promotes Tissue Survival and Regeneration. Advanced Science, 2021, 8, 2002500.	11.2	15
5	A versatile technique for high-resolution three-dimensional imaging of human arterial segmentsÂusing microcomputed tomography. JVS Vascular Science, 2021, 2, 13-19.	1.1	3
6	Translational Studies on the Potential of a VEGF Nanoparticle-Loaded Hyaluronic Acid Hydrogel. Pharmaceutics, 2021, 13, 779.	4.5	9
7	Design Considerations for Macroencapsulation Devices for Stem Cell Derived Islets for the Treatment of Type 1 Diabetes. Advanced Science, 2021, 8, e2100820.	11.2	24
8	Additive Manufacturing of Multiâ€Scale Porous Soft Tissue Implants That Encourage Vascularization and Tissue Ingrowth. Advanced Healthcare Materials, 2021, 10, e2100229.	7.6	14
9	Resveratrol significantly improves cell survival in comparison to dexrazoxane and carvedilol in a h9c2 model of doxorubicin induced cardiotoxicity. Biomedicine and Pharmacotherapy, 2021, 140, 111702.	5.6	23
10	Device-Based Solutions to Improve Cardiac Physiology and Hemodynamics in HeartÂFailure With Preserved EjectionÂFraction. JACC Basic To Translational Science, 2021, 6, 772-795.	4.1	24
11	The Foreign Body Response to an Implantable Therapeutic Reservoir in a Diabetic Rodent Model. Tissue Engineering - Part C: Methods, 2021, 27, 515-528.	2.1	7
12	Towards the use of localised delivery strategies to counteract cancer therapyâ€“induced cardiotoxicities. Drug Delivery and Translational Research, 2021, 11, 1924-1942.	5.8	7
13	A Thermoresponsive Chitosan/Î²-Glycerophosphate Hydrogel for Minimally Invasive Treatment of Critical Limb Ischaemia. Polymers, 2021, 13, 3568.	4.5	2
14	P.122: Development of an Oxygen Durability Model to Overcome Hypoxia in Encapsulated Islets Within a Functionalized Oxygenated Biomaterial. Transplantation, 2021, 105, S46-S47.	1.0	0
15	Hydrogels: 3D Drug Delivery Systems for Nanoparticles and Extracellular Vesicles. Biomedicines, 2021, 9, 1694.	3.2	19
16	P.120: Additive Manufactured Macroencapsulation Devices for Islet Cell Replacement Therapy. Transplantation, 2021, 105, S45-S45.	1.0	0
17	P.123: Establishing the Controlled Delivery of VEGF Using a Hydrogel Loaded Soft Robotic Drug Delivery System With the Aim to Prevascularise Implant Site for Islet Transplantation. Transplantation, 2021, 105, S47-S48.	1.0	1
18	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.	4.5	7

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19	Developing a morphomics framework to optimize implant site-specific design parameters for islet macroencapsulation devices. Journal of the Royal Society Interface, 2021, 18, 20210673.	3.4	3
20	Non-invasive marker-independent high content analysis of a microphysiological human pancreas-on-a-chip model. Matrix Biology, 2020, 85-86, 205-220.	3.6	72
21	Development of a nanomedicine-loaded hydrogel for sustained delivery of an angiogenic growth factor to the ischaemic myocardium. Drug Delivery and Translational Research, 2020, 10, 440-454.	5.8	21
22	Controlled Heterotypic Pseudo-Islet Assembly of Human Î²-Cells and Human Umbilical Vein Endothelial Cells Using Magnetic Levitation. Tissue Engineering - Part A, 2020, 26, 387-399.	3.1	39
23	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.	3.3	15
24	Fluorescence lifetime metabolic mapping of hypoxiaâ€induced damage in pancreatic pseudoâ€islets. Journal of Biophotonics, 2020, 13, e202000375.	2.3	8
25	Enhancing Delivery of Smallâ€Moleculeâ€and Cellâ€Based Therapies for Ovarian Cancer Using Advanced Delivery Strategies. Advanced Therapeutics, 2020, 3, 2000144.	3.2	1
26	Development of a Sustained Release Nano-In-Gel Delivery System for the Chemotactic and Angiogenic Growth Factor Stromal-Derived Factor 1Î±. Pharmaceutics, 2020, 12, 513.	4.5	9
27	Pre-culture of mesenchymal stem cells within RGD-modified hyaluronic acid hydrogel improves their resilience to ischaemic conditions. Acta Biomaterialia, 2020, 107, 78-90.	8.3	22
28	Therapeutic Resevoirs: Implantable Therapeutic Reservoir Systems for Diverse Clinical Applications in Large Animal Models (Adv. Healthcare Mater. 11/2020). Advanced Healthcare Materials, 2020, 9, 2070035.	7.6	2
29	Cardiac responses to biomaterials. , 2020, , 573-599.		2
30	Rapid bone repair with the recruitment of CD206+M2-like macrophages using non-viral scaffold-mediated miR-133a inhibition of host cells. Acta Biomaterialia, 2020, 109, 267-279.	8.3	30
31	Implantable Therapeutic Reservoir Systems for Diverse Clinical Applications in Large Animal Models. Advanced Healthcare Materials, 2020, 9, e2000305.	7.6	13
32	Sustained Release of Vascular Endothelial Growth Factor from Poly(Îµ-caprolactone-PEG-Îµ-caprolactone)-<i>b</i>-Poly(<scp>l</scp>-lactide) Multiblock Copolymer Microspheres. ACS Omega, 2019, 4, 11481-11492.	3.5	21
33	An actuatable soft reservoir modulates host foreign body response. Science Robotics, 2019, 4, .	17.6	49
34	Insulin-like growth factor-1 (IGF-1) poly (lactic-co-glycolic acid) (PLGA) microparticles â€" development, characterisation, and <i>in vitro</i> assessment of bioactivity for cardiac applications. Journal of Microencapsulation, 2019, 36, 267-277.	2.8	10
35	A bioresorbable biomaterial carrier and passive stabilization device to improve heart function post-myocardial infarction. Materials Science and Engineering C, 2019, 103, 109751.	7.3	24
36	RGD-decorated cholesterol stabilized polyplexes for targeted siRNA delivery to glioblastoma cells. Drug Delivery and Translational Research, 2019, 9, 679-693.	5.8	7

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37	Enhancing medial layer recellularization of tissue-engineered blood vessels using radial microchannels. Regenerative Medicine, 2019, 14, 1013-1028.	1.7	3
38	An injectable alginate/extra cellular matrix (ECM) hydrogel towards acellular treatment of heart failure. Drug Delivery and Translational Research, 2019, 9, 1-13.	5.8	47
39	Harnessing an Inhibitory Role of miR-16 in Osteogenesis by Human Mesenchymal Stem Cells for Advanced Scaffold-Based Bone Tissue Engineering. Tissue Engineering - Part A, 2019, 25, 24-33.	3.1	37
40	Optimization of cell growth on palmitoylâ€hyaluronan knitted scaffolds developed for tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2018, 106, 1488-1499.	4.0	9
41	A collagen cardiac patch incorporating alginate microparticles permits the controlled release of hepatocyte growth factor and insulin-like growth factor-1 to enhance cardiac stem cell migration and proliferation. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e384-e394.	2.7	42
42	ANGI-08. TARGETING THE RhoGEF BETA-PIX TO ENHANCE THE ACTIVITY OF BEVACIZUMAB IN GLIOBLASTOMA: A NANOPARTICLE MEDIATED GENE SILENCING APPROACH. Neuro-Oncology, 2018, 20, vi29-vi30.	1.2	0
43	<u>A</u>dvanced <u>M</u>aterial <u>Cath</u>eter (AMCath), a minimally invasive endocardial catheter for the delivery of fast-gelling covalently cross-linked hyaluronic acid hydrogels. Journal of Biomaterials Applications, 2018, 33, 681-692.	2.4	19
44	Hydrogels in adipose tissue engineeringâ€"Potential application in postâ€mastectomy breast regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 2234-2247.	2.7	27
45	Towards Alternative Approaches for Coupling of a Soft Robotic Sleeve to the Heart. Annals of Biomedical Engineering, 2018, 46, 1534-1547.	2.5	31
46	Sustained release of targeted cardiac therapy with a replenishable implanted epicardial reservoir. Nature Biomedical Engineering, 2018, 2, 416-428.	22.5	70
47	Olfactory Derived Stem Cells Delivered in a Biphasic Conduit Promote Peripheral Nerve Repair In Vivo. Stem Cells Translational Medicine, 2017, 6, 1894-1904.	3.3	21
48	Advances in polymeric islet cell encapsulation technologies to limit the foreign body response and provide immunoisolation. Current Opinion in Pharmacology, 2017, 36, 66-71.	3.5	27
49	Direct UV-Triggered Thiolâ€"ene Cross-Linking of Electrospun Polyester Fibers from Unsaturated Poly(macrolactone)s and Their Drug Loading by Solvent Swelling. Biomacromolecules, 2017, 18, 4292-4298.	5.4	21
50	Fabrication of biodegradable textile scaffold based on hydrophobized hyaluronic acid. International Journal of Biological Macromolecules, 2017, 95, 903-909.	7.5	19
51	A stimuli responsive liposome loaded hydrogel provides flexible on-demand release of therapeutic agents. Acta Biomaterialia, 2017, 48, 110-119.	8.3	57
52	An <i>in vitro</i> investigation to assess procedure parameters for injecting therapeutic hydrogels into the myocardium. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 2618-2629.	3.4	9
53	In vitroVascularization: Tissue Engineering Constructs. , 2017, , 723-742.		0
54	Nanomedicines for advanced cancer treatments: Transitioning towards responsive systems. International Journal of Pharmaceutics, 2016, 515, 132-164.	5.2	83

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55	Effect of collagenâ€glycosaminoglycan scaffold pore size on matrix mineralization and cellular behavior in different cell types. Journal of Biomedical Materials Research - Part A, 2016, 104, 291-304.	4.0	68
56	Next generation bone tissue engineering: non-viral miR-133a inhibition using collagen-nanohydroxyapatite scaffolds rapidly enhances osteogenesis. Scientific Reports, 2016, 6, 27941.	3.3	68
57	Biomaterialâ€Enhanced Cell and Drug Delivery: Lessons Learned in the Cardiac Field and Future Perspectives. Advanced Materials, 2016, 28, 5648-5661.	21.0	63
58	Delivering Nucleicâ€Acid Based Nanomedicines on Biomaterial Scaffolds for Orthopedic Tissue Repair: Challenges, Progress and Future Perspectives. Advanced Materials, 2016, 28, 5447-5469.	21.0	95
59	Investigating the effect of hypoxic culture on the endothelial differentiation of human amniotic fluidâ€derived stem cells. Journal of Anatomy, 2015, 227, 767-780.	1.5	6
60	A novel collagen-nanohydroxyapatite microRNA-activated scaffold for tissue engineering applications capable of efficient delivery of both miR-mimics and antagomiRs to human mesenchymal stem cells. Journal of Controlled Release, 2015, 200, 42-51.	9.9	85
61	Spatiotemporal delivery of small molecule therapeutics using a thermosensitive liposome loaded hydrogel. Journal of Controlled Release, 2015, 213, e28-e29.	9.9	1
62	The pre-vascularisation of a collagen-chondroitin sulphate scaffold using human amniotic fluid-derived stem cells to enhance and stabilise endothelial cell-mediated vessel formation. Acta Biomaterialia, 2015, 26, 263-273.	8.3	26
63	Drug and cell delivery for cardiac regeneration. Advanced Drug Delivery Reviews, 2015, 84, 85-106.	13.7	170
64	Combinatorial Gene Therapy Accelerates Bone Regeneration: Nonâ€Viral Dual Delivery of VEGF and BMP2 in a Collagenâ€Nanohydroxyapatite Scaffold. Advanced Healthcare Materials, 2015, 4, 223-227.	7.6	151
65	Enhanced delivery of microRNA mimics to cardiomyocytes using ultrasound responsive microbubbles reverses hypertrophy in an in-vitro model. Technology and Health Care, 2014, 22, 37-51.	1.2	23
66	An Experimental Investigation of the Effect of Mechanical and Biochemical Stimuli on Cell Migration Within a Decellularized Vascular Construct. Annals of Biomedical Engineering, 2014, 42, 2029-2038.	2.5	12
67	The application of a thermoresponsive chitosan/Î²â€GP gel to enhance cell repopulation of decellularized vascular scaffolds. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 1700-1710.	3.4	20
68	Hyperthermiaâ€Induced Drug Delivery from Thermosensitive Liposomes Encapsulated in an Injectable Hydrogel for Local Chemotherapy. Advanced Healthcare Materials, 2014, 3, 854-859.	7.6	64
69	Comparison of biomaterial delivery vehicles for improving acute retention of stem cells in the infarcted heart. Biomaterials, 2014, 35, 6850-6858.	11.4	140
70	Encapsulation of cardiac stem cells in superoxide dismutase-loaded alginate prevents doxorubicin-mediated toxicity. Journal of Tissue Engineering and Regenerative Medicine, 2013, 7, 302-311.	2.7	18
71	Orchestrating osteogenic differentiation of mesenchymal stem cellsâ€"identification of placental growth factor as a mechanosensitive gene with a pro-osteogenic role. Stem Cells, 2013, 31, 2420-2431.	3.2	43
72	The delayed addition of human mesenchymal stem cells to pre-formed endothelial cell networks results in functional vascularization of a collagenâ€"glycosaminoglycan scaffold in vivo. Acta Biomaterialia, 2013, 9, 9303-9316.	8.3	111

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73	Supramolecular Hydrogels with Reverse Thermal Gelation Properties from (Oligo)tyrosine Containing Block Copolymers. Biomacromolecules, 2013, 14, 200-206.	5.4	103
74	Optimum Parameters for Freeze-Drying Decellularized Arterial Scaffolds. Tissue Engineering - Part C: Methods, 2013, 19, 981-990.	2.1	35
75	High levels of ephrinB2 over-expression increases the osteogenic differentiation of human mesenchymal stem cells and promotes enhanced cell mediated mineralisation in a polyethyleneimine-ephrinB2 gene-activated matrix. Journal of Controlled Release, 2013, 165, 173-182.	9.9	52
76	Towards a Clinically Applicable Tissue Engineered Vascular Graft. , 2013, , .		0
77	Non-viral gene-activated matrices. Organogenesis, 2013, 9, 22-28.	1.2	40
78	Mesenchymal stem cells to augment therapeutic angiogenesis in hind-limb ischemia models: how important is their source?. Stem Cell Research and Therapy, 2013, 4, 131.	5.5	5
79	Injection techniques for bulk cell seeding decellularised vascular scaffolds. International Journal of Nano and Biomaterials, 2012, 4, 96.	0.1	3
80	The development of non-viral gene-activated matrices for bone regeneration using polyethyleneimine (PEI) and collagen-based scaffolds. Journal of Controlled Release, 2012, 158, 304-311.	9.9	93
81	Development of a thermoresponsive chitosan gel combined with human mesenchymal stem cells and desferrioxamine as a multimodal pro-angiogenic therapeutic for the treatment of critical limb ischaemia. Journal of Controlled Release, 2012, 161, 73-80.	9.9	64
82	Mechanical characterization of a customized decellularized scaffold for vascular tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 8, 58-70.	3.1	85
83	Innovative Collagen Nanoâ€Hydroxyapatite Scaffolds Offer a Highly Efficient Nonâ€Viral Gene Delivery Platform for Stem Cellâ€Mediated Bone Formation. Advanced Materials, 2012, 24, 749-754.	21.0	182
84	RANKL and OPG activity is regulated by injury size in networks of osteocyte-like cells. Bone, 2011, 48, 182-188.	2.9	66
85	Temporal and Spatial Changes in Cartilage-Matrix-Specific Gene Expression in Mesenchymal Stem Cells in Response to Dynamic Compression. Tissue Engineering - Part A, 2011, 17, 3085-3093.	3.1	51
86	Towards in vitro vascularisation of collagen-GAG scaffolds. , 2011, 21, 15-30.		70
87	Mesenchymal Stem Cells Overexpressing Ephrin-B2 Rapidly Adopt an Early Endothelial Phenotype with Simultaneous Reduction of Osteogenic Potential. Tissue Engineering - Part A, 2010, 16, 2755-2768.	3.1	36
88	The healing of bony defects by cell-free collagen-based scaffolds compared to stem cell-seeded tissue engineered constructs. Biomaterials, 2010, 31, 9232-9243.	11.4	204
89	The Scissors Model of Microcrack Detection in Bone: Work in Progress. Materials Research Society Symposia Proceedings, 2010, 1274, 1.	0.1	3
90	Bone Marrowâ€"Derived Mesenchymal Stem Cells Promote Angiogenic Processes in a Time- and Dose-Dependent Manner<i>In Vitro</i>. Tissue Engineering - Part A, 2009, 15, 2459-2470.	3.1	127

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91	Gene-Eluting Stents: Comparison of Adenoviral and Adeno- Associated Viral Gene Delivery to the Blood Vessel Wall In Vivo. Human Gene Therapy, 2006, 17, 741-750.	2.7	48
92	In Vitro Vascularization: Tissue Engineering Constructs. , 0, , 4043-4062.		0