Jeffrey M Karp

List of Publications by Year
in descending order

115	21,009	46984 47	29127 104
papers	citations	h-index	g-index

122	122	122	32901
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanocarriers as an emerging platform for cancer therapy. Nature Nanotechnology, 2007, 2, 751-760.	15.6	7,469
2	Progress and challenges towards targeted delivery of cancer therapeutics. Nature Communications, 2018, 9, 1410.	5.8	1,488
3	Mesenchymal Stem Cell Homing: The Devil Is in the Details. Cell Stem Cell, 2009, 4, 206-216.	5.2	1,241
4	Mesenchymal stem cells: immune evasive, not immune privileged. Nature Biotechnology, 2014, 32, 252-260.	9.4	1,138
5	Harnessing the Mesenchymal Stem Cell Secretome for the Treatment of Cardiovascular Disease. Cell Stem Cell, 2012, 10, 244-258.	5.2	706
6	Engineering Stem Cell Organoids. Cell Stem Cell, 2016, 18, 25-38.	5.2	654
7	Mesenchymal stem cell therapy: Two steps forward, one step back. Trends in Molecular Medicine, 2010, 16, 203-209.	3.5	545
8	A biodegradable and biocompatible gecko-inspired tissue adhesive. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2307-2312.	3.3	490
9	Niche-independent high-purity cultures of Lgr5+ intestinal stem cells and their progeny. Nature Methods, 2014, 11, 106-112.	9.0	466
10	Shattering barriers toward clinically meaningful MSC therapies. Science Advances, 2020, 6, eaba6884.	4.7	351
11	Controlling size, shape and homogeneity of embryoid bodies using poly(ethylene glycol) microwells. Lab on A Chip, 2007, 7, 786.	3.1	344
12	A bio-inspired swellable microneedle adhesive for mechanical interlocking with tissue. Nature Communications, 2013, 4, 1702.	5.8	316
13	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. Science Translational Medicine, 2015, 7, 300ra128.	5.8	288
14	Accelerating the Translation of Nanomaterials in Biomedicine. ACS Nano, 2015, 9, 6644-6654.	7.3	279
15	Bioinspired multivalent DNA network for capture and release of cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19626-19631.	3.3	266
16	A Blood-Resistant Surgical Glue for Minimally Invasive Repair of Vessels and Heart Defects. Science Translational Medicine, 2014, 6, 218ra6.	5.8	253
17	Nanoparticleâ€“aptamer bioconjugates for cancer targeting. Expert Opinion on Drug Delivery, 2006, 3, 311-324.	2.4	245
18	Overcoming the translational barriers of tissue adhesives. Nature Reviews Materials, 2020, 5, 310-329.	23.3	213

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19	mRNA-engineered mesenchymal stem cells for targeted delivery of interleukin-10 to sites of inflammation. Blood, 2013, 122, e23-e32.	0.6	169
20	Clonal Expansion of Lgr5-Positive Cells from Mammalian Cochlea and High-Purity Generation of Sensory Hair Cells. Cell Reports, 2017, 18, 1917-1929.	2.9	167
21	Cultivation of Human Embryonic Stem Cells Without the Embryoid Body Step Enhances Osteogenesis In Vitro. Stem Cells, 2006, 24, 835-843.	1.4	163
22	Towards an arthritis flare-responsive drug delivery system. Nature Communications, 2018, 9, 1275.	5.8	157
23	Bone formation on two-dimensional poly(DL-lactide-co-glycolide) (PLGA) films and three-dimensional PLGA tissue engineering scaffoldsin vitro. Journal of Biomedical Materials Research Part B, 2003, 64A, 388-396.	3.0	152
24	Self-assembled prodrugs: An enzymatically triggered drug-delivery platform. Biomaterials, 2009, 30, 383-393.	5.7	141
25	A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft. Science Translational Medicine, 2014, 6, 249ra110.	5.8	131
26	Tracking Mesenchymal Stem Cells with Iron Oxide Nanoparticle Loaded Poly(lactide-co-glycolide) Microparticles. Nano Letters, 2012, 12, 4131-4139.	4.5	129
27	A self-adherent, bullet-shaped microneedle patch for controlled transdermal delivery of insulin. Journal of Controlled Release, 2017, 265, 48-56.	4.8	123
28	A photolithographic method to create cellular micropatterns. Biomaterials, 2006, 27, 4755-4764.	5.7	118
29	Development and therapeutic applications of advanced biomaterials. Current Opinion in Biotechnology, 2007, 18, 454-459.	3.3	112
30	Cabozantinib Eradicates Advanced Murine Prostate Cancer by Activating Antitumor Innate Immunity. Cancer Discovery, 2017, 7, 750-765.	7.7	112
31	Chemical Engineering of Mesenchymal Stem Cells to Induce a Cell Rolling Response. Bioconjugate Chemistry, 2008, 19, 2105-2109.	1.8	105
32	Microstructured barbs on the North American porcupine quill enable easy tissue penetration and difficult removal. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21289-21294.	3.3	104
33	Multiscale technologies for treatment of ischemic cardiomyopathy. Nature Nanotechnology, 2017, 12, 845-855.	15.6	104
34	The Kinetics of Small Extracellular Vesicle Delivery Impacts Skin Tissue Regeneration. ACS Nano, 2019, 13, 8694-8707.	7.3	100
35	Fibrin-filled scaffolds for bone-tissue engineering: Anin vivo study. Journal of Biomedical Materials Research Part B, 2004, 71A, 162-171.	3.0	97
36	A Highly Tunable Biocompatible and Multifunctional Biodegradable Elastomer. Advanced Materials, 2013, 25, 1209-1215.	11.1	94

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37	Engineering cells with intracellular agentâ€“loaded microparticles to control cell phenotype. Nature Protocols, 2014, 9, 233-245.	5.5	84
38	Application of biomaterials to advance induced pluripotent stem cell research and therapy. EMBO Journal, 2015, 34, 987-1008.	3.5	84
39	Genetically Programmable Selfâ€Regenerating Bacterial Hydrogels. Advanced Materials, 2019, 31, e1901826.	11.1	78
40	Nanoparticle-based monitoring of cell therapy. Nanotechnology, 2011, 22, 494001.	1.3	74
41	Performance-enhanced mesenchymal stem cells via intracellular delivery of steroids. Scientific Reports, 2014, 4, 4645.	1.6	74
42	Culturing human intestinal stem cells for regenerative applications in the treatment of inflammatory bowel disease. EMBO Molecular Medicine, 2017, 9, 558-570.	3.3	69
43	A prodrug-doped cellular Trojan Horse for the potential treatment of prostate cancer. Biomaterials, 2016, 91, 140-150.	5.7	68
44	Prodrugs as self-assembled hydrogels: a new paradigm for biomaterials. Current Opinion in Biotechnology, 2013, 24, 1174-1182.	3.3	67
45	BBB pathophysiologyâ€“independent delivery of siRNA in traumatic brain injury. Science Advances, 2021, 7, .	4.7	67
46	Cellular and extracellular programming of cell fate through engineered intracrine-, paracrine-, and endocrine-like mechanisms. Biomaterials, 2011, 32, 3053-3061.	5.7	66
47	Generating iPSCs: Translating Cell Reprogramming Science into Scalable and Robust Biomanufacturing Strategies. Cell Stem Cell, 2015, 16, 13-17.	5.2	60
48	A Phase I Study to Assess the Safety and Cancer-Homing Ability of Allogeneic Bone Marrow-Derived Mesenchymal Stem Cells in Men with Localized Prostate Cancer. Stem Cells Translational Medicine, 2019, 8, 441-449.	1.6	50
49	Intraoperative Stem Cell Therapy. Annual Review of Biomedical Engineering, 2012, 14, 325-349.	5.7	48
50	Therapeutic luminal coating of the intestine. Nature Materials, 2018, 17, 834-842.	13.3	46
51	A Small-Molecule Screen for Enhanced Homing of Systemically Infused Cells. Cell Reports, 2015, 10, 1261-1268.	2.9	45
52	Thrombin mediated migration of osteogenic cells. Bone, 2005, 37, 337-348.	1.4	43
53	Chemistry and material science at the cell surface. Materials Today, 2010, 13, 14-21.	8.3	38
54	Isolation of Circulating Plasma Cells in Multiple Myeloma Using CD138 Antibody-Based Capture in a Microfluidic Device. Scientific Reports, 2017, 7, 45681.	1.6	37

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55	Emerging Medical Devices for Minimally Invasive Cell Therapy. Mayo Clinic Proceedings, 2014, 89, 259-273.	1.4	36
56	Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair. Advanced Healthcare Materials, 2015, 4, 2587-2596.	3.9	36
57	Towards a defined ECM and small molecule based monolayer culture system for the expansion of mouse and human intestinal stem cells. Biomaterials, 2018, 154, 60-73.	5.7	35
58	Harnessing single-cell genomics to improve the physiological fidelity of organoid-derived cell types. BMC Biology, 2018, 16, 62.	1.7	35
59	A light-reflecting balloon catheter for atraumatic tissue defect repair. Science Translational Medicine, 2015, 7, 306ra149.	5.8	34
60	Improved Speech Intelligibility in Subjects With Stable Sensorineural Hearing Loss Following Intratympanic Dosing of FX-322 in a Phase 1b Study. Otology and Neurotology, 2021, 42, e849-e857.	0.7	34
61	Fabrication of Precise Cylindrical Three-Dimensional Tissue Engineering Scaffolds for In Vitro and In Vivo Bone Engineering Applications. Journal of Craniofacial Surgery, 2003, 14, 317-323.	0.3	33
62	Simple battery armor to protect against gastrointestinal injury from accidental ingestion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16490-16495.	3.3	33
63	Beyond Hit-and-Run: Stem Cells Leave a Lasting Memory. Cell Metabolism, 2015, 22, 541-543.	7.2	31
64	All models are wrong, but some organoids may be useful. Genome Biology, 2019, 20, 66.	3.8	31
65	Engineering designer beta cells with a CRISPR-Cas9 conjugation platform. Nature Communications, 2020, 11, 4043.	5.8	31
66	Enabling Consistency in Pluripotent Stem Cell-Derived Products for Research and Development and Clinical Applications Through Material Standards. Stem Cells Translational Medicine, 2015, 4, 217-223.	1.6	30
67	A therapeutic convectionâ€“enhanced macroencapsulation device for enhancing Î² cell viability and insulin secretion. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
68	A growth-accommodating implant for paediatric applications. Nature Biomedical Engineering, 2017, 1, 818-825.	11.6	28
69	Bioprocess decision support tool for scalable manufacture of extracellular vesicles. Biotechnology and Bioengineering, 2019, 116, 307-319.	1.7	28
70	Controlled Inhibition of the Mesenchymal Stromal Cell Pro-inflammatory Secretome via Microparticle Engineering. Stem Cell Reports, 2016, 6, 926-939.	2.3	26
71	Zinc-dependent histone deacetylases drive neutrophil extracellular trap formation and potentiate local and systemic inflammation. IScience, 2021, 24, 103256.	1.9	26
72	Bioinspired polydimethylsiloxane-based composites with high shear resistance against wet tissue. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 87-95.	1.5	24

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73	Screening for modulators of the cellular composition of gut epithelia via organoid models of intestinal stem cell differentiation. Nature Biomedical Engineering, 2022, 6, 476-494.	11.6	24
74	A 3D culture platform enables development of zinc-binding prodrugs for targeted proliferation of Î² cells. Science Advances, 2020, 6, .	4.7	22
75	Quantitative assessment of barriers to the clinical development and adoption of cellular therapies: A pilot study. Journal of Tissue Engineering, 2014, 5, 204173141455176.	2.3	19
76	Robust differentiation of human enteroendocrine cells from intestinal stem cells. Nature Communications, 2022, 13, 261.	5.8	19
77	Self-assembled hydrogel fibers for sensing the multi-compartment intracellular milieu. Scientific Reports, 2015, 4, 4466.	1.6	17
78	Bioengineering nanotechnology: towards the clinic. Nanotechnology, 2011, 22, 490201-490201.	1.3	16
79	Combined Surface Micropatterning and Reactive Chemistry Maximizes Tissue Adhesion with Minimal Inflammation. Advanced Healthcare Materials, 2014, 3, 565-571.	3.9	16
80	A resistance-sensing mechanical injector for the precise delivery of liquids to target tissue. Nature Biomedical Engineering, 2019, 3, 621-631.	11.6	15
81	Challenges in IBD Research: Novel Technologies. Inflammatory Bowel Diseases, 2019, 25, S24-S30.	0.9	14
82	Preclinical and clinical evaluation of a novel synthetic bioresorbable, on-demand, light-activated sealant in vascular reconstruction. Journal of Cardiovascular Surgery, 2019, 60, 599-611.	0.3	13
83	A Portable Chemotaxis Platform for Short and Long Term Analysis. PLoS ONE, 2012, 7, e44995.	1.1	12
84	Bioengineering tools to elucidate and control the fate of transplanted stem cells. Biochemical Society Transactions, 2014, 42, 679-687.	1.6	12
85	A Slick and Stretchable Surgical Adhesive. New England Journal of Medicine, 2017, 377, 2092-2094.	13.9	12
86	Graft-implanted, enzyme responsive, tacrolimus-eluting hydrogel enables long-term survival of orthotopic porcine limb vascularized composite allografts: A proof of concept study. PLoS ONE, 2019, 14, e0210914.	1.1	12
87	Cabozantinib Unlocks Efficient In Vivo Targeted Delivery of Neutrophil-Loaded Nanoparticles into Murine Prostate Tumors. Molecular Cancer Therapeutics, 2021, 20, 438-449.	1.9	10
88	Controlling Cell Fate In Vivo. ChemBioChem, 2009, 10, 2308-2310.	1.3	9
89	A cell-based drug delivery platform for treating central nervous system inflammation. Journal of Molecular Medicine, 2021, 99, 663-671.	1.7	8
90	The Implementation of Novel Collaborative Structures for the Identification and Resolution of Barriers to Pluripotent Stem Cell Translation. Stem Cells and Development, 2013, 22, 63-72.	1.1	7

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91	Acute Experimental Barrier Injury Triggers Ulcerative Colitisâ€“Specific Innate Hyperresponsiveness and Ulcerative Colitisâ€“Type Microbiome Changes in Humans. Cellular and Molecular Gastroenterology and Hepatology, 2021, 12, 1281-1296.	2.3	7
92	The Need to Study, Mimic, and Target Stem Cell Niches. , 2017, , 3-13.		6
93	Focus on RNA interference: from nanoformulations toin vivodelivery. Nanotechnology, 2018, 29, 010201.	1.3	6
94	Opinions and trends in biomaterials education: Report of a 2003 Society for Biomaterials survey. Journal of Biomedical Materials Research Part B, 2004, 70A, 1-9.	3.0	5
95	Decision Support Tools for Regenerative Medicine: Systematic Review. Journal of Medical Internet Research, 2018, 20, e12448.	2.1	5
96	Animal models for nickel allergy. Nature Nanotechnology, 2011, 6, 533-533.	15.6	3
97	Overview of Tissue Engineering Concepts and Applications. , 2013, , 1122-1137.		3
98	Cell therapy - showing cells the way home. Oncotarget, 2015, 6, 17857-17858.	0.8	3
99	Daily transient coating of the intestine leads to weight loss and improved glucose tolerance. Metabolism: Clinical and Experimental, 2022, 126, 154917.	1.5	3
100	Stomaching Notch. EMBO Journal, 2015, 34, 2489-2491.	3.5	2
101	Microparticle Encapsulation of a Prostate-targeted Biologic for the Treatment of Liver Metastases in a Preclinical Model of Castration-resistant Prostate Cancer. Molecular Cancer Therapeutics, 2020, 19, 2353-2362.	1.9	2
102	Toxin-Mediated siRNA Delivery. Trends in Pharmacological Sciences, 2020, 41, 511-513.	4.0	2
103	Cell surface conjugation of sialyl Lewis X induces a rolling response for mesenchymal stem cells. , 2009, , .		1
104	Micro/Nano-Engineering of Cells for Delivery of Therapeutics. , 2014, , 253-279.		1
105	In Reply to the Letter to the Editor from Raj et al.: Clinical Evidence Indicates Allogeneic Mesenchymal Stem Cells Do Not Pose a Significant Risk for Cancer Progression in the Context of Cellâ€Based Drug Delivery. Stem Cells Translational Medicine, 2019, 8, 739-740.	1.6	1
106	A radial clutch needle for facile and safe tissue compartment access. Medical Devices & Sensors, 2019, 2, e10049.	2.7	1
107	An in vitro Blood-brain Barrier Model to Study the Penetration of Nanoparticles. Bio-protocol, 2022, 12, e4334.	0.2	1
108	Part C: Directed Differentiation of Human Embryonic Stem Cells into Osteoblasts Cells. , 0, , 249-271.		0

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109	Enzyme responsive acetaminophen hydrogels. , 2009, , .		0
110	Steering trajectories of rolling cells by 2D asymmetric receptor patterning. , 2010, , .		0
111	Immobilized contrast-enhanced MRI: Gadolinium-based long-term MR contrast enhancement of the vein graft vessel wall. Magnetic Resonance in Medicine, 2011, 65, spcone-spcone.	1.9	0
112	Applications of Microfabrication and Microfluidic Techniques in Mesenchymal Stem Cell Research. , 2013, , 69-95.		0
113	Medical Adhesives: Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair (Adv. Healthcare Mater. 16/2015). Advanced Healthcare Materials, 2015, 4, 2318-2318.	3.9	0
114	Hydrogels: Genetically Programmable Selfâ€Regenerating Bacterial Hydrogels (Adv. Mater. 40/2019). Advanced Materials, 2019, 31, 1970289.	11.1	0
115	Microfluidic Separation of Cells by Rolling on Patterned Receptors. , 2008, , .		0