Ben Newland

List of Publications by Year
in descending order

58 papers	2,170 citations	236612 25 h-index	233125 45 g-index
61 all docs	61 docs citations	61 times ranked	2996 citing authors

#	Article	IF	Citations
1	Mussel-inspired hyperbranched poly(amino ester) polymer as strong wet tissue adhesive. Biomaterials, 2014, 35, 711-719.	5.7	205
2	Extracellular Matrix Components HAPLN1, Lumican, and Collagen I Cause Hyaluronic Acid-Dependent Folding of the Developing Human Neocortex. Neuron, 2018, 99, 702-719.e6.	3.8	139
3	Highly branched poly(Î²-amino ester)s for skin gene therapy. Journal of Controlled Release, 2016, 244, 336-346.	4.8	95
4	Complex polymer architectures through free-radical polymerization of multivinyl monomers. Nature Reviews Chemistry, 2020, 4, 194-212.	13.8	93
5	A highly effective gene delivery vector â€“ hyperbranched poly(2-(dimethylamino)ethyl methacrylate) from in situ deactivation enhanced ATRP. Chemical Communications, 2010, 46, 4698.	2.2	86
6	Catechol functionalized hyperbranched polymers as biomedical materials. Progress in Polymer Science, 2018, 78, 47-55.	11.8	85
7	3D Single Cyclized Polymer Chain Structure from Controlled Polymerization of Multi-Vinyl Monomers: Beyond Floryâ€“Stockmayer Theory. Journal of the American Chemical Society, 2011, 133, 13130-13137.	6.6	82
8	Single Cyclized Molecule Versus Single Branched Molecule: A Simple and Efficient 3D â€œKnotâ€•Polymer Structure for Nonviral Gene Delivery. Journal of the American Chemical Society, 2012, 134, 4782-4789.	6.6	81
9	Highly branched Âpoly(Î²-amino ester)Âdelivery of minicircle DNA for transfection of neurodegenerativeÂdisease related cells. Nature Communications, 2019, 10, 3307.	5.8	80
10	The reduction in immunogenicity of neurotrophin overexpressing stem cells after intra-striatal transplantation by encapsulation inÂanÂinÂsitu gelling collagen hydrogel. Biomaterials, 2013, 34, 9420-9429.	5.7	75
11	Significance of Branching for Transfection: Synthesis of Highly Branched Degradable Functional Poly(dimethylaminoethyl methacrylate) by Vinyl Oligomer Combination. Angewandte Chemie - International Edition, 2014, 53, 6095-6100.	7.2	74
12	A biomimetic hyperbranched poly(amino ester)-based nanocomposite as a tunable bone adhesive for sternal closure. Journal of Materials Chemistry B, 2014, 2, 4067.	2.9	66
13	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
14	Tackling Cell Transplantation Anoikis: An Injectable, Shape Memory Cryogel Microcarrier Platform Material for Stem Cell and Neuronal Cell Growth. Small, 2015, 11, 5047-5053.	5.2	62
15	Improved axonal regeneration of transected spinal cord mediated by multichannel collagen conduits functionalized with neurotrophin-3 gene. Gene Therapy, 2013, 20, 1149-1157.	2.3	57
16	Reactive oxygen species (ROS): utilizing injectable antioxidative hydrogels and ROS-producing therapies to manage the double-edged sword. Journal of Materials Chemistry B, 2021, 9, 6326-6346.	2.9	46
17	Oxygen-Producing Gellan Gum Hydrogels for Dual Delivery of Either Oxygen or Peroxide with Doxorubicin. ACS Biomaterials Science and Engineering, 2017, 3, 787-792.	2.6	43
18	Controlled Polymerization of Multivinyl Monomers: Formation of Cyclized/Knotted Singleâ€Chain Polymer Architectures. Angewandte Chemie - International Edition, 2017, 56, 450-460.	7.2	43

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19	Dual stimuli responsive PEG based hyperbranched polymers. Polymer Chemistry, 2010, 1, 827.	1.9	40
20	The neurotoxicity of gene vectors and its amelioration by packaging with collagen hollow spheres. Biomaterials, 2013, 34, 2130-2141.	5.7	37
21	Selective vulnerability of inhibitory networks in multiple sclerosis. Acta Neuropathologica, 2021, 141, 415-429.	3.9	37
22	GDNF Gene Delivery via a 2-(Dimethylamino)ethyl Methacrylate Based Cyclized Knot Polymer for Neuronal Cell Applications. ACS Chemical Neuroscience, 2013, 4, 540-546.	1.7	32
23	Synthesis of ROS scavenging microspheres from a dopamine containing poly(Î²-amino ester) for applications for neurodegenerative disorders. Biomaterials Science, 2016, 4, 400-404.	2.6	31
24	Untying a nanoscale knotted polymer structure to linear chains for efficient gene delivery in vitro and to the brain. Nanoscale, 2014, 6, 7526-7533.	2.8	28
25	Macroporous heparin-based microcarriers allow long-term 3D culture and differentiation of neural precursor cells. Biomaterials, 2020, 230, 119540.	5.7	27
26	Biomaterial based strategies to reconstruct the nigrostriatal pathway in organotypic slice co-cultures. Acta Biomaterialia, 2021, 121, 250-262.	4.1	25
27	Single cyclized molecule structures from RAFT homopolymerization of multi-vinyl monomers. Chemical Communications, 2012, 48, 3085.	2.2	24
28	Prospects for polymer therapeutics in Parkinson's disease and other neurodegenerative disorders. Progress in Polymer Science, 2015, 44, 79-112.	11.8	24
29	Cryogel biomaterials for neuroscience applications. Neurochemistry International, 2021, 147, 105012.	1.9	24
30	A hyperbranched dopamine-containing PEG-based polymer for the inhibition of Î±-synuclein fibrillation. Biochemical and Biophysical Research Communications, 2016, 469, 830-835.	1.0	23
31	Soft and flexible poly(ethylene glycol) nanotubes for local drug delivery. Nanoscale, 2018, 10, 8413-8421.	2.8	22
32	Does local drug delivery still hold therapeutic promise for brain cancer? A systematic review. Journal of Controlled Release, 2021, 337, 296-305.	4.8	22
33	The reverse of polymer degradation: in situ crosslinked gel formation through disulfide cleavage. Chemical Communications, 2012, 48, 585-587.	2.2	20
34	Biomaterial approaches to gene therapies for neurodegenerative disorders of the CNS. Biomaterials Science, 2013, 1, 556.	2.6	19
35	Beyond Branching: Multiknot Structured Polymer for Gene Delivery. Biomacromolecules, 2014, 15, 4520-4527.	2.6	18
36	Magnetically Controllable Polymer Nanotubes from a Cyclized Crosslinker for Site-Specific Delivery of Doxorubicin. Scientific Reports, 2015, 5, 17478.	1.6	16

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37	Focal drug administration via heparin-containing cryogel microcarriers reduces cancer growth and metastasis. Carbohydrate Polymers, 2020, 245, 116504.	5.1	16
38	Targeting delivery in Parkinson's disease. Drug Discovery Today, 2016, 21, 1313-1320.	3.2	15
39	Cryogel scaffolds for regionally constrained delivery of lysophosphatidylcholine to central nervous system slice cultures: A model of focal demyelination for multiple sclerosis research. Acta Biomaterialia, 2019, 97, 216-229.	4.1	15
40	Heparin-based, injectable microcarriers for controlled delivery of interleukin-13 to the brain. Biomaterials Science, 2020, 8, 4997-5004.	2.6	15
41	Local delivery to malignant brain tumors: potential biomaterial-based therapeutic/adjuvant strategies. Biomaterials Science, 2021, 9, 6037-6051.	2.6	15
42	Low polydispersity (N-ethyl pyrrolidine methacrylamide-co-1-vinylimidazole) linear oligomers for gene therapy applications. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 82, 465-474.	2.0	14
43	The ying and yang of idebenone: Not too little, not too much â€“ cell death in NQO1 deficient cells and the mouse retina. Free Radical Biology and Medicine, 2020, 152, 551-560.	1.3	14
44	Oxygen producing microscale spheres affect cell survival in conditions of oxygen-glucose deprivation in a cell specific manner: implications for cell transplantation. Biomaterials Science, 2018, 6, 2571-2577.	2.6	13
45	Injectable Glycosaminoglycan-Based Cryogels from Well-Defined Microscale Templates for Local Growth Factor Delivery. ACS Chemical Neuroscience, 2021, 12, 1178-1188.	1.7	12
46	Sulfonated cryogel scaffolds for focal delivery in ex-vivo brain tissue cultures. Biomaterials, 2021, 271, 120712.	5.7	12
47	Controlled homopolymerization of multi-vinyl monomers: dendritic polymers synthesized via an optimized ATRA reaction. Chemical Communications, 2013, 49, 10124.	2.2	11
48	A reliable method for detecting complexed DNA in vitro. Nanoscale, 2010, 2, 2718.	2.8	9
49	Static and dynamic 3D culture of neural precursor cells on macroporous cryogel microcarriers. MethodsX, 2020, 7, 100805.	0.7	9
50	Preparation, loading, and cytotoxicity analysis of polymer nanotubes from an ethylene glycol dimethacrylate homopolymer in comparison to multiâ€walled carbon nanotubes. Journal of Interdisciplinary Nanomedicine, 2016, 1, 9-18.	3.6	8
51	Poly(ethylene glycol) based nanotubes for tuneable drug delivery to glioblastoma multiforme. Nanoscale Advances, 2020, 2, 4498-4509.	2.2	8
52	Non-viral xylosyltransferase-1 siRNA delivery as an effective alternative to chondroitinase in an in vitro model of reactive astrocytes. Neuroscience, 2016, 339, 267-275.	1.1	7
53	Kontrollierte Polymerisation von Multivinylâ€Monomeren: Bildung einer cyclischen/verknoteten Einzelkettenâ€Polymerarchitektur. Angewandte Chemie, 2017, 129, 462-473.	1.6	5
54	Oxygen-glucose deprivation in neurons: implications for cell transplantation therapies. Progress in Neurobiology, 2021, 205, 102126.	2.8	5

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55	Cryogel scaffolds: soft and easy to use tools for neural tissue culture. Neural Regeneration Research, 2022, 17, 1981.	1.6	5
56	Growth Factor Therapy for Parkinsonâ€™s Disease: Alternative Delivery Systems. Journal of Parkinson's Disease, 2021, 11, S229-S236.	1.5	4
57	Well-Defined Polyethylene Glycol Microscale Hydrogel Blocks Containing Gold Nanorods for Dual Photothermal and Chemotherapeutic Therapy. Pharmaceutics, 2022, 14, 551.	2.0	3
58	New avenues for therapy in mitochondrial optic neuropathies. Therapeutic Advances in Rare Disease, 2021, 2, 263300402110290.	0.3	0