Paul D Dalton

List of Publications by Year
in descending order

127 papers	11,704 citations	36691 53 h-index	32181 105 g-index
130 all docs	130 docs citations	130 times ranked	11370 citing authors

#	Article	IF	Citations
1	Prevascularized Retrievable Hybrid Implant to Enhance Function of Subcutaneous Encapsulated Islets. Tissue Engineering - Part A, 2022, 28, 212-224.	1.6	21
2	Highly Elastic Scaffolds Produced by Melt Electrowriting of Poly(Lâ€lactideâ€<i>co</i>â€Îµâ€caprolactone). Advanced Materials Technologies, 2022, 7, 2100508.	3.0	15
3	Hollowâ€Fiber Melt Electrowriting Using a 3Dâ€Printed Coaxial Nozzle. Advanced Engineering Materials, 2022, 24, 2100750.	1.6	6
4	The Multiweek Thermal Stability of Medicalâ€Grade Poly(Îµâ€caprolactone) During Melt Electrowriting. Small, 2022, 18, e2104193.	5.2	20
5	Processing of Poly(lacticâ€<i>co</i>â€glycolic acid) Microfibers via Melt Electrowriting. Macromolecular Chemistry and Physics, 2022, 223, .	1.1	6
6	Melt electrowriting to produce microfiber fragments. Polymers for Advanced Technologies, 2022, 33, 1989-1992.	1.6	4
7	Designing with Circular Arc Toolpaths to Increase the Complexity of Melt Electrowriting. Advanced Materials Technologies, 2022, 7, .	3.0	12
8	The Synergy of Biomimetic Design Strategies for Tissue Constructs. Advanced Functional Materials, 2022, 32, .	7.8	12
9	Hydrophilic (AB) n Segmented Copolymers for Melt Extrusionâ€Based Additive Manufacturing. Macromolecular Chemistry and Physics, 2021, 222, 2000265.	1.1	1
10	Polymers for Melt Electrowriting. Advanced Healthcare Materials, 2021, 10, e2001232.	3.9	123
11	Fiber Bridging during Melt Electrowriting of Poly(Îµâ€Caprolactone) and the Influence of Fiber Diameter and Wall Height. Macromolecular Materials and Engineering, 2021, 306, 2000685.	1.7	30
12	Design of Suspended Melt Electrowritten Fiber Arrays for Schwann Cell Migration and Neurite Outgrowth. Macromolecular Bioscience, 2021, 21, e2000439.	2.1	10
13	Convergence of Machine Vision and Melt Electrowriting. Advanced Materials, 2021, 33, e2100519.	11.1	40
14	Melt electrowriting of poly(vinylidene fluorideâ€<i>co</i>â€trifluoroethylene). Polymer International, 2021, 70, 1725-1732.	1.6	6
15	Melt electrowriting of poly(vinylidene difluoride) using a heated collector. Polymers for Advanced Technologies, 2021, 32, 4951-4955.	1.6	7
16	An initiator- and catalyst-free hydrogel coating process for 3D printed medical-grade poly(Îµ-caprolactone). Beilstein Journal of Organic Chemistry, 2021, 17, 2095-2101.	1.3	2
17	Spinal Cord Neuronal Network Formation in a 3D Printed Reinforced Matrixâ€"A Model System to Study Disease Mechanisms. Advanced Healthcare Materials, 2021, 10, e2100830.	3.9	12
18	A novel in vitro assay for peripheral nerve-related cell migration that preserves both extracellular matrix-derived molecular cues and nanofiber-derived topography. Journal of Neuroscience Methods, 2021, 361, 109289.	1.3	4

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19	Melt Electrowriting of Amphiphilic Physically Crosslinked Segmented Copolymers. Macromolecular Chemistry and Physics, 2021, 222, 2100259.	1.1	3
20	Production of Scaffolds Using Melt Electrospinning Writing and Cell Seeding. Methods in Molecular Biology, 2021, 2147, 111-124.	0.4	6
21	Brain and Breast Cancer Cells with PTEN Loss of Function Reveal Enhanced Durotaxis and RHOB Dependent Amoeboid Migration Utilizing 3D Scaffolds and Aligned Microfiber Tracts. Cancers, 2021, 13, 5144.	1.7	4
22	Nanofibers and Nanostructured Scaffolds for Nervous System Lesions. Neuromethods, 2021, , 61-101.	0.2	2
23	A versatile biomaterial ink platform for the melt electrowriting of chemically-crosslinked hydrogels. Materials Horizons, 2020, 7, 928-933.	6.4	44
24	Precisely defined fiber scaffolds with 40 Î¼m porosity induce elongation driven M2-like polarization of human macrophages. Biofabrication, 2020, 12, 025007.	3.7	109
25	Hydrogels with Cell Adhesion Peptideâ€Decorated Channel Walls for Cell Guidance. Macromolecular Rapid Communications, 2020, 41, 2000295.	2.0	7
26	Melt Electrospinning of Nanofibers from Medicalâ€Grade Poly(Îµâ€Caprolactone) with a Modified Nozzle. Small, 2020, 16, e2003471.	5.2	35
27	Accurate Prediction of Melt Electrowritten Laydown Patterns from Simple Geometrical Considerations. Advanced Materials Technologies, 2020, 5, 2000772.	3.0	42
28	Melt Electrowritten In Vitro Radial Device to Study Cell Growth and Migration. Advanced Biology, 2020, 4, e2000077.	3.0	18
29	Designing Outside the Box: Unlocking the Geometric Freedom of Melt Electrowriting using Microscale Layer Shifting. Advanced Materials, 2020, 32, e2001874.	11.1	79
30	Cortical Neurons form a Functional Neuronal Network in a 3D Printed Reinforced Matrix. Advanced Healthcare Materials, 2020, 9, e1901630.	3.9	22
31	Advances in Hybrid Fabrication toward Hierarchical Tissue Constructs. Advanced Science, 2020, 7, 1902953.	5.6	86
32	The Next Frontier in Melt Electrospinning: Taming the Jet. Advanced Functional Materials, 2019, 29, 1904664.	7.8	173
33	Extracellular Matrix-Modified Fiber Scaffolds as a Proadipogenic Mesenchymal Stromal Cell Delivery Platform. ACS Biomaterials Science and Engineering, 2019, 5, 6655-6666.	2.6	15
34	The Impact of Melt Electrowritten Scaffold Design on Porosity Determined by X-Ray Microtomography. Tissue Engineering - Part C: Methods, 2019, 25, 367-379.	1.1	37
35	Permanent Hydrophilization and Generic Bioactivation of Melt Electrowritten Scaffolds. Advanced Healthcare Materials, 2019, 8, e1801544.	3.9	23
36	Tailored Melt Electrowritten Scaffolds for the Generation of Sheetâ€Like Tissue Constructs from Multicellular Spheroids. Advanced Healthcare Materials, 2019, 8, e1801326.	3.9	48

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37	Fabrication of arbitrary three-dimensional suspended hollow microstructures in transparent fused silica glass. Nature Communications, 2019, 10, 1439.	5.8	76
38	Melt electrowriting of electroactive poly(vinylidene difluoride) fibers. Polymer International, 2019, 68, 735-745.	1.6	42
39	Design and Development of a Three-Dimensional Printing High-Throughput Melt Electrowriting Technology Platform. 3D Printing and Additive Manufacturing, 2019, 6, 82-90.	1.4	32
40	Printomics: the high-throughput analysis of printing parameters applied to melt electrowriting. Biofabrication, 2019, 11, 025004.	3.7	53
41	3D Electrophysiological Measurements on Cells Embedded within Fiberâ€Reinforced Matrigel. Advanced Healthcare Materials, 2019, 8, e1801226.	3.9	24
42	Melt Electrowriting of Thermoplastic Elastomers. Macromolecular Rapid Communications, 2018, 39, e1800055.	2.0	52
43	Melt Electrospinning Writing of Highly Ordered Large Volume Scaffold Architectures. Advanced Materials, 2018, 30, e1706570.	11.1	191
44	Mechanical behavior of a soft hydrogel reinforced with three-dimensional printed microfibre scaffolds. Scientific Reports, 2018, 8, 1245.	1.6	116
45	Melt electrowriting below the critical translation speed to fabricate crimped elastomer scaffolds with non-linear extension behaviour mimicking that of ligaments and tendons. Acta Biomaterialia, 2018, 72, 110-120.	4.1	83
46	3D printing strategies for peripheral nerve regeneration. Biofabrication, 2018, 10, 032001.	3.7	75
47	Spatial Patterning of Hydrogels via 3D Covalent Transfer Stamping from a Fugitive Ink. Macromolecular Rapid Communications, 2018, 39, 1700564.	2.0	2
48	Outâ€ofâ€Plane 3Dâ€Printed Microfibers Improve the Shear Properties of Hydrogel Composites. Small, 2018, 14, 1702773.	5.2	53
49	Dimensionâ€Based Design of Melt Electrowritten Scaffolds. Small, 2018, 14, e1800232.	5.2	167
50	Design and fabrication of melt electrowritten tubes using intuitive software. Materials and Design, 2018, 155, 46-58.	3.3	56
51	Additive manufacturing of polymer melts for implantable medical devices and scaffolds. Biofabrication, 2017, 9, 012002.	3.7	145
52	Engineering a humanized bone organ model in mice to study bone metastases. Nature Protocols, 2017, 12, 639-663.	5.5	91
53	Additive manufacturing with polypropylene microfibers. Materials Science and Engineering C, 2017, 77, 883-887.	3.8	71
54	Endosteal-like extracellular matrix expression on melt electrospun written scaffolds. Acta Biomaterialia, 2017, 52, 145-158.	4.1	58

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55	Melt electrowriting with additive manufacturing principles. Current Opinion in Biomedical Engineering, 2017, 2, 49-57.	1.8	150
56	Melt Electrospinning Writing of Three-dimensional Poly(ε-caprolactone) Scaffolds with Controllable Morphologies for Tissue Engineering Applications. Journal of Visualized Experiments, 2017, , .	0.2	36
57	Electrospinning Technology: Cellulose and Cellulose Derivatives. , 2017, , 506-546.		0
58	Fibre pulsing during melt electrospinning writing. BioNanoMaterials, 2016, 17, .	1.4	109
59	Biofabrication: reappraising the definition of an evolving field. Biofabrication, 2016, 8, 013001.	3.7	523
60	Melt electrospinning today: An opportune time for an emerging polymer process. Progress in Polymer Science, 2016, 56, 116-166.	11.8	381
61	Additive Manufacturing of a Photo-Cross-Linkable Polymer via Direct Melt Electrospinning Writing for Producing High Strength Structures. Biomacromolecules, 2016, 17, 208-214.	2.6	85
62	Selective isolation and characterization of primary cells from normal breast and tumors reveal plasticity of adipose derived stem cells. Breast Cancer Research, 2016, 18, 32.	2.2	43
63	Hierarchically Structured Porous Poly(2â€•oxazoline) Hydrogels. Macromolecular Rapid Communications, 2016, 37, 93-99.	2.0	33
64	Melt electrospinning onto cylinders: effects of rotational velocity and collector diameter on morphology of tubular structures. Polymer International, 2015, 64, 1086-1095.	1.6	86
65	Melt Electrospinning and Its Technologization in Tissue Engineering. Tissue Engineering - Part B: Reviews, 2015, 21, 187-202.	2.5	180
66	Peptide-functionalized polymeric nanoparticles for active targeting of damaged tissue in animals with experimental autoimmune encephalomyelitis. Neuroscience Letters, 2015, 602, 126-132.	1.0	21
67	Additive manufacturing of scaffolds with sub-micron filaments via melt electrospinning writing. Biofabrication, 2015, 7, 035002.	3.7	296
68	Reinforcement of hydrogels using three-dimensionally printed microfibres. Nature Communications, 2015, 6, 6933.	5.8	567
69	Chapter 6. Design and Fabrication of Scaffolds <i>via</i> Melt Electrospinning for Applications in Tissue Engineering. RSC Polymer Chemistry Series, 2015, , 100-120.	0.1	9
70	A tissue-engineered humanized xenograft model of human breast cancer metastasis to bone. DMM Disease Models and Mechanisms, 2014, 7, 299-309.	1.2	114
71	Tissue Engineering of the Nervous System. , 2014, , 583-625.		3
72	Scaffold Design and Fabrication. , 2014, , 311-346.		32

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73	Melt electrospinning of poly(Îµ-caprolactone) scaffolds: Phenomenological observations associated with collection and direct writing. Materials Science and Engineering C, 2014, 45, 698-708.	3.8	139
74	Host reaction to poly(2-hydroxyethyl methacrylate) scaffolds in a small spinal cord injury model. Journal of Materials Science: Materials in Medicine, 2013, 24, 2001-2011.	1.7	21
75	Microengineered PEG Hydrogels: 3D Scaffolds for Guided Cell Growth. Macromolecular Bioscience, 2013, 13, 562-572.	2.1	13
76	Electrospinning and additive manufacturing: converging technologies. Biomaterials Science, 2013, 1, 171-185.	2.6	207
77	Dermal fibroblast infiltration of poly(Îµ-caprolactone) scaffolds fabricated by melt electrospinning in a direct writing mode. Biofabrication, 2013, 5, 025001.	3.7	172
78	Using extracellular matrix for regenerative medicine in the spinal cord. Biomaterials, 2013, 34, 4945-4955.	5.7	83
79	Electrospinning for Regenerative Medicine. , 2013, , 539-592.		0
80	Design and Fabrication of Tubular Scaffolds via Direct Writing in a Melt Electrospinning Mode. Biointerphases, 2012, 7, 13.	0.6	176
81	Soluble Axoplasm Enriched from Injured CNS Axons Reveals the Early Modulation of the Actin Cytoskeleton. PLoS ONE, 2012, 7, e47552.	1.1	26
82	Design, fabrication and characterization of PCL electrospun scaffoldsâ€"a review. Journal of Materials Chemistry, 2011, 21, 9419.	6.7	499
83	Degradable polyester scaffolds with controlled surface chemistry combining minimal protein adsorption with specific bioactivation. Nature Materials, 2011, 10, 67-73.	13.3	298
84	Melt Electrospinning. Chemistry - an Asian Journal, 2011, 6, 44-56.	1.7	260
85	Direct Writing By Way of Melt Electrospinning. Advanced Materials, 2011, 23, 5651-5657.	11.1	622
86	Polymersomes, smaller than you think: ferrocene as a TEM probe to determine core structure. Journal of Nanoparticle Research, 2010, 12, 1997-2001.	0.8	24
87	Melt electrospinning of polycaprolactone and its blends with poly(ethylene glycol). Polymer International, 2010, 59, 1558-1562.	1.6	90
88	Neural interactions with materials. Frontiers in Bioscience - Landmark, 2009, Volume, 769.	3.0	33
89	SnapShot: Polymer Scaff olds for Tissue Engineering. Biomaterials, 2009, 30, 701-702.	5.7	37
90	Deposition of Electrospun Fibers on Reactive Substrates for<i>In Vitro</i>Investigations. Tissue Engineering - Part C: Methods, 2009, 15, 77-85.	1.1	48

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91	Human neural cell interactions with orientated electrospun nanofibers <i>in vitro</i>. Nanomedicine, 2009, 4, 11-30.	1.7	99
92	Biofunctionalized poly(ethylene glycol)-block-poly(Îµ-caprolactone) nanofibers for tissue engineering. Journal of Materials Science: Materials in Medicine, 2008, 19, 1479-1484.	1.7	44
93	Structure and Properties of Ureaâ€Crosslinked Star Poly[(ethylene oxide)â€<i>ran</i>â€(propylene oxide)] Hydrogels. Macromolecular Bioscience, 2008, 8, 923-931.	2.1	44
94	Control of protein adsorption on functionalized electrospun fibers. Biotechnology and Bioengineering, 2008, 101, 609-621.	1.7	78
95	Patterned melt electrospun substrates for tissue engineering. Biomedical Materials (Bristol), 2008, 3, 034109.	1.7	123
96	Scaffold design and fabrication. , 2008, , 403-454.		32
97	Tissue engineering of the nervous system. , 2008, , 611-647.		11
98	Guidance of glial cell migration and axonal growth on electrospun nanofibers of poly-Îµ-caprolactone and a collagen/poly-Îµ-caprolactone blend. Biomaterials, 2007, 28, 3012-3025.	5.7	667
99	Electrospinning of polymer melts: Phenomenological observations. Polymer, 2007, 48, 6823-6833.	1.8	302
100	Direct in Vitro Electrospinning with Polymer Melts. Biomacromolecules, 2006, 7, 686-690.	2.6	197
101	Matrix inclusion within synthetic hydrogel guidance channels improves specific supraspinal and local axonal regeneration after complete spinal cord transection. Biomaterials, 2006, 27, 519-533.	5.7	189
102	Melt electrospinning of poly-(ethylene glycol-block-Îµ-caprolactone). Biotechnology Journal, 2006, 1, 998-1006.	1.8	97
103	Electrospinning with dual collection rings. Polymer, 2005, 46, 611-614.	1.8	234
104	Synthetic Hydrogel Guidance Channels Facilitate Regeneration of Adult Rat Brainstem Motor Axons after Complete Spinal Cord Transection. Journal of Neurotrauma, 2004, 21, 789-804.	1.7	168
105	Fiber templating of poly(2-hydroxyethyl methacrylate) for neural tissue engineering. Biomaterials, 2003, 24, 4265-4272.	5.7	171
106	Scaffolds for Tissue Engineering. MRS Bulletin, 2003, 28, 301-306.	1.7	108
107	Growth factor enhancement of peripheral nerve regeneration through a novel synthetic hydrogel tube. Journal of Neurosurgery, 2003, 99, 555-565.	0.9	168
108	Manufacture of poly(2-hydroxyethyl methacrylate-co-methyl methacrylate) hydrogel tubes for use as nerve guidance channels. Biomaterials, 2002, 23, 3843-3851.	5.7	214

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109	Processing of Polymer Scaffolds. , 2002, , 725-731.		1
110	Investigating the Properties of Novel Poly(2-hydroxyethyl methacrylate-co-methyl methacrylate) Hydrogel Hollow Fiber Membranes. Chemistry of Materials, 2001, 13, 4087-4093.	3.2	39
111	Tissue engineered alternatives to nerve transplantation for repair of peripheral nervous system injuries. Transplantation Proceedings, 2001, 33, 612-615.	0.3	20
112	Creating porous tubes by centrifugal forces for soft tissue application. Biomaterials, 2001, 22, 2661-2669.	5.7	47
113	Hydrophilic sponges based on 2-hydroxyethyl methacrylate: part VII: modulation of sponge characteristics by changes in reactivity and hydrophilicity of crosslinking agents. Journal of Materials Science: Materials in Medicine, 2000, 11, 319-325.	1.7	36
114	Artificial cornea. Progress in Polymer Science, 1998, 23, 447-473.	11.8	105
115	The use of hydrophilic polymers as artificial vitreous. Progress in Polymer Science, 1998, 23, 475-508.	11.8	76
116	Biodegradationin vitro and retention in the rabbit eye of crosslinked poly(1-vinyl-2-pyrrolidinone) hydrogel as a vitreous substitute. , 1998, 39, 650-659.		86
117	Clinical results of implantation of the Chirila keratoprosthesis in rabbits. British Journal of Ophthalmology, 1998, 82, 18-25.	2.1	34
118	Hydrophilic Sponges Based on 2-Hydroxyethyl Methacrylate. III. Effect of Incorporating a Hydrophilic Crosslinking Agent on the Equilibrium Water Content and Pore Structure. Polymer International, 1997, 42, 45-56.	1.6	49
119	Keratoprosthesis: preliminary results of an artificial corneal button as a fullâ€thickness implant in the rabbit model. Australian and New Zealand Journal of Ophthalmology, 1996, 24, 297-303.	0.4	24
120	Crosslinked poly (1-vinyl-2-pyrrolidinone) as a vitreous substitute. , 1996, 30, 441-448.		57
121	Poly(l-vinyl-2-pyrrolidinone) hydrogels as vitreous substitutes: Histopathological evaluation in the animal eye. Journal of Biomaterials Science, Polymer Edition, 1996, 7, 685-696.	1.9	85
122	Preliminary Evaluation of a Hydrogel Core-and-Skirt Keratoprosthesis in the Rabbit Cornea. Journal of Refractive Surgery, 1996, 12, 525-529.	1.1	40
123	Oscillatory shear experiments as criteria for potential vitreous substitutes. Polymer Gels and Networks, 1995, 3, 429-444.	0.6	28
124	The Use of Fourier Transform Infrared Spectrometry for Monitoring the Retention of Polymers in the Vitreous Humour. Bio-Medical Materials and Engineering, 1995, 5, 185-193.	0.4	2
125	Interpenetrating polymer network (IPN) as a permanent joint between the elements of a new type of artificial cornea. Journal of Biomedical Materials Research Part B, 1994, 28, 745-753.	3.0	95
126	Electrospinning Technology: Cellulose and Cellulose Derivatives. , 0, , 3218-3258.		0

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127	In Situ Characterization of Meltâ€"Electrowritten Scaffolds in 3D Using Optical Coherence Tomography. Advanced Photonics Research, 0, , 2100274.	1.7	1