

# Lonnie D Shea

## List of Publications by Year in descending order

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238  
papers

18,173  
citations

10351

72  
h-index

17055

122  
g-index

244  
all docs

244  
docs citations

244  
times ranked

16207  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cancer nanomedicine for combination cancer immunotherapy. <i>Nature Reviews Materials</i> , 2019, 4, 398-414.	23.3	658
2	DNA delivery from polymer matrices for tissue engineering. <i>Nature Biotechnology</i> , 1999, 17, 551-554.	9.4	651
3	Stem/Progenitor Cell-Mediated <i>De Novo</i> Regeneration of Dental Pulp with Newly Deposited Continuous Layer of Dentin in an <i>In Vivo</i> Model. <i>Tissue Engineering - Part A</i> , 2010, 16, 605-615.	1.6	535
4	Tissue-Engineered Follicles Produce Live, Fertile Offspring. <i>Tissue Engineering</i> , 2006, 12, 2739-2746.	4.9	354
5	Microparticles bearing encephalitogenic peptides induce T-cell tolerance and ameliorate experimental autoimmune encephalomyelitis. <i>Nature Biotechnology</i> , 2012, 30, 1217-1224.	9.4	351
6	Crosslinked hyaluronic acid hydrogels: a strategy to functionalize and pattern. <i>Biomaterials</i> , 2005, 26, 359-371.	5.7	326
7	Advances in islet encapsulation technologies. <i>Nature Reviews Drug Discovery</i> , 2017, 16, 338-350.	21.5	315
8	Porous carriers for biomedical applications based on alginate hydrogels. <i>Biomaterials</i> , 2000, 21, 1921-1927.	5.7	308
9	Physical properties of alginate hydrogels and their effects on in vitro follicle development. <i>Biomaterials</i> , 2007, 28, 4439-4448.	5.7	292
10	In vitro grown human ovarian follicles from cancer patients support oocyte growth. <i>Human Reproduction</i> , 2009, 24, 2531-2540.	0.4	280
11	Generation of lung organoids from human pluripotent stem cells in vitro. <i>Nature Protocols</i> , 2019, 14, 518-540.	5.5	274
12	A Biodegradable Nanoparticle Platform for the Induction of Antigen-Specific Immune Tolerance for Treatment of Autoimmune Disease. <i>ACS Nano</i> , 2014, 8, 2148-2160.	7.3	256
13	Matrices and scaffolds for DNA delivery in tissue engineering. <i>Advanced Drug Delivery Reviews</i> , 2007, 59, 292-307.	6.6	241
14	Identification of a Stage-Specific Permissive In Vitro Culture Environment for Follicle Growth and Oocyte Development. <i>Biology of Reproduction</i> , 2006, 75, 916-923.	1.2	234
15	The in vitro regulation of ovarian follicle development using alginate-extracellular matrix gels. <i>Biomaterials</i> , 2006, 27, 714-723.	5.7	219
16	Tissue engineering tools for modulation of the immune response. <i>BioTechniques</i> , 2011, 51, 239-254.	0.8	215
17	Engineered Bone Development from a Pre-Osteoblast Cell Line on Three-Dimensional Scaffolds. <i>Tissue Engineering</i> , 2000, 6, 605-617.	4.9	214
18	Controlled release systems for DNA delivery. <i>Molecular Therapy</i> , 2004, 10, 19-26.	3.7	214

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19	Interpenetrating fibrin- $\alpha$ lginate matrices for in vitro ovarian follicle development. <i>Biomaterials</i> , 2009, 30, 5476-5485.	5.7	212
20	Design of modular non-viral gene therapy vectors. <i>Biomaterials</i> , 2006, 27, 947-954.	5.7	193
21	In vitro follicle growth supports human oocyte meiotic maturation. <i>Scientific Reports</i> , 2015, 5, 17323.	1.6	190
22	Harnessing nanoparticles for immune modulation. <i>Trends in Immunology</i> , 2015, 36, 419-427.	2.9	190
23	Novel Approach for the Three-Dimensional Culture of Granulosa Cell-Oocyte Complexes. <i>Tissue Engineering</i> , 2003, 9, 1013-1021.	4.9	183
24	Postnatal regulation of germ cells by activin: The establishment of the initial follicle pool. <i>Developmental Biology</i> , 2006, 298, 132-148.	0.9	183
25	Chromosome cohesion decreases in human eggs with advanced maternal age. <i>Aging Cell</i> , 2012, 11, 1121-1124.	3.0	161
26	Regulation of Mouse Follicle Development by Follicle-Stimulating Hormone in a Three-Dimensional In Vitro Culture System Is Dependent on Follicle Stage and Dose1. <i>Biology of Reproduction</i> , 2005, 73, 942-950.	1.2	158
27	The Role of the Extracellular Matrix in Ovarian Follicle Development. <i>Reproductive Sciences</i> , 2007, 14, 6-10.	1.1	158
28	Plasmid Delivery in Vivo from Porous Tissue-Engineering Scaffolds: Transgene Expression and Cellular Transfection. <i>Molecular Therapy</i> , 2005, 12, 475-483.	3.7	156
29	DNA delivery from hyaluronic acid-collagen hydrogels via a substrate-mediated approach. <i>Biomaterials</i> , 2005, 26, 1575-1584.	5.7	151
30	Surface-Tethered DNA Complexes for Enhanced Gene Delivery. <i>Bioconjugate Chemistry</i> , 2002, 13, 621-629.	1.8	146
31	Controllable delivery of non-viral DNA from porous scaffolds. <i>Journal of Controlled Release</i> , 2003, 86, 157-168.	4.8	140
32	A novel two-step strategy for in vitro culture of early-stage ovarian follicles in the mouse. <i>Fertility and Sterility</i> , 2010, 93, 2633-2639.	0.5	140
33	Bioengineering the Ovarian Follicle Microenvironment. <i>Annual Review of Biomedical Engineering</i> , 2014, 16, 29-52.	5.7	138
34	Extracellular Matrix Protein-Coated Scaffolds Promote the Reversal of Diabetes After Extrahepatic Islet Transplantation. <i>Transplantation</i> , 2008, 85, 1456-1464.	0.5	133
35	In vivo capture and label-free detection of early metastatic cells. <i>Nature Communications</i> , 2015, 6, 8094.	5.8	133
36	A new hypothesis regarding ovarian follicle development: ovarian rigidity as a regulator of selection and health. <i>Journal of Assisted Reproduction and Genetics</i> , 2011, 28, 3-6.	1.2	132

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37	Hydrogel network design using multifunctional macromers to coordinate tissue maturation in ovarian follicle culture. <i>Biomaterials</i> , 2011, 32, 2524-2531.	5.7	132
38	Gene delivery through cell culture substrate adsorbed DNA complexes. <i>Biotechnology and Bioengineering</i> , 2005, 90, 290-302.	1.7	131
39	Distribution of extracellular matrix proteins type I collagen, type IV collagen, fibronectin, and laminin in mouse folliculogenesis. <i>Histochemistry and Cell Biology</i> , 2006, 126, 583-592.	0.8	130
40	Vasculogenic hydrogel enhances islet survival, engraftment, and function in leading extrahepatic sites. <i>Science Advances</i> , 2017, 3, e1700184.	4.7	130
41	Neurotrophin releasing single and multiple lumen nerve conduits. <i>Journal of Controlled Release</i> , 2005, 104, 433-446.	4.8	129
42	Polymer Scaffolds as Synthetic Microenvironments for Extrahepatic Islet Transplantation. <i>Transplantation</i> , 2006, 82, 452-459.	0.5	126
43	Local immunomodulation with Fas ligand-engineered biomaterials achieves allogeneic islet graft acceptance. <i>Nature Materials</i> , 2018, 17, 732-739.	13.3	124
44	Non-viral vector delivery from PEG-hyaluronic acid hydrogels. <i>Journal of Controlled Release</i> , 2007, 120, 233-241.	4.8	123
45	Evidence for Chromosome 2p16.3 Polycystic Ovary Syndrome Susceptibility Locus in Affected Women of European Ancestry. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2013, 98, E185-E190.	1.8	121
46	Fate of the initial follicle pool: Empirical and mathematical evidence supporting its sufficiency for adult fertility. <i>Developmental Biology</i> , 2006, 298, 149-154.	0.9	117
47	Secondary follicle growth and oocyte maturation by culture in alginate hydrogel following cryopreservation of the ovary or individual follicles. <i>Biotechnology and Bioengineering</i> , 2009, 103, 378-386.	1.7	117
48	Engineering the Follicle Microenvironment. <i>Seminars in Reproductive Medicine</i> , 2007, 25, 287-299.	0.5	112
49	Substrate-mediated DNA delivery: role of the cationic polymer structure and extent of modification. <i>Journal of Controlled Release</i> , 2003, 93, 69-84.	4.8	111
50	Gene delivery from polymer scaffolds for tissue engineering. <i>Expert Review of Medical Devices</i> , 2004, 1, 127-138.	1.4	110
51	Alginate encapsulation supports the growth and differentiation of human primordial follicles within ovarian cortical tissue. <i>Journal of Assisted Reproduction and Genetics</i> , 2014, 31, 1013-1028.	1.2	110
52	Extracellular Matrix Functions in Follicle Maturation. <i>Seminars in Reproductive Medicine</i> , 2006, 24, 262-269.	0.5	109
53	Engineering Biomaterial Systems to Enhance Viral Vector Gene Delivery. <i>Molecular Therapy</i> , 2011, 19, 1407-1415.	3.7	107
54	Fibrin Encapsulation and Vascular Endothelial Growth Factor Delivery Promotes Ovarian Graft Survival in Mice. <i>Tissue Engineering - Part A</i> , 2011, 17, 3095-3104.	1.6	105

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55	In Vitro Oocyte Maturation and Preantral Follicle Culture from the Luteal-Phase Baboon Ovary Produce Mature Oocytes. <i>Biology of Reproduction</i> , 2011, 84, 689-697.	1.2	103
56	Multifunctional, multichannel bridges that deliver neurotrophin encoding lentivirus for regeneration following spinal cord injury. <i>Biomaterials</i> , 2012, 33, 1618-1626.	5.7	103
57	Transforming growth factor-beta 1 delivery from microporous scaffolds decreases inflammation post-implant and enhances function of transplanted islets. <i>Biomaterials</i> , 2016, 80, 11-19.	5.7	103
58	Apoptosis-induced CXCL5 accelerates inflammation and growth of prostate tumor metastases in bone. <i>Journal of Clinical Investigation</i> , 2017, 128, 248-266.	3.9	103
59	Engineering the pre-metastatic niche. <i>Nature Biomedical Engineering</i> , 2017, 1, .	11.6	100
60	Engineering the ovarian cycle using in vitro follicle culture. <i>Human Reproduction</i> , 2015, 30, 1386-1395.	0.4	99
61	The Mouse Follicle Microenvironment Regulates Antrum Formation and Steroid Production: Alterations in Gene Expression Profiles <sup>1</sup> . <i>Biology of Reproduction</i> , 2009, 80, 432-439.	1.2	98
62	In vivo reprogramming of immune cells: Technologies for induction of antigen-specific tolerance. <i>Advanced Drug Delivery Reviews</i> , 2017, 114, 240-255.	6.6	95
63	Local gene delivery from ECM-coated poly(lactide-co-glycolide) multiple channel bridges after spinal cord injury. <i>Biomaterials</i> , 2009, 30, 2361-2368.	5.7	91
64	An antigen-encapsulating nanoparticle platform for TH1/17 immune tolerance therapy. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 191-200.	1.7	89
65	Tolerogenic Ag-PLG nanoparticles induce tregs to suppress activated diabetogenic CD4 and CD8 T cells. <i>Journal of Autoimmunity</i> , 2018, 89, 112-124.	3.0	87
66	Gliadin Nanoparticles Induce Immune Tolerance to Gliadin in Mouse Models of Celiac Disease. <i>Gastroenterology</i> , 2020, 158, 1667-1681.e12.	0.6	87
67	Enhanced Survival with Implantable Scaffolds That Capture Metastatic Breast Cancer Cells <i>in Vivo</i> . <i>Cancer Research</i> , 2016, 76, 5209-5218.	0.4	86
68	Plakophilin-2 loss promotes TGF- $\beta$ 1/p38 MAPK-dependent fibrotic gene expression in cardiomyocytes. <i>Journal of Cell Biology</i> , 2016, 212, 425-438.	2.3	83
69	Intravascular innate immune cells reprogrammed via intravenous nanoparticles to promote functional recovery after spinal cord injury. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14947-14954.	3.3	83
70	Aligned hydrogel tubes guide regeneration following spinal cord injury. <i>Acta Biomaterialia</i> , 2019, 86, 312-322.	4.1	83
71	Peptide-Conjugated Nanoparticles Reduce Positive Co-stimulatory Expression and T Cell Activity to Induce Tolerance. <i>Molecular Therapy</i> , 2017, 25, 1676-1685.	3.7	79
72	Controlled Delivery of Single or Multiple Antigens in Tolerogenic Nanoparticles Using Peptide-Polymer Bioconjugates. <i>Molecular Therapy</i> , 2017, 25, 1655-1664.	3.7	79

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73	Biodegradable antigen-associated PLG nanoparticles tolerize Th2-mediated allergic airway inflammation pre- and postsensitization. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5059-5064.	3.3	78
74	Nanoparticle delivery of donor antigens for transplant tolerance in allogeneic islet transplantation. Biomaterials, 2014, 35, 8887-8894.	5.7	77
75	Fibrin hydrogels for non-viral vector delivery in vitro. Journal of Controlled Release, 2009, 136, 148-154.	4.8	75
76	Channel density and porosity of degradable bridging scaffolds on axon growth after spinal injury. Biomaterials, 2013, 34, 2213-2220.	5.7	73
77	Substrate-mediated delivery from self-assembled monolayers: Effect of surface ionization, hydrophilicity, and patterning. Acta Biomaterialia, 2005, 1, 511-522.	4.1	71
78	Fibrin hydrogels for lentiviral gene delivery in vitro and in vivo. Journal of Controlled Release, 2012, 157, 80-85.	4.8	68
79	Itâ€™s All in the Delivery: Designing Hydrogels for Cell and Non-viral Gene Therapies. Molecular Therapy, 2018, 26, 2087-2106.	3.7	68
80	Designing drug-free biodegradable nanoparticles to modulate inflammatory monocytes and neutrophils for ameliorating inflammation. Journal of Controlled Release, 2019, 300, 185-196.	4.8	68
81	Inductive tissue engineering with protein and DNA-releasing scaffolds. Molecular BioSystems, 2006, 2, 36-48.	2.9	67
82	Extrahepatic islet transplantation with microporous polymer scaffolds in syngeneic mouse and allogeneic porcine models. Biomaterials, 2011, 32, 9677-9684.	5.7	67
83	Overcoming challenges in treating autoimmunity: Development of tolerogenic immune-modifying nanoparticles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 18, 282-291.	1.7	67
84	Patterned PLG substrates for localized DNA delivery and directed neurite extension. Biomaterials, 2007, 28, 2603-2611.	5.7	66
85	Preserving female fertility following cancer treatment: Current options and future possibilities. Pediatric Blood and Cancer, 2009, 53, 289-295.	0.8	66
86	PLG Scaffold Delivered Antigen-Specific Regulatory T Cells Induce Systemic Tolerance in Autoimmune Diabetes. Tissue Engineering - Part A, 2013, 19, 1465-1475.	1.6	66
87	Modulation of leukocyte infiltration and phenotype in microporous tissue engineering scaffolds via vector induced IL-10 expression. Biomaterials, 2014, 35, 2024-2031.	5.7	66
88	Immune Tolerance for Autoimmune Disease and Cell Transplantation. Annual Review of Biomedical Engineering, 2016, 18, 181-205.	5.7	66
89	Conjugation of Transforming Growth Factor Beta to Antigen-Loaded Poly(lactide-co-glycolide) Nanoparticles Enhances Efficiency of Antigen-Specific Tolerance. Bioconjugate Chemistry, 2018, 29, 813-823.	1.8	66
90	Extracellular matrix mediators of metastatic cell colonization characterized using scaffold mimics of the pre-metastatic niche. Acta Biomaterialia, 2016, 33, 13-24.	4.1	65

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91	Neutrophils preferentially phagocytose elongated particles—An opportunity for selective targeting in acute inflammatory diseases. <i>Science Advances</i> , 2020, 6, eaba1474.	4.7	64
92	Pancreatic cancer is marked by complement-high blood monocytes and tumor-associated macrophages. <i>Life Science Alliance</i> , 2021, 4, e202000935.	1.3	64
93	Nano-Encapsulation of Arsenic Trioxide Enhances Efficacy against Murine Lymphoma Model while Minimizing Its Impact on Ovarian Reserve In Vitro and In Vivo. <i>PLoS ONE</i> , 2013, 8, e58491.	1.1	63
94	Sonic hedgehog and neurotrophin-3 increase oligodendrocyte numbers and myelination after spinal cord injury. <i>Integrative Biology (United Kingdom)</i> , 2014, 6, 694-705.	0.6	63
95	Collagen IV-Modified Scaffolds Improve Islet Survival and Function and Reduce Time to Euglycemia. <i>Tissue Engineering - Part A</i> , 2013, 19, 2361-2372.	1.6	62
96	Size-specific follicle selection improves mouse oocyte reproductive outcomes. <i>Reproduction</i> , 2015, 150, 183-192.	1.1	61
97	Biomaterial bridges enable regeneration and re-entry of corticospinal tract axons into the caudal spinal cord after SCI: Association with recovery of forelimb function. <i>Biomaterials</i> , 2015, 65, 1-12.	5.7	61
98	Surface polyethylene glycol enhances substrate-mediated gene delivery by nonspecifically immobilized complexes. <i>Acta Biomaterialia</i> , 2008, 4, 26-39.	4.1	60
99	Sustained transgene expression via citric acid-based polyester elastomers. <i>Biomaterials</i> , 2009, 30, 2632-2641.	5.7	60
100	Future Directions in Oncofertility and Fertility Preservation: A Report from the 2011 Oncofertility Consortium Conference. <i>Journal of Adolescent and Young Adult Oncology</i> , 2013, 2, 25-30.	0.7	59
101	Plasmid Releasing Multiple Channel Bridges for Transgene Expression After Spinal Cord Injury. <i>Molecular Therapy</i> , 2009, 17, 318-326.	3.7	58
102	Murine granulosa cell morphology and function are regulated by a synthetic Arg—Gly—Asp matrix. <i>Molecular and Cellular Endocrinology</i> , 2003, 205, 1-10.	1.6	57
103	Multiple Channel Bridges for Spinal Cord Injury: Cellular Characterization of Host Response. <i>Tissue Engineering - Part A</i> , 2009, 15, 3283-3295.	1.6	56
104	Embryonic Fibroblasts Enable the Culture of Primary Ovarian Follicles Within Alginate Hydrogels. <i>Tissue Engineering - Part A</i> , 2012, 18, 1229-1238.	1.6	56
105	Hydrogels for lentiviral gene delivery. <i>Expert Opinion on Drug Delivery</i> , 2013, 10, 499-509.	2.4	56
106	Poly(lactide-co-glycolide) microspheres for MRI-monitored transcatheter delivery of sorafenib to liver tumors. <i>Journal of Controlled Release</i> , 2014, 184, 10-17.	4.8	56
107	Local Immunomodulation with Anti-inflammatory Cytokine-Encoding Lentivirus Enhances Functional Recovery after Spinal Cord Injury. <i>Molecular Therapy</i> , 2018, 26, 1756-1770.	3.7	56
108	Intramuscular delivery of DNA releasing microspheres: Microsphere properties and transgene expression. <i>Journal of Controlled Release</i> , 2006, 112, 120-128.	4.8	53

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109	Lentivirus Immobilization to Nanoparticles for Enhanced and Localized Delivery From Hydrogels. <i>Molecular Therapy</i> , 2010, 18, 700-706.	3.7	53
110	Permanent protection of PLG scaffold transplanted allogeneic islet grafts in diabetic mice treated with ECDI-fixed donor splenocyte infusions. <i>Biomaterials</i> , 2011, 32, 4517-4524.	5.7	53
111	Motility-related actinin alpha-4 is associated with advanced and metastatic ovarian carcinoma. <i>Laboratory Investigation</i> , 2008, 88, 602-614.	1.7	52
112	Fibrin-Mediated Delivery of an Ovarian Follicle Pool in a Mouse Model of Infertility. <i>Tissue Engineering - Part A</i> , 2014, 20, 3021-3030.	1.6	52
113	Promoting extracellular matrix remodeling via ascorbic acid enhances the survival of primary ovarian follicles encapsulated in alginate hydrogels. <i>Biotechnology and Bioengineering</i> , 2014, 111, 1417-1429.	1.7	52
114	Cargo-less nanoparticles program innate immune cell responses to toll-like receptor activation. <i>Biomaterials</i> , 2019, 218, 119333.	5.7	51
115	Microenvironmental Regulation of Chemokine (C-X-C-Motif) Receptor 4 in Ovarian Carcinoma. <i>Molecular Cancer Research</i> , 2010, 8, 653-664.	1.5	50
116	The contribution of plasmid design and release to in vivo gene expression following delivery from cationic polymer modified scaffolds. <i>Biomaterials</i> , 2010, 31, 1140-1147.	5.7	49
117	Multi-modal magnetic resonance elastography for noninvasive assessment of ovarian tissue rigidity in vivo. <i>Acta Biomaterialia</i> , 2015, 13, 295-300.	4.1	49
118	Reducing inflammation through delivery of lentivirus encoding for anti-inflammatory cytokines attenuates neuropathic pain after spinal cord injury. <i>Journal of Controlled Release</i> , 2018, 290, 88-101.	4.8	49
119	The impact of adhesion peptides within hydrogels on the phenotype and signaling of normal and cancerous mammary epithelial cells. <i>Biomaterials</i> , 2012, 33, 3548-3559.	5.7	48
120	Mechanistic model of G-protein signal transduction determinants of efficacy and effect of precoupled receptors. <i>Biochemical Pharmacology</i> , 1997, 53, 519-530.	2.0	47
121	Hydrogel macroporosity and the prolongation of transgene expression and the enhancement of angiogenesis. <i>Biomaterials</i> , 2012, 33, 7412-7421.	5.7	47
122	Polysaccharide-modified scaffolds for controlled lentivirus delivery in vitro and after spinal cord injury. <i>Journal of Controlled Release</i> , 2013, 170, 421-429.	4.8	47
123	Regulation and guidance of cell behavior for tissue regeneration via the siRNA mechanism. <i>Wound Repair and Regeneration</i> , 2007, 15, 286-295.	1.5	46
124	Three-dimensional systems for in vitro follicular culture: overview of alginate-based matrices. <i>Reproduction, Fertility and Development</i> , 2014, 26, 915.	0.1	46
125	Tolerance induction using nanoparticles bearing HY peptides in bone marrow transplantation. <i>Biomaterials</i> , 2016, 76, 1-10.	5.7	46
126	Design of biodegradable nanoparticles to modulate phenotypes of antigen-presenting cells for antigen-specific treatment of autoimmune disease. <i>Biomaterials</i> , 2019, 222, 119432.	5.7	46



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127	Human lung organoids develop into adult airway-like structures directed by physico-chemical biomaterial properties. <i>Biomaterials</i> , 2020, 234, 119757.	5.7	46
128	Spatially Patterned Gene Delivery for Localized Neuron Survival and Neurite Extension. <i>Molecular Therapy</i> , 2007, 15, 705-712.	3.7	45
129	Retrievable hydrogels for ovarian follicle transplantation and oocyte collection. <i>Biotechnology and Bioengineering</i> , 2018, 115, 2075-2086.	1.7	45
130	Poly(lactide-co-glycolide) microspheres for MRI-monitored delivery of sorafenib in a rabbit VX2 model. <i>Biomaterials</i> , 2015, 61, 299-306.	5.7	44
131	Noninvasive Index of Cryorecovery and Growth Potential for Human Follicles In Vitro <sup>1</sup> . <i>Biology of Reproduction</i> , 2010, 82, 1180-1189.	1.2	43
132	Matrix Rigidity Activates Wnt Signaling through Down-regulation of Dickkopf-1 Protein. <i>Journal of Biological Chemistry</i> , 2013, 288, 141-151.	1.6	42
133	Wilms tumor gene protein 1 is associated with ovarian cancer metastasis and modulates cell invasion. <i>Cancer</i> , 2008, 112, 1632-1641.	2.0	41
134	Efficacy of immobilized polyplexes and lipoplexes for substrate-mediated gene delivery. <i>Biotechnology and Bioengineering</i> , 2009, 102, 1679-1691.	1.7	41
135	Heparin-chitosan nanoparticle functionalization of porous poly(ethylene glycol) hydrogels for localized lentivirus delivery of angiogenic factors. <i>Biomaterials</i> , 2014, 35, 8687-8693.	5.7	41
136	Self-assembling peptide-lipoplexes for substrate-mediated gene delivery. <i>Acta Biomaterialia</i> , 2009, 5, 903-912.	4.1	40
137	Vascular endothelial growth factor and fibroblast growth factor 2 delivery from spinal cord bridges to enhance angiogenesis following injury. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 98A, 372-382.	2.1	40
138	Porous Scaffolds Support Extrahepatic Human Islet Transplantation, Engraftment, and Function in Mice. <i>Cell Transplantation</i> , 2013, 22, 811-819.	1.2	40
139	Downregulation of connective tissue growth factor by three-dimensional matrix enhances ovarian carcinoma cell invasion. <i>International Journal of Cancer</i> , 2009, 125, 816-825.	2.3	39
140	Nerve growth factor expression by PLG-mediated lipofection. <i>Biomaterials</i> , 2006, 27, 2477-2486.	5.7	38
141	Balancing cell migration with matrix degradation enhances gene delivery to cells cultured three-dimensionally within hydrogels. <i>Journal of Controlled Release</i> , 2010, 146, 128-135.	4.8	38
142	Modulating lung immune cells by pulmonary delivery of antigen-specific nanoparticles to treat autoimmune disease. <i>Science Advances</i> , 2020, 6, .	4.7	38
143	Layered PLG scaffolds for in vivo plasmid delivery. <i>Biomaterials</i> , 2009, 30, 394-401.	5.7	37
144	Patterned transgene expression in multiple-channel bridges after spinal cord injury. <i>Acta Biomaterialia</i> , 2010, 6, 2889-2897.	4.1	37

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145	Tissue Engineering Approaches to Modulate the Inflammatory Milieu following Spinal Cord Injury. <i>Cells Tissues Organs</i> , 2016, 202, 52-66.	1.3	37
146	Gene Delivery by Immobilization to Cell-Adhesive Substrates. <i>MRS Bulletin</i> , 2005, 30, 659-662.	1.7	36
147	Phosphatidylserine immobilization of lentivirus for localized gene transfer. <i>Biomaterials</i> , 2010, 31, 4353-4359.	5.7	36
148	Reducing neuroinflammation by delivery of IL-10 encoding lentivirus from multiple-channel bridges. <i>Bioengineering and Translational Medicine</i> , 2016, 1, 136-148.	3.9	35
149	Controlled release strategies for modulating immune responses to promote tissue regeneration. <i>Journal of Controlled Release</i> , 2015, 219, 155-166.	4.8	34
150	Microporous scaffolds support assembly and differentiation of pancreatic progenitors into $\beta^2$ -cell clusters. <i>Acta Biomaterialia</i> , 2019, 96, 111-122.	4.1	34
151	Synergistic effect of eribulin and CDK inhibition for the treatment of triple negative breast cancer. <i>Oncotarget</i> , 2017, 8, 83925-83939.	0.8	34
152	An injectable PEG hydrogel controlling neurotrophin-3 release by affinity peptides. <i>Journal of Controlled Release</i> , 2021, 330, 575-586.	4.8	32
153	Gene therapy vectors with enhanced transfection based on hydrogels modified with affinity peptides. <i>Biomaterials</i> , 2011, 32, 5092-5099.	5.7	30
154	Inhibition of CDK-mediated phosphorylation of Smad3 results in decreased oncogenesis in triple negative breast cancer cells. <i>Cell Cycle</i> , 2014, 13, 3191-3201.	1.3	30
155	Localized immune tolerance from FasL-functionalized PLG scaffolds. <i>Biomaterials</i> , 2019, 192, 271-281.	5.7	30
156	Long-Term Characterization of Axon Regeneration and Matrix Changes Using Multiple Channel Bridges for Spinal Cord Regeneration. <i>Tissue Engineering - Part A</i> , 2014, 20, 1027-1037.	1.6	29
157	Dynamic, Large-Scale Profiling of Transcription Factor Activity from Live Cells in 3D Culture. <i>PLoS ONE</i> , 2010, 5, e14026.	1.1	29
158	Dynamic transcription factor activity networks in response to independently altered mechanical and adhesive microenvironmental cues. <i>Integrative Biology (United Kingdom)</i> , 2016, 8, 844-860.	0.6	28
159	Metastatic Conditioning of Myeloid Cells at a Subcutaneous Synthetic Niche Reflects Disease Progression and Predicts Therapeutic Outcomes. <i>Cancer Research</i> , 2020, 80, 602-612.	0.4	28
160	Spatially patterned gene expression for guided neurite extension. <i>Journal of Neuroscience Research</i> , 2009, 87, 844-856.	1.3	27
161	Porous Silicon Nanoparticles Embedded in Poly(lactic acid)-glycolic acid) Nanofiber Scaffolds Deliver Neurotrophic Payloads to Enhance Neuronal Growth. <i>Advanced Functional Materials</i> , 2020, 30, 2002560.	7.8	27
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