David Nisbet

List of Publications by Year
in descending order

110 papers	4,753 citations	71102 41 h-index	106344 65 g-index
120 all docs	120 docs citations	120 times ranked	6286 citing authors

#	Article	IF	Citations
1	Using UV-Responsive Nanoparticles to Provide <i>In Situ</i> Control of Growth Factor Delivery and a More Constant Release Profile from a Hydrogel Environment. ACS Applied Materials & Interfaces, 2022, 14, 12068-12076.	8.0	7
2	When Less Gold is More: Selective Attomolar Biosensing at the Nanoscale. Advanced Functional Materials, 2022, 32, .	14.9	11
3	Changing Fate: Reprogramming Cells via Engineered Nanoscale Delivery Materials. Advanced Materials, 2022, 34, e2108757.	21.0	9
4	A Hydrogel as a Bespoke Delivery Platform for Stromal Cell-Derived Factor-1. Gels, 2022, 8, 224.	4.5	0
5	Extracellular Matrix Biomimetic Hydrogels, Encapsulated with Stromal Cell-Derived Factor 1, Improve the Composition of Foetal Tissue Grafts in a Rodent Model of Parkinsonâ€™s Disease. International Journal of Molecular Sciences, 2022, 23, 4646.	4.1	6
6	Biodesigned bioinks for 3D printing via divalent crosslinking of self-assembled peptide-polysaccharide hybrids. Materials Today Advances, 2022, 14, 100243.	5.2	3
7	Self-Assembled Peptide Habitats to Model Tumor Metastasis. Gels, 2022, 8, 332.	4.5	1
8	Shielding Surfaces from Viruses and Bacteria with a Multiscale Coating. Advanced Science, 2022, 9, .	11.2	4
9	Traction of 3D and 4D Printing in the Healthcare Industry: From Drug Delivery and Analysis to Regenerative Medicine. ACS Biomaterials Science and Engineering, 2022, 8, 2764-2797.	5.2	34
10	Peptide Hydrogel Scaffold for Mesenchymal Precursor Cells Implanted to Injured Adult Rat Spinal Cord. Tissue Engineering - Part A, 2021, 27, 993-1007.	3.1	16
11	Is Viral Vector Gene Delivery More Effective Using Biomaterials?. Advanced Healthcare Materials, 2021, 10, e2001238.	7.6	34
12	Stability of ZIF-8 nanopowders in bacterial culture media and its implication for antibacterial properties. Chemical Engineering Journal, 2021, 413, 127511.	12.7	137
13	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.	5.9	5
14	An Outlook of Recent Advances in Chemiresistive Sensor-Based Electronic Nose Systems for Food Quality and Environmental Monitoring. Sensors, 2021, 21, 2271.	3.8	48
15	Engineering Fractal Photonic Metamaterials by Stochastic Selfâ€Assembly of Nanoparticles. Advanced Photonics Research, 2021, 2, 2100020.	3.6	6
16	Tuneable Hybrid Hydrogels via Complementary Self-Assembly of a Bioactive Peptide with a Robust Polysaccharide. ACS Biomaterials Science and Engineering, 2021, 7, 3340-3350.	5.2	20
17	The effect of a superhydrophobic coating on moisture absorption and tensile strength of 3D-printed carbon-fibre/polyamide. Composites Part A: Applied Science and Manufacturing, 2021, 145, 106380.	7.6	13
18	Tissue Programmed Hydrogels Functionalized with GDNF Improve Human Neural Grafts in Parkinson's Disease. Advanced Functional Materials, 2021, 31, 2105301.	14.9	16

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19	Non-oxidized cellulose nanofibers as a topical hemostat: In vitro thromboelastometry studies of structure vs function. Carbohydrate Polymers, 2021, 265, 118043.	10.2	10
20	Enhancing Peptide Biomaterials for Biofabrication. Polymers, 2021, 13, 2590.	4.5	11
21	Replace and repair: Biomimetic bioprinting for effective muscle engineering. APL Bioengineering, 2021, 5, 031502.	6.2	9
22	Tuning the selectivity of highly sensitive chemiresistive nanoparticle networks by encapsulation with metalâ€“organic frameworks. Journal of Materials Chemistry C, 2021, 9, 17331-17340.	5.5	17
23	Biomimetic Materials and Their Utility in Modeling the 3-Dimensional Neural Environment. IScience, 2020, 23, 100788.	4.1	33
24	Peptide Programmed Hydrogels as Safe Sanctuary Microenvironments for Cell Transplantation. Advanced Functional Materials, 2020, 30, 1900390.	14.9	29
25	Vertically configured nanostructure-mediated electroporation: a promising route for intracellular regulations and interrogations. Materials Horizons, 2020, 7, 2810-2831.	12.2	22
26	Effect of phyto-fabricated nanoscale organic-iron complex on photo-fermentative hydrogen production by Rhodopseudomonas palustris MP2 and Rhodopseudomonas palustris MP4. Biomass and Bioenergy, 2020, 140, 105667.	5.7	12
27	Harnessing the self-assembly of peptides for the targeted delivery of anti-cancer agents. Materials Horizons, 2020, 7, 1996-2010.	12.2	17
28	Green Full Conversion of ZnO Nanopowders to Well-Dispersed Zeolitic Imidazolate Framework-8 (ZIF-8) Nanopowders via a Stoichiometric Mechanochemical Reaction for Fast Dye Adsorption. Crystal Growth and Design, 2020, 20, 2761-2773.	3.0	54
29	Cytotoxic T cells swarm by homotypic chemokine signalling. ELife, 2020, 9, .	6.0	46
30	Bioinspired surface modification of orthopedic implants for bone tissue engineering. Biomaterials, 2019, 219, 119366.	11.4	204
31	Engineering of Chitosan-Hydroxyapatite-Magnetite Hierarchical Scaffolds for Guided Bone Growth. Materials, 2019, 12, 2321.	2.9	37
32	Harnessing stem cells and biomaterials to promote neural repair. British Journal of Pharmacology, 2019, 176, 355-368.	5.4	34
33	Harnessing stem cells and biomaterials to promote neural repair. British Journal of Pharmacology, 2019, 176, 355-368.	5.4	1
34	Large and Small Assembly: Combining Functional Macromolecules with Small Peptides to Control the Morphology of Skeletal Muscle Progenitor Cells. Biomacromolecules, 2018, 19, 825-837.	5.4	26
35	Using minimalist selfâ€assembling peptides as hierarchical scaffolds to stabilise growth factors and promote stem cell integration in the injured brain. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1571-e1579.	2.7	44
36	Dynamic and Responsive Growth Factor Delivery from Electrospun and Hydrogel Tissue Engineering Materials. Advanced Healthcare Materials, 2018, 7, 1700836.	7.6	54

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37	A Programmed Antiâ€Inflammatory Nanoscaffold (PAIN) as a 3D Tool to Understand the Brain Injury Response. Advanced Materials, 2018, 30, e1805209.	21.0	32
38	Scaffolds Formed via the Non-Equilibrium Supramolecular Assembly of the Synergistic ECM Peptides RGD and PHSRN Demonstrate Improved Cell Attachment in 3D. Polymers, 2018, 10, 690.	4.5	25
39	Hydrogelâ€Immobilized Supercharged Proteins. Advanced Biology, 2018, 2, 1700240.	3.0	14
40	Optimally Hierarchical Nanostructured Hydroxyapatite Coatings for Superior Prosthesis Biointegration. ACS Applied Materials & Interfaces, 2018, 10, 24840-24849.	8.0	20
41	Shear Containment of BDNF within Molecular Hydrogels Promotes Human Stem Cell Engraftment and Postinfarction Remodeling in Stroke. Advanced Biology, 2018, 2, 1800113.	3.0	28
42	Review: Biomaterial systems to resolve brain inflammation after traumatic injury. APL Bioengineering, 2018, 2, 021502.	6.2	24
43	Galactose-functionalised PCL nanofibre scaffolds to attenuate inflammatory action of astrocytes in vitro and in vivo. Journal of Materials Chemistry B, 2017, 5, 4073-4083.	5.8	12
44	Engineering Highly Interconnected Neuronal Networks on Nanowire Scaffolds. Nano Letters, 2017, 17, 3369-3375.	9.1	58
45	Bioprinting and Biofabrication with Peptide and Protein Biomaterials. Advances in Experimental Medicine and Biology, 2017, 1030, 95-129.	1.6	16
46	Peptide-Based Scaffolds Support Human Cortical Progenitor Graft Integration to Reduce Atrophy and Promote Functional Repair in a Model of Stroke. Cell Reports, 2017, 20, 1964-1977.	6.4	88
47	Reducing Astrocytic Scarring after Traumatic Brain Injury with a Multifaceted Anti-Inflammatory Hydrogel System. ACS Biomaterials Science and Engineering, 2017, 3, 2542-2549.	5.2	26
48	Temporally controlled growth factor delivery from a self-assembling peptide hydrogel and electrospun nanofibre composite scaffold. Nanoscale, 2017, 9, 13661-13669.	5.6	37
49	Facile Control over the Supramolecular Ordering of Self-assembled Peptide Scaffolds by Simultaneous Assembly with a Polysacharride. Scientific Reports, 2017, 7, 4797.	3.3	23
50	Adaptive spatial filtering for off-axis digital holographic microscopy based on region recognition approach with iterative thresholding. , 2016, , .		0
51	Ultra-Durable and Transparent Self-Cleaning Surfaces by Large-Scale Self-Assembly of Hierarchical Interpenetrated Polymer Networks. ACS Applied Materials & Interfaces, 2016, 8, 13615-13623.	8.0	179
52	Automated Fourier space region-recognition filtering for off-axis digital holographic microscopy. Biomedical Optics Express, 2016, 7, 3111.	2.9	49
53	Temporally controlled release of multiple growth factors from a self-assembling peptide hydrogel. Nanotechnology, 2016, 27, 385102.	2.6	38
54	Controlling integrin-based adhesion to a degradable electrospun fibre scaffold via SI-ATRP. Journal of Materials Chemistry B, 2016, 4, 7314-7322.	5.8	12

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55	Mimosa Origami: A nanostructure-enabled directional self-organization regime of materials. Science Advances, 2016, 2, e1600417.	10.3	108
56	Ultra-Porous Nanoparticle Networks: A Biomimetic Coating Morphology for Enhanced Cellular Response and Infiltration. Scientific Reports, 2016, 6, 24305.	3.3	23
57	Tailoring minimalist self-assembling peptides for localized viral vector gene delivery. Nano Research, 2016, 9, 674-684.	10.4	41
58	Characterisation of minimalist co-assembled fluorenylmethyloxycarbonyl self-assembling peptide systems for presentation of multiple bioactive peptides. Acta Biomaterialia, 2016, 38, 11-22.	8.3	56
59	Probing the Interfacial Structure of Bilayer Plasma Polymer Films via Neutron Reflectometry. Plasma Processes and Polymers, 2016, 13, 534-543.	3.0	0
60	Deletion of the Complex I Subunit NDUFS4 Adversely Modulates Cellular Differentiation. Stem Cells and Development, 2016, 25, 239-250.	2.1	8
61	Coassembled nanostructured bioscaffold reduces the expression of proinflammatory cytokines to induce apoptosis in epithelial cancer cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1397-1407.	3.3	39
62	Integrating Biomaterials and Stem Cells for Neural Regeneration. Stem Cells and Development, 2016, 25, 214-226.	2.1	26
63	Functionalized composite scaffolds improve the engraftment of transplanted dopaminergic progenitors in a mouse model of Parkinson's disease. Biomaterials, 2016, 74, 89-98.	11.4	89
64	A Commentary on the Need for 3D-Biologically Relevant In Vitro Environments to Investigate Astrocytes and Their Role in Central Nervous System Inflammation. Neurochemical Research, 2016, 41, 589-592.	3.3	8
65	Optimization of Aqueous SIâ€ATRP Grafting of Poly(Oligo(Ethylene Glycol) Methacrylate) Brushes from Benzyl Chloride Macroinitiator Surfaces. Macromolecular Bioscience, 2015, 15, 799-811.	4.1	13
66	Transcriptomic analysis and 3D bioengineering of astrocytes indicate ROCK inhibition produces cytotrophic astrogliosis. Frontiers in Neuroscience, 2015, 9, 50.	2.8	19
67	In vitro evaluation of biodegradable magnesium alloys containing micro-alloying additions of strontium, with and without zinc. Journal of Materials Chemistry B, 2015, 3, 8874-8883.	5.8	29
68	Low Fouling Electrospun Scaffolds with Clicked Bioactive Peptides for Specific Cell Attachment. Biomacromolecules, 2015, 16, 2109-2118.	5.4	18
69	Interleukin-10 conjugated electrospun polycaprolactone (PCL) nanofibre scaffolds for promoting alternatively activated (M2) macrophages around the peripheral nerve in vivo. Journal of Immunological Methods, 2015, 420, 38-49.	1.4	60
70	Flexible Transparent Hierarchical Nanomesh for Rose Petalâ€Like Droplet Manipulation and Lossless Transfer. Advanced Materials Interfaces, 2015, 2, 1500071.	3.7	31
71	Tuning the mechanical and morphological properties of self-assembled peptide hydrogels via control over the gelation mechanism through regulation of ionic strength and the rate of pH change. RSC Advances, 2015, 5, 301-307.	3.6	56
72	Self-Assembled Peptide Nanostructures for the Fabrication of Cell Scaffolds. , 2015, , 33-61.		2

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73	In vivo assessment of grafted cortical neural progenitor cells and host response to functionalized self-assembling peptide hydrogels and the implications for tissue repair. Journal of Materials Chemistry B, 2014, 2, 7771-7778.	5.8	71
74	In vitro response to functionalized selfâ€assembled peptide scaffolds for threeâ€dimensional cell culture. Biopolymers, 2014, 102, 197-205.	2.4	41
75	A study of the initial film growth of PEG-like plasma polymer films via XPS and NEXAFS. Applied Surface Science, 2014, 288, 288-294.	6.1	24
76	The influence of biodegradable magnesium alloys on the osteogenic differentiation of human mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	4.0	42
77	Specific control of cellâ€“material interactions: Targeting cell receptors using ligand-functionalized polymer substrates. Progress in Polymer Science, 2014, 39, 1312-1347.	24.7	57
78	Characterization of the Stability and Bio-functionality of Tethered Proteins on Bioengineered Scaffolds. Journal of Biological Chemistry, 2014, 289, 15044-15051.	3.4	29
79	Hierarchical amorphous nanofibers for transparent inherently super-hydrophilic coatings. Journal of Materials Chemistry A, 2014, 2, 15575-15581.	10.3	36
80	Controlling initial biodegradation of magnesium by a biocompatible strontium phosphate conversion coating. Acta Biomaterialia, 2014, 10, 1463-1474.	8.3	135
81	3D Electrospun scaffolds promote a cytotrophic phenotype of cultured primary astrocytes. Journal of Neurochemistry, 2014, 130, 215-226.	3.9	47
82	Surface grafting of electrospun fibers using ATRP and RAFT for the control of biointerfacial interactions. Biointerphases, 2013, 8, 16.	1.6	30
83	Tuning the amino acid sequence of minimalist peptides to present biological signals via charge neutralised self assembly. Soft Matter, 2013, 9, 3915.	2.7	60
84	Scission of electrospun polymer fibres by ultrasonication. Polymer, 2013, 54, 4237-4252.	3.8	54
85	Mitochondrial DNA Haplotypes Define Gene Expression Patterns in Pluripotent and Differentiating Embryonic Stem Cells. Stem Cells, 2013, 31, 703-716.	3.2	65
86	Biofunctionalisation of polymeric scaffolds for neural tissue engineering. Journal of Biomaterials Applications, 2012, 27, 369-390.	2.4	41
87	Promoting engraftment of transplanted neural stem cells/progenitors using biofunctionalised electrospun scaffolds. Biomaterials, 2012, 33, 9188-9197.	11.4	87
88	Method to Impart Electro- and Biofunctionality to Neural Scaffolds Using Grapheneâ€“Polyelectrolyte Multilayers. ACS Applied Materials & Interfaces, 2012, 4, 4524-4531.	8.0	80
89	The Potential of Stem Cells and Tissue Engineered Scaffolds for Repair of the Central Nervous System. , 2012, , 97-111.		6
90	Self-Assembled Peptides: Characterisation and In Vivo Response. Biointerphases, 2012, 7, 2.	1.6	45

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91	Tissue Engineering of Organs: Brain Tissues. , 2011, , 457-492.		1
92	Optimizing interfacial features to regulate neural progenitor cells using polyelectrolyte multilayers and brain derived neurotrophic factor. Biointerphases, 2011, 6, 189-199.	1.6	17
93	Performance-driven design of Biocompatible Mg alloys. Jom, 2011, 63, 28-34.	1.9	96
94	Synthetic Multi-level Matrices for Bone Regeneration. , 2011, , 99-122.		5
95	Bio-nanotechnology Approaches to Neural Tissue Engineering. , 2010, , .		3
96	Implantation of Functionalized Thermally Gelling Xyloglucan Hydrogel Within the Brain: Associated Neurite Infiltration and Inflammatory Response. Tissue Engineering - Part A, 2010, 16, 2833-2842.	3.1	45
97	Biomaterials for Brain Tissue Engineering. Australian Journal of Chemistry, 2010, 63, 1143.	0.9	99
98	Three-Dimensional Nanofibrous Scaffolds Incorporating Immobilized BDNF Promote Proliferation and Differentiation of Cortical Neural Stem Cells. Stem Cells and Development, 2010, 19, 843-852.	2.1	158
99	Enhancing neurite outgrowth from primary neurones and neural stem cells using thermoresponsive hydrogel scaffolds for the repair of spinal cord injury. Journal of Biomedical Materials Research - Part A, 2009, 89A, 24-35.	4.0	49
100	Surface and bulk characterisation of electrospun membranes: Problems and improvements. Colloids and Surfaces B: Biointerfaces, 2009, 71, 1-12.	5.0	39
101	Neurite infiltration and cellular response to electrospun polycaprolactone scaffolds implanted into the brain. Biomaterials, 2009, 30, 4573-4580.	11.4	140
102	Review Paper: A Review of the Cellular Response on Electrospun Nanofibers for Tissue Engineering. Journal of Biomaterials Applications, 2009, 24, 7-29.	2.4	264
103	Neural tissue engineering of the CNS using hydrogels. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 251-263.	3.4	145
104	Characterization of neural stem cells on electrospun poly(Îµ-caprolactone) submicron scaffolds: evaluating their potential in neural tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 623-634.	3.5	106
105	Interaction of embryonic cortical neurons on nanofibrous scaffolds for neural tissue engineering. Journal of Neural Engineering, 2007, 4, 35-41.	3.5	96
106	Morphology and gelation of thermosensitive xyloglucan hydrogels. Biophysical Chemistry, 2006, 121, 14-20.	2.8	67
107	The effect of surface hydrophilicity on the behavior of embryonic cortical neurons. Journal of Colloid and Interface Science, 2006, 299, 647-655.	9.4	23
108	Rheological properties of high melt strength poly(ethylene terephthalate) formed by reactive extrusion. Journal of Applied Polymer Science, 2006, 100, 3646-3652.	2.6	52

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109	Colonization and maintenance of murine embryonic stem cells on poly(Î±-hydroxy esters). Biomaterials, 2004, 25, 4963-4970.	11.4	52
110	Hybrid Selfâ€Assembling Peptide/Gelatin Methacrylate (GelMA) Bioink Blend for Improved Bioprintability and Primary Myoblast Response. Advanced NanoBiomed Research, 0, , 2100106.	3.6	2