Combination of Hyaluronic Acid Hydrogel Scaffold and
Survival of Neural Stem Cells

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#	Article	IF	Citations
1	Mechanisms and promotion of 3D neurite bridging between PHBV microspheres in a microsphereâ€“hydrogel hybrid scaffold. Soft Matter, 2011, 7, 11372.	1.2	8
2	Engineering therapies in the CNS: What works and what can be translated. Neuroscience Letters, 2012, 519, 147-154.	1.0	13
3	Advances in natural biomaterials for nerve tissue repair. Neuroscience Letters, 2012, 519, 103-114.	1.0	127
4	Polydopamine-mediated surface modification of scaffold materials for human neural stem cell engineering. Biomaterials, 2012, 33, 6952-6964.	5.7	311
5	Neo-vascularization of the stroke cavity by implantation of human neural stem cells on VEGF-releasing PLGA microparticles. Biomaterials, 2012, 33, 7435-7446.	5.7	126
6	Recent trends in cancer drug resistance reversal strategies using nanoparticles. Expert Opinion on Drug Delivery, 2012, 9, 287-301.	2.4	42
7	Hyaluronic acid-based scaffold for central neural tissue engineering. Interface Focus, 2012, 2, 278-291.	1.5	114
8	Stem cell therapy in stroke: Where are we now?. Sang Thrombose Vaisseaux, 2012, 24, 119-124.	0.1	0
9	Processing and Templating of Bioactive-Loaded Polymeric Neural Architectures: Challenges and Innovative Strategies. , 2012, , .		2
10	Ferroferric oxide/chitosan scaffolds with three-dimensional oriented structure. Chinese Journal of Polymer Science (English Edition), 2012, 30, 436-442.	2.0	20
11	Mild method for the agglomeration of dispersed polycaprolactone microspheres via a genipinâ€crosslinked gelatin hydrogel. Journal of Applied Polymer Science, 2013, 129, 689-698.	1.3	3
12	The Potential for Stem Cells in Cerebral Palsyâ€"Piecing Together the Puzzle. Seminars in Pediatric Neurology, 2013, 20, 146-153.	1.0	13
13	The Development of a É›-Polycaprolactone Scaffold for Central Nervous System Repair. Tissue Engineering - Part A, 2013, 19, 497-507.	1.6	32
14	New PLGAâ€“P188â€“PLGA matrix enhances TGF-Î²3 release from pharmacologically active microcarriers and promotes chondrogenesis of mesenchymal stem cells. Journal of Controlled Release, 2013, 170, 99-110.	4.8	80
15	A novel family of biodegradable hybrid hydrogels from arginine-based poly(ester amide) and hyaluronic acid precursors. Soft Matter, 2013, 9, 3965.	1.2	46
16	Naturally and synthetic smart composite biomaterials for tissue regeneration. Advanced Drug Delivery Reviews, 2013, 65, 471-496.	6.6	308
17	Directing neural stem cell fate with biomaterial parameters for injured brain regeneration. Progress in Natural Science: Materials International, 2013, 23, 103-112.	1.8	36
18	Bioresponsive hydrogel scaffolding systems for 3D constructions in tissue engineering and regenerative medicine. Nanomedicine, 2013, 8, 655-668.	1.7	33

#	Article	IF	Citations
19	Materials for Central Nervous System Tissue Engineering. , 0, , .		5
20	In vivo bioluminescence imaging for viable human neural stem cells incorporated within in situ gelatin hydrogels. EJNMMI Research, 2014, 4, 61.	1.1	3
21	Approaches for Neural Tissue Regeneration. Stem Cell Reviews and Reports, 2014, 10, 44-59.	5.6	46
22	Nanoparticulate strategies for the five Râ€™s of traumatic spinal cord injury intervention: restriction, repair, regeneration, restoration and reorganization. Nanomedicine, 2014, 9, 331-348.	1.7	15
23	Electrospun gelatin scaffolds incorporating rat decellularized brain extracellular matrix for neural tissue engineering. Biomaterials, 2014, 35, 1205-1214.	5.7	177
24	Vascular Mechanisms in CNS Trauma. , 2014, , .		4
25	Advanced biomaterials for repairing the nervous system: what can hydrogels do for the brain?. Materials Today, 2014, 17, 332-340.	8.3	77
26	Enhancing Effect of Glucose Microspheres in the Viability of Human Mesenchymal Stem Cell Suspensions for Clinical Administration. Pharmaceutical Research, 2014, 31, 3515-3528.	1.7	11
27	Enhancing neuronal growth from human endometrial stem cells derived neuronâ€like cells in threeâ€dimensional fibrin gel for nerve tissue engineering. Journal of Biomedical Materials Research - Part A, 2014, 102, 2533-2543.	2.1	46
28	Neural differentiation of pluripotent cells in 3D alginate-based cultures. Biomaterials, 2014, 35, 4636-4645.	5.7	91
29	Drug-Eluting Nasal Implants: Formulation, Characterization, Clinical Applications and Challenges. Pharmaceutics, 2014, 6, 249-267.	2.0	39
30	The Experimental Therapy on Brain Ischemia by Improvement of Local Angiogenesis with Tissue Engineering in the Mouse. Cell Transplantation, 2014, 23, 83-95.	1.2	60
31	A poly(lactideâ€coâ€glycolide) film loaded with abundant bone morphogenetic proteinâ€2: A substrateâ€promoting osteoblast attachment, proliferation, and differentiation in bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 2786-2796.	2.1	16
32	Comparing different methods to fix and to dehydrate cells on alginate hydrogel scaffolds using scanning electron microscopy. Microscopy Research and Technique, 2015, 78, 553-561.	1.2	24
33	Endogenous Repair Signaling after Brain Injury and Complementary Bioengineering Approaches to Enhance Neural Regeneration. Biomarker Insights, 2015, 10s1, BMI.S20062.	1.0	31
34	Functionalized Î±-Helical Peptide Hydrogels for Neural Tissue Engineering. ACS Biomaterials Science and Engineering, 2015, 1, 431-439.	2.6	59
35	3D Printing with Nucleic Acid Adhesives. ACS Biomaterials Science and Engineering, 2015, 1, 19-26.	2.6	23
36	Bioâ€Interface of Conducting Polymerâ€Based Materials for Neuroregeneration. Advanced Materials Interfaces, 2015, 2, 1500059.	1.9	33

#	Article	IF	Citations
37	Hyaluronic acid and neural stem cells: implications for biomaterial design. Journal of Materials Chemistry B, 2015, 3, 7850-7866.	2.9	50
38	Enhancing neural stem cell response to SDF-1Î± gradients through hyaluronic acid-laminin hydrogels. Biomaterials, 2015, 72, 11-19.	5.7	63
39	Biomimetic niche for neural stem cell differentiation using poly-L-lysine/hyaluronic acid multilayer films. Journal of Biomaterials Applications, 2015, 29, 1418-1427.	1.2	15
40	Strategies to Optimize Adult Stem Cell Therapy for Tissue Regeneration. International Journal of Molecular Sciences, 2016, 17, 982.	1.8	111
41	Bioactive polymer nanocomposites for spinal cord tissue engineering. , 2016, , 143-159.		0
42	Extracellular matrix-derived tissues for neurological applications. , 2016, , 83-118.		3
43	Biomaterial Applications in Cell-Based Therapy in Experimental Stroke. Stem Cells International, 2016, 2016, 1-14.	1.2	46
44	5-Flurouracil microencapsulation and impregnation in hyaluronic acid hydrogel as composite drug delivery system for ocular fibrosis. Cogent Medicine, 2016, 3, 1182108.	0.7	5
45	Ordered self-assembled monolayers terminated with different chemical functional groups direct neural stem cell linage behaviours. Biomedical Materials (Bristol), 2016, 11, 014107.	1.7	7
46	Fabrication and surface modification of poly lactic acid (PLA) scaffolds with epidermal growth factor for neural tissue engineering. Biomatter, 2016, 6, e1231276.	2.6	52
48	Encapsulation-free controlled release: Electrostatic adsorption eliminates the need for protein encapsulation in PLGA nanoparticles. Science Advances, 2016, 2, e1600519.	4.7	122
49	Angiogenic microspheres promote neural regeneration and motor function recovery after spinal cord injury in rats. Scientific Reports, 2016, 6, 33428.	1.6	64
50	Spinal cord injury repair by implantation of structured hyaluronic acid scaffold with PLGA microspheres in the rat. Cell and Tissue Research, 2016, 364, 17-28.	1.5	59
51	Microfluidic engineering of neural stem cell niches for fate determination. Biomicrofluidics, 2017, 11, 014106.	1.2	22
52	Preparation, characterization and in vivo evaluation of a combination delivery system based on hyaluronic acid/jeffamine hydrogel loaded with PHBV/PLGA blend nanoparticles for prolonged delivery of Teriparatide. European Journal of Pharmaceutical Sciences, 2017, 101, 167-181.	1.9	20
53	A facile one-step gelation approach simultaneously combining physical and chemical cross-linking for the preparation of injectable hydrogels. Journal of Materials Chemistry B, 2017, 5, 3145-3153.	2.9	6
55	Synthetic biomaterials for engineering neural tissue from stem cells. , 2017, , 127-158.		3
56	Injectable uncrosslinked biomimetic hydrogels as candidate scaffolds for neural stem cell delivery. Journal of Biomedical Materials Research - Part A, 2017, 105, 790-805.	2.1	27

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57	Competitive Affinity Release for Longâ€Term Delivery of Antibodies from Hydrogels. Angewandte Chemie - International Edition, 2018, 57, 3406-3410.	7.2	32
58	Graphene Oxide-Based Biocompatible 3D Mesh with a Tunable Porosity and Tensility for Cell Culture. ACS Biomaterials Science and Engineering, 2018, 4, 1505-1517.	2.6	3
59	3D tissue engineering, an emerging technique for pharmaceutical research. Acta Pharmaceutica Sinica B, 2018, 8, 756-766.	5.7	49
60	Competitive Affinity Release for Longâ€Term Delivery of Antibodies from Hydrogels. Angewandte Chemie, 2018, 130, 3464-3468.	1.6	8
61	In Vitro Microfluidic Models for Neurodegenerative Disorders. Advanced Healthcare Materials, 2018, 7, 1700489.	3.9	98
62	Current and novel polymeric biomaterials for neural tissue engineering. Journal of Biomedical Science, 2018, 25, 90.	2.6	302
63	Stem Cell- and Biomaterial-Based Neural Repair for Enhancing Spinal Axonal Regeneration. , 2018, , 59-84.		1
64	Hydrogel-assisted neuroregeneration approaches towards brain injury therapy: A state-of-the-art review. Computational and Structural Biotechnology Journal, 2018, 16, 488-502.	1.9	77
65	3D bioprinting models of neural tissues: The current state of the field and future directions. Brain Research Bulletin, 2019, 150, 240-249.	1.4	32
66	Preparation and in vitro evaluation of radiolabeled HA-PLGA nanoparticles as novel MTX delivery system for local treatment of rheumatoid arthritis. Materials Science and Engineering C, 2019, 103, 109766.	3.8	63
67	Biohybrids of scaffolding hyaluronic acid biomaterials plus adipose stem cells home local neural stem and endothelial cells: Implications for reconstruction of brain lesions after stroke. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 1598-1606.	1.6	17
68	Pharmacological therapies and factors delivery for spinal cord injury regeneration. , 2020, , 223-248.		1
69	Fabrication of versatile dynamic hyaluronic acid-based hydrogels. Carbohydrate Polymers, 2020, 233, 115803.	5.1	83
70	Hyaluronic Acid: Redefining Its Role. Cells, 2020, 9, 1743.	1.8	208
71	Coating Materials for Neural Stem/Progenitor Cell Culture and Differentiation. Stem Cells and Development, 2020, 29, 463-474.	1.1	20
72	Progress toward finding the perfect match: hydrogels for treatment of central nervous system injury. Materials Today Advances, 2020, 6, 100039.	2.5	22
73	Natural and synthetic polymeric scaffolds used in peripheral nerve tissue engineering: Advantages and disadvantages. Polymers for Advanced Technologies, 2021, 32, 2267-2289.	1.6	43
74	Alginate hydrogel: The influence of the hardening on the rheological behaviour. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 116, 104341.	1.5	17

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75	Biomaterials for Neural Tissue Engineering. Frontiers in Nanotechnology, 2021, 3, .	2.4	52
76	Neural Stem Cell-Laden Self-Healing Polysaccharide Hydrogel Transplantation Promotes Neurogenesis and Functional Recovery after Cerebral Ischemia in Rats. ACS Applied Bio Materials, 2021, 4, 3046-3054.	2.3	5
77	Design Challenges in Polymeric Scaffolds for Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 617141.	2.0	82
78	Types of biomaterials useful in brain repair. Neurochemistry International, 2021, 146, 105034.	1.9	4
79	Cryogel biomaterials for neuroscience applications. Neurochemistry International, 2021, 147, 105012.	1.9	24
80	Soft matter polysaccharide-based hydrogels as versatile bioengineered platforms for brain tissue repair and regeneration. International Journal of Biological Macromolecules, 2021, 182, 1091-1111.	3.6	10
81	Formulation strategies for bacteriophages to target intracellular bacterial pathogens. Advanced Drug Delivery Reviews, 2021, 176, 113864.	6.6	31
82	Extracellular Matrixâ€Mimetic Hydrogels for Treating Neural Tissue Injury: A Focus on Fibrin, Hyaluronic Acid, and Elastinâ€Like Polypeptide Hydrogels. Advanced Healthcare Materials, 2021, 10, e2101329.	3.9	41
83	Hyaluronic acid hydrogels, as a biological macromolecule-based platform for stem cells delivery and their fate control: A review. International Journal of Biological Macromolecules, 2021, 189, 554-566.	3.6	28
85	Recent Advances in Extracellular Matrix for Engineering Stem Cell Responses. Current Medicinal Chemistry, 2019, 26, 6321-6338.	1.2	7
86	Nanotechnology-based Targeting of Neurodegenerative Disorders: A Promising Tool for Efficient Delivery of Neuromedicines. Current Drug Targets, 2020, 21, 819-836.	1.0	7
87	Biomaterials for CNS Injury. , 2014, , 333-352.		0
88	Biomimetic Materials: Polymeric Substrates for Axonal Regeneration. , 0, , 913-931.		0
89	PLGA Nano- and Microparticles for VEGF Delivery. , 2016, , 445-478.		0
90	Dual-function hydrogels with sequential release of GSK3Î² inhibitor and VEGF inhibit inflammation and promote angiogenesis after stroke. Chemical Engineering Journal, 2022, 433, 133671.	6.6	20
91	Nanobiomaterials for regenerative medicine. , 2022, , 141-187.		2
92	Implantable Immunosuppressant Delivery to Prevent Rejection in Transplantation. International Journal of Molecular Sciences, 2022, 23, 1592.	1.8	7
93	Electroactive Scaffolds to Improve Neural Stem Cell Therapy for Spinal Cord Injury. Frontiers in Medical Technology, 2022, 4, 693438.	1.3	10

#	Article	IF	Citations
94	Emerging scaffold- and cellular-based strategies for brain tissue regeneration and imaging. In Vitro Models, 2022, 1, 129-150.	1.0	8
95	Micro- and nanotechnology in biomedical engineering for cartilage tissue regeneration in osteoarthritis. Beilstein Journal of Nanotechnology, 2022, 13, 363-389.	1.5	12
97	Fractone Stem Cell Niche Components Provide Intuitive Clues in the Design of New Therapeutic Procedures/Biomatrices for Neural Repair. International Journal of Molecular Sciences, 2022, 23, 5148.	1.8	5
98	Transplantation of layer-by-layer assembled neural stem cells tethered with vascular endothelial growth factor reservoir promotes neurogenesis and angiogenesis after ischemic stroke in mice. Applied Materials Today, 2022, 28, 101548.	2.3	5
99	Porous Silicon Nanoparticles Targeted to the Extracellular Matrix for Therapeutic Protein Delivery in Traumatic Brain Injury. Bioconjugate Chemistry, 0, , .	1.8	7
100	3D-printed hyaluronic acid hydrogel scaffolds impregnated with neurotrophic factors (BDNF, GDNF) for post-traumatic brain tissue reconstruction. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	7
101	Sustainable Biopolymers. , 2022, , 1-31.		0
102	Encapsulation of MSCs and GDNF in an Injectable Nanoreinforced Supramolecular Hydrogel for Brain Tissue Engineering. Biomacromolecules, 2022, 23, 4629-4644.	2.6	6
103	Hyaluronic Acid Scaffolds for Loco-Regional Therapy in Nervous System Related Disorders. International Journal of Molecular Sciences, 2022, 23, 12174.	1.8	8
104	Sustainable Biopolymers. , 2023, , 1-31.		0
105	Advancements in Hydrogel Application for Ischemic Stroke Therapy. Gels, 2022, 8, 777.	2.1	6
106	The potential of hydrogels as a niche for promoting neurogenesis and regulating neuroinflammation in ischemic stroke. Materials and Design, 2023, 229, 111916.	3.3	1
107	Sustainable Biopolymers. , 2023, , 319-349.		0
112	Polysaccharide-based responsive hydrogels for nerve regeneration. , 2024, , 429-455.		0