Tim R Dargaville

List of Publications by Year
in descending order

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84	4,669	136740 32	98622 67
papers	citations	h-index	g-index

87	87	87	6947
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Design, fabrication and characterization of PCL electrospun scaffoldsâ€”a review. Journal of Materials Chemistry, 2011, 21, 9419.	6.7	499
2	Degradation mechanisms of polycaprolactone in the context of chemistry, geometry and environment. Progress in Polymer Science, 2019, 96, 1-20.	11.8	366
3	Electrospraying of polymers with therapeutic molecules: State of the art. Progress in Polymer Science, 2012, 37, 1510-1551.	11.8	363
4	Sensors and imaging for wound healing: A review. Biosensors and Bioelectronics, 2013, 41, 30-42.	5.3	352
5	High energy radiation grafting of fluoropolymers. Progress in Polymer Science, 2003, 28, 1355-1376.	11.8	330
6	Electrospraying, a Reproducible Method for Production of Polymeric Microspheres for Biomedical Applications. Polymers, 2011, 3, 131-149.	2.0	262
7	Electrospinning and additive manufacturing: converging technologies. Biomaterials Science, 2013, 1, 171-185.	2.6	207
8	Discovering Cell-Adhesion Peptides in Tissue Engineering: Beyond RGD. Trends in Biotechnology, 2018, 36, 372-383.	4.9	194
9	Dermal fibroblast infiltration of poly(Îµ-caprolactone) scaffolds fabricated by melt electrospinning in a direct writing mode. Biofabrication, 2013, 5, 025001.	3.7	172
10	Chitosanâ€“collagen scaffolds with nano/microfibrous architecture for skin tissue engineering. Journal of Biomedical Materials Research - Part A, 2013, 101, 3482-3492.	2.1	88
11	Poly(2-oxazoline) Hydrogels for Controlled Fibroblast Attachment. Biomacromolecules, 2013, 14, 2724-2732.	2.6	86
12	Poly(2â€oxazoline) Hydrogel Monoliths via Thiolâ€ene Coupling. Macromolecular Rapid Communications, 2012, 33, 1695-1700.	2.0	75
13	Scaffolds for Growth Factor Delivery as Applied to Bone Tissue Engineering. International Journal of Polymer Science, 2012, 2012, 1-25.	1.2	73
14	Additive manufacturing with polypropylene microfibers. Materials Science and Engineering C, 2017, 77, 883-887.	3.8	71
15	Recent advances in dermal wound healing: biomedical device approaches. Expert Review of Medical Devices, 2010, 7, 143-154.	1.4	70
16	Poly(2â€oxazoline) Hydrogels: Stateâ€ofâ€theâ€Art and Emerging Applications. Macromolecular Bioscience, 2018, 18, e1800070.	2.1	70
17	Emulating Human Tissues and Organs: A Bioprinting Perspective Toward Personalized Medicine. Chemical Reviews, 2020, 120, 11093-11139.	23.0	61
18	Opinion to address the personal protective equipment shortage in the global community during the COVID-19 outbreak. Polymer Degradation and Stability, 2020, 176, 109162.	2.7	55

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19	Evaluation of piezoelectric poly(vinylidene fluoride) polymers for use in space environments. I. Temperature limitations. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1310-1320.	2.4	53
20	Extended use of face masks during the COVID-19 pandemic - Thermal conditioning and spray-on surface disinfection. Polymer Degradation and Stability, 2020, 179, 109251.	2.7	51
21	Modified alumina nanofiber membranes for protein separation. Separation and Purification Technology, 2013, 120, 239-244.	3.9	49
22	Tailored Melt Electrowritten Scaffolds for the Generation of Sheetâ€Like Tissue Constructs from Multicellular Spheroids. Advanced Healthcare Materials, 2019, 8, e1801326.	3.9	48
23	3D printed dual macro-, microscale porous network as a tissue engineering scaffold with drug delivering function. Biofabrication, 2019, 11, 035014.	3.7	47
24	Physico-chemical/biological properties of tripolyphosphate cross-linked chitosan based nanofibers. Materials Science and Engineering C, 2013, 33, 1446-1454.	3.8	46
25	Attenuation of protease activity in chronic wound fluid with bisphosphonate-functionalised hydrogels. Biomaterials, 2008, 29, 1785-1795.	5.7	45
26	Multireactive Poly(2-oxazoline) Nanofibers through Electrospinning with Crosslinking on the Fly. ACS Macro Letters, 2016, 5, 676-681.	2.3	41
27	Controlling microencapsulation and release of micronized proteins using poly(ethylene glycol) and electrospraying. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 87, 366-377.	2.0	39
28	Poly(2-oxazoline) block copolymer nanoparticles for curcumin loading and delivery to cancer cells. European Polymer Journal, 2017, 93, 682-694.	2.6	36
29	The Adsorption of Multinuclear Phenolic Compounds on Activated Carbon. Journal of Colloid and Interface Science, 1996, 182, 17-25.	5.0	35
30	Amphiphilic Silicone Architectures via Anaerobic Thiolâ€“Ene Chemistry. Organic Letters, 2011, 13, 6006-6009.	2.4	35
31	High-Speed MAS 19F NMR Analysis of an Irradiated Fluoropolymer. Macromolecules, 2002, 35, 5544-5549.	2.2	34
32	Unexpected Switching of the Photogelation Chemistry When Cross-Linking Poly(2-oxazoline) Copolymers. Macromolecules, 2016, 49, 4774-4783.	2.2	34
33	Hierarchically Structured Porous Poly(2â€oxazoline) Hydrogels. Macromolecular Rapid Communications, 2016, 37, 93-99.	2.0	33
34	Poly(2-oxazoline) hydrogels as next generation three-dimensional cell supports. Cell Adhesion and Migration, 2014, 8, 88-93.	1.1	27
35	Composites for Delivery of Therapeutics: Combining Melt Electrospun Scaffolds with Loaded Electrosprayed Microparticles. Macromolecular Bioscience, 2014, 14, 202-214.	2.1	27
36	Light-induced Ligation of o-Quinodimethanes with Gated Fluorescence Self-reporting. Journal of the American Chemical Society, 2020, 142, 7744-7748.	6.6	26

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37	Architecture-inspired paradigm for 3D bioprinting of vessel-like structures using extrudable carboxylated agarose hydrogels. Emergent Materials, 2019, 2, 233-243.	3.2	25
38	Cross-Linking of PFA by Electron Beam Irradiation. Macromolecules, 2003, 36, 7138-7142.	2.2	21
39	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
40	Prevascularized Retrievable Hybrid Implant to Enhance Function of Subcutaneous Encapsulated Islets. Tissue Engineering - Part A, 2022, 28, 212-224.	1.6	21
41	Porous 3D Printed Scaffolds For Guided Bone Regeneration In a Rat Calvarial Defect Model. Applied Materials Today, 2020, 20, 100706.	2.3	21
42	Plasma Polymer and Biomolecule Modification of 3D Scaffolds for Tissue Engineering. Plasma Processes and Polymers, 2016, 13, 678-689.	1.6	20
43	An Investigation of the Thermal and Tensile Properties of PFA Following Î³-Radiolysis. Macromolecules, 2003, 36, 7132-7137.	2.2	19
44	Studies on the Effect of the Size of Polycaprolactone Microspheres for the Dispersion of Salbutamol Sulfate from Dry Powder Inhaler Formulations. Pharmaceutical Research, 2012, 29, 2445-2455.	1.7	19
45	The Absolute Stereochemistry of Variabilin and Related Sesterterpene Tetronic Acids. Natural Product Research, 1994, 4, 51-56.	0.4	18
46	Influence of side-chain length on long-term release kinetics from poly(2-oxazoline)-drug conjugate networks. European Polymer Journal, 2019, 120, 109217.	2.6	18
47	Drugâ€“polymer conjugates with dynamic cloud point temperatures based on poly(2-oxazoline) copolymers. Polymer Chemistry, 2020, 11, 5191-5199.	1.9	18
48	Evaluation of diagnostic tools that tertiary teachers can apply to profile their studentsâ€™ conceptions. International Journal of Science Education, 2017, 39, 565-586.	1.0	17
49	Polymer networks based on photo-caged diene dimerization. Materials Horizons, 2019, 6, 81-89.	6.4	17
50	Evaluation of piezoelectric PVDF polymers for use in space environments. II. Effects of atomic oxygen and vacuum UV exposure. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2503-2513.	2.4	16
51	Evaluation of piezoelectric PVDF polymers for use in space environments. III. Comparison of the effects of vacuum UV and gamma radiation. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3253-3264.	2.4	16
52	Local Doxorubicin Delivery via 3Dâ€Printed Porous Scaffolds Reduces Systemic Cytotoxicity and Breast Cancer Recurrence in Mice. Advanced Therapeutics, 2020, 3, 2000056.	1.6	15
53	Highly Elastic Scaffolds Produced by Melt Electrowriting of Poly(Lâ€lactideâ€coâ€Îµâ€caprolactone). Advanced Materials Technologies, 2022, 7, 2100508.	3.0	15
54	A peptidomimetic inhibitor of matrix metalloproteinases containing a tetherable linker group. Journal of Biomedical Materials Research - Part A, 2011, 96A, 663-672.	2.1	13

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55	Polycaprolactone Microspheres as Carriers for Dry Powder Inhalers: Effect of Surface Coating on Aerosolization of Salbutamol Sulfate. Journal of Pharmaceutical Sciences, 2012, 101, 733-745.	1.6	13
56	Matrix Metalloproteinase Biosensor Based on a Porous Silicon Reflector. Australian Journal of Chemistry, 2013, 66, 1428.	0.5	13
57	Crosslinking of electrospun and bioextruded partially hydrolyzed poly(2-ethyl-2-oxazoline) using glutaraldehyde vapour. European Polymer Journal, 2019, 120, 109218.	2.6	13
58	Improving skin integration around longâ€term percutaneous devices using fibrous scaffolds in a reconstructed human skin equivalent model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 738-749.	1.6	13
59	Antibacterial Albumin-Tannic Acid Coatings for Scaffold-Guided Breast Reconstruction. Frontiers in Bioengineering and Biotechnology, 2021, 9, 638577.	2.0	13
60	Inhaled ciprofloxacin-loaded poly(2-ethyl-2-oxazoline) nanoparticles from dry powder inhaler formulation for the potential treatment of lower respiratory tract infections. PLoS ONE, 2021, 16, e0261720.	1.1	13
61	Antithrombogenic peripherally inserted central catheters: overview of efficacy and safety. Expert Review of Medical Devices, 2019, 16, 25-33.	1.4	12
62	Selection and Optimization of Piezoelectric Polyvinylidene Fluoride Polymers for Adaptive Optics in Space Environments. High Performance Polymers, 2005, 17, 575-592.	0.8	11
63	Colloidal drug probe: Method development and validation for adhesion force measurement using Atomic Force Microscopy. Advanced Powder Technology, 2014, 25, 1240-1248.	2.0	11
64	Poly(2-allylamidopropyl-2-oxazoline)-Based Hydrogels: From Accelerated Gelation Kinetics to In Vivo Compatibility in a Murine Subdermal Implant Model. Biomacromolecules, 2021, 22, 1590-1599.	2.6	11
65	Thermoresponsive Polymerâ€“Antibiotic Conjugates Based on Gradient Copolymers of 2-Oxazoline and 2-Oxazine. Biomacromolecules, 2021, 22, 5185-5194.	2.6	11
66	Injectable biocompatible poly(2-oxazoline) hydrogels by strain promoted alkyneâ€“azide cycloaddition. Biointerphases, 2021, 16, 011001.	0.6	9
67	Initial design and physical characterization of a polymeric device for osmosisâ€driven delayed burst delivery of vaccines. Biotechnology and Bioengineering, 2015, 112, 1927-1935.	1.7	8
68	Growth Factor-Loaded Microparticles for Tissue Engineering: The Discrepancies of In Vitro Characterization Assays. Tissue Engineering - Part C: Methods, 2016, 22, 142-154.	1.1	8
69	An in vitro Reconstructed Human Skin Equivalent Model to Study the Role of Skin Integration Around Percutaneous Devices Against Bacterial Infection. Frontiers in Microbiology, 2020, 11, 670.	1.5	8
70	Going beyond RGD: screening of a cell-adhesion peptide library in 3D cell culture. Biomedical Materials (Bristol), 2020, 15, 055033.	1.7	8
71	A Self-Catalyzed Visible Light Driven Thiol Ligation. Journal of the American Chemical Society, 2021, 143, 7292-7297.	6.6	8
72	An Investigation of the Nitroxide-Mediated Preirradiation Grafting of Styrene onto PFA. Macromolecules, 2004, 37, 360-366.	2.2	7

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73	An investigation into the effect of amphiphilic siloxane oligomers on dermal fibroblasts. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1919-1927.	2.1	7
74	Hydrogels with Cell Adhesion Peptideâ€Decorated Channel Walls for Cell Guidance. Macromolecular Rapid Communications, 2020, 41, 2000295.	2.0	7
75	Investigation of the Vapor-Phase Grafting of Styrene onto PFA. Macromolecules, 2003, 36, 8276-8281.	2.2	6
76	The effect of amphiphilic siloxane oligomers on fibroblast and keratinocyte proliferation and apoptosis. Journal of Biomedical Materials Research - Part A, 2010, 95A, 620-631.	2.1	6
77	Production of Scaffolds Using Melt Electrospinning Writing and Cell Seeding. Methods in Molecular Biology, 2021, 2147, 111-124.	0.4	6
78	Macrocyclization efficiency for poly(2-oxazoline)s and poly(2-oxazine)s. Polymer Chemistry, 2022, 13, 3975-3980.	1.9	5
79	Elastic Bioresorbable Polymeric Capsules for Osmosis-Driven Delayed Burst Delivery of Vaccines. Pharmaceutics, 2021, 13, 434.	2.0	3
80	Spatial Patterning of Hydrogels via 3D Covalent Transfer Stamping from a Fugitive Ink. Macromolecular Rapid Communications, 2018, 39, 1700564.	2.0	2
81	Transparent, Pliable, Antimicrobial Hydrogels for Ocular Wound Dressings. Applied Sciences (Switzerland), 2020, 10, 7548.	1.3	2
82	In vivo evaluation of skin integration with ventricular assist device drivelines. Journal of Heart and Lung Transplantation, 2022, 41, 1032-1043.	0.3	2
83	Degradation of Piezoelectric Fluoropolymers in Space Environments. ACS Symposium Series, 2009, , 100-112.	0.5	0
84	Tissue adhesive and chlorhexidine gluconate interaction: Implications for vascular access device securement. Journal of Vascular Access, 2019, 20, 229-230.	0.5	0