Jeffrey M Karp

List of Publications by Year
in descending order

115 papers	21,009 citations	47006 47 h-index	29157 104 g-index
122 all docs	122 docs citations	122 times ranked	32901 citing authors

#	Article	IF	Citations
1	Daily transient coating of the intestine leads to weight loss and improved glucose tolerance. Metabolism: Clinical and Experimental, 2022, 126, 154917.	3.4	3
2	Robust differentiation of human enteroendocrine cells from intestinal stem cells. Nature Communications, 2022, 13, 261.	12.8	19
3	An in vitro Blood-brain Barrier Model to Study the Penetration of Nanoparticles. Bio-protocol, 2022, 12, e4334.	0.4	1
4	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.	22.5	24
5	A cell-based drug delivery platform for treating central nervous system inflammation. Journal of Molecular Medicine, 2021, 99, 663-671.	3.9	8
6	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.	1.3	34
7	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, .	7.1	29
8	BBB pathophysiologyâ€“independent delivery of siRNA in traumatic brain injury. Science Advances, 2021, 7, .	10.3	67
9	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.	4.5	7
10	Cabozantinib Unlocks Efficient In Vivo Targeted Delivery of Neutrophil-Loaded Nanoparticles into Murine Prostate Tumors. Molecular Cancer Therapeutics, 2021, 20, 438-449.	4.1	10
11	Zinc-dependent histone deacetylases drive neutrophil extracellular trap formation and potentiate local and systemic inflammation. IScience, 2021, 24, 103256.	4.1	26
12	A 3D culture platform enables development of zinc-binding prodrugs for targeted proliferation of Î² cells. Science Advances, 2020, 6, .	10.3	22
13	Shattering barriers toward clinically meaningful MSC therapies. Science Advances, 2020, 6, eaba6884.	10.3	351
14	Engineering designer beta cells with a CRISPR-Cas9 conjugation platform. Nature Communications, 2020, 11, 4043.	12.8	31
15	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.	4.1	2
16	Toxin-Mediated siRNA Delivery. Trends in Pharmacological Sciences, 2020, 41, 511-513.	8.7	2
17	Overcoming the translational barriers of tissue adhesives. Nature Reviews Materials, 2020, 5, 310-329.	48.7	213
18	Bioprocess decision support tool for scalable manufacture of extracellular vesicles. Biotechnology and Bioengineering, 2019, 116, 307-319.	3.3	28

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19	The Kinetics of Small Extracellular Vesicle Delivery Impacts Skin Tissue Regeneration. ACS Nano, 2019, 13, 8694-8707.	14.6	100
20	Genetically Programmable Selfâ€Regenerating Bacterial Hydrogels. Advanced Materials, 2019, 31, e1901826.	21.0	78
21	Hydrogels: Genetically Programmable Selfâ€Regenerating Bacterial Hydrogels (Adv. Mater. 40/2019). Advanced Materials, 2019, 31, 1970289.	21.0	0
22	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.	2.5	12
23	Challenges in IBD Research: Novel Technologies. Inflammatory Bowel Diseases, 2019, 25, S24-S30.	1.9	14
24	All models are wrong, but some organoids may be useful. Genome Biology, 2019, 20, 66.	8.8	31
25	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.	3.3	1
26	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.	3.3	50
27	A resistance-sensing mechanical injector for the precise delivery of liquids to target tissue. Nature Biomedical Engineering, 2019, 3, 621-631.	22.5	15
28	A radial clutch needle for facile and safe tissue compartment access. Medical Devices & Sensors, 2019, 2, e10049.	2.7	1
29	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.	0.6	13
30	Towards an arthritis flare-responsive drug delivery system. Nature Communications, 2018, 9, 1275.	12.8	157
31	Progress and challenges towards targeted delivery of cancer therapeutics. Nature Communications, 2018, 9, 1410.	12.8	1,488
32	Focus on RNA interference: from nanoformulations toin vivodelivery. Nanotechnology, 2018, 29, 010201.	2.6	6
33	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.	11.4	35
34	Harnessing single-cell genomics to improve the physiological fidelity of organoid-derived cell types. BMC Biology, 2018, 16, 62.	3.8	35
35	Therapeutic luminal coating of the intestine. Nature Materials, 2018, 17, 834-842.	27.5	46
36	Decision Support Tools for Regenerative Medicine: Systematic Review. Journal of Medical Internet Research, 2018, 20, e12448.	4.3	5

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37	Clonal Expansion of Lgr5-Positive Cells from Mammalian Cochlea and High-Purity Generation of Sensory Hair Cells. Cell Reports, 2017, 18, 1917-1929.	6.4	167
38	Cabozantinib Eradicates Advanced Murine Prostate Cancer by Activating Antitumor Innate Immunity. Cancer Discovery, 2017, 7, 750-765.	9.4	112
39	Culturing human intestinal stem cells for regenerative applications in the treatment of inflammatory bowel disease. EMBO Molecular Medicine, 2017, 9, 558-570.	6.9	69
40	A self-adherent, bullet-shaped microneedle patch for controlled transdermal delivery of insulin. Journal of Controlled Release, 2017, 265, 48-56.	9.9	123
41	Isolation of Circulating Plasma Cells in Multiple Myeloma Using CD138 Antibody-Based Capture in a Microfluidic Device. Scientific Reports, 2017, 7, 45681.	3.3	37
42	A growth-accommodating implant for paediatric applications. Nature Biomedical Engineering, 2017, 1, 818-825.	22.5	28
43	Multiscale technologies for treatment of ischemic cardiomyopathy. Nature Nanotechnology, 2017, 12, 845-855.	31.5	104
44	A Slick and Stretchable Surgical Adhesive. New England Journal of Medicine, 2017, 377, 2092-2094.	27.0	12
45	The Need to Study, Mimic, and Target Stem Cell Niches. , 2017, , 3-13.		6
46	Controlled Inhibition of the Mesenchymal Stromal Cell Pro-inflammatory Secretome via Microparticle Engineering. Stem Cell Reports, 2016, 6, 926-939.	4.8	26
47	A prodrug-doped cellular Trojan Horse for the potential treatment of prostate cancer. Biomaterials, 2016, 91, 140-150.	11.4	68
48	Bioinspired polydimethylsiloxane-based composites with high shear resistance against wet tissue. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 87-95.	3.1	24
49	Engineering Stem Cell Organoids. Cell Stem Cell, 2016, 18, 25-38.	11.1	654
50	Medical Adhesives: Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair (Adv. Healthcare Mater. 16/2015). Advanced Healthcare Materials, 2015, 4, 2318-2318.	7.6	0
51	Stomaching Notch. EMBO Journal, 2015, 34, 2489-2491.	7.8	2
52	Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair. Advanced Healthcare Materials, 2015, 4, 2587-2596.	7.6	36
53	Generating iPSCs: Translating Cell Reprogramming Science into Scalable and Robust Biomanufacturing Strategies. Cell Stem Cell, 2015, 16, 13-17.	11.1	60
54	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.	3.3	30

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55	A Small-Molecule Screen for Enhanced Homing of Systemically Infused Cells. Cell Reports, 2015, 10, 1261-1268.	6.4	45
56	Accelerating the Translation of Nanomaterials in Biomedicine. ACS Nano, 2015, 9, 6644-6654.	14.6	279
57	Application of biomaterials to advance induced pluripotent stem cell research and therapy. EMBO Journal, 2015, 34, 987-1008.	7.8	84
58	A light-reflecting balloon catheter for atraumatic tissue defect repair. Science Translational Medicine, 2015, 7, 306ra149.	12.4	34
59	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. Science Translational Medicine, 2015, 7, 300ra128.	12.4	288
60	Beyond Hit-and-Run: Stem Cells Leave a Lasting Memory. Cell Metabolism, 2015, 22, 541-543.	16.2	31
61	Self-assembled hydrogel fibers for sensing the multi-compartment intracellular milieu. Scientific Reports, 2015, 4, 4466.	3.3	17
62	Cell therapy - showing cells the way home. Oncotarget, 2015, 6, 17857-17858.	1.8	3
63	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.	7.1	33
64	Micro/Nano-Engineering of Cells for Delivery of Therapeutics. , 2014, , 253-279.		1
65	Combined Surface Micropatterning and Reactive Chemistry Maximizes Tissue Adhesion with Minimal Inflammation. Advanced Healthcare Materials, 2014, 3, 565-571.	7.6	16
66	A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft. Science Translational Medicine, 2014, 6, 249ra110.	12.4	131
67	Mesenchymal stem cells: immune evasive, not immune privileged. Nature Biotechnology, 2014, 32, 252-260.	17.5	1,138
68	Bioengineering tools to elucidate and control the fate of transplanted stem cells. Biochemical Society Transactions, 2014, 42, 679-687.	3.4	12
69	A Blood-Resistant Surgical Glue for Minimally Invasive Repair of Vessels and Heart Defects. Science Translational Medicine, 2014, 6, 218ra6.	12.4	253
70	Engineering cells with intracellular agentâ€“loaded microparticles to control cell phenotype. Nature Protocols, 2014, 9, 233-245.	12.0	84
71	Niche-independent high-purity cultures of Lgr5+ intestinal stem cells and their progeny. Nature Methods, 2014, 11, 106-112.	19.0	466
72	Emerging Medical Devices for Minimally Invasive Cell Therapy. Mayo Clinic Proceedings, 2014, 89, 259-273.	3.0	36

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73	Quantitative assessment of barriers to the clinical development and adoption of cellular therapies: A pilot study. Journal of Tissue Engineering, 2014, 5, 204173141455176.	5.5	19
74	Performance-enhanced mesenchymal stem cells via intracellular delivery of steroids. Scientific Reports, 2014, 4, 4645.	3.3	74
75	Prodrugs as self-assembled hydrogels: a new paradigm for biomaterials. Current Opinion in Biotechnology, 2013, 24, 1174-1182.	6.6	67
76	A Highly Tunable Biocompatible and Multifunctional Biodegradable Elastomer. Advanced Materials, 2013, 25, 1209-1215.	21.0	94
77	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.	2.1	7
78	mRNA-engineered mesenchymal stem cells for targeted delivery of interleukin-10 to sites of inflammation. Blood, 2013, 122, e23-e32.	1.4	169
79	Overview of Tissue Engineering Concepts and Applications. , 2013, , 1122-1137.		3
80	A bio-inspired swellable microneedle adhesive for mechanical interlocking with tissue. Nature Communications, 2013, 4, 1702.	12.8	316
81	Applications of Microfabrication and Microfluidic Techniques in Mesenchymal Stem Cell Research. , 2013, , 69-95.		0
82	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.	7.1	104
83	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.	7.1	266
84	Intraoperative Stem Cell Therapy. Annual Review of Biomedical Engineering, 2012, 14, 325-349.	12.3	48
85	Tracking Mesenchymal Stem Cells with Iron Oxide Nanoparticle Loaded Poly(lactide-co-glycolide) Microparticles. Nano Letters, 2012, 12, 4131-4139.	9.1	129
86	A Portable Chemotaxis Platform for Short and Long Term Analysis. PLoS ONE, 2012, 7, e44995.	2.5	12
87	Harnessing the Mesenchymal Stem Cell Secretome for the Treatment of Cardiovascular Disease. Cell Stem Cell, 2012, 10, 244-258.	11.1	706
88	Nanoparticle-based monitoring of cell therapy. Nanotechnology, 2011, 22, 494001.	2.6	74
89	Cellular and extracellular programming of cell fate through engineered intracrine-, paracrine-, and endocrine-like mechanisms. Biomaterials, 2011, 32, 3053-3061.	11.4	66
90	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.	3.0	0

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91	Bioengineering nanotechnology: towards the clinic. Nanotechnology, 2011, 22, 490201-490201.	2.6	16
92	Animal models for nickel allergy. Nature Nanotechnology, 2011, 6, 533-533.	31.5	3
93	Chemistry and material science at the cell surface. Materials Today, 2010, 13, 14-21.	14.2	38
94	Steering trajectories of rolling cells by 2D asymmetric receptor patterning. , 2010, , .		0
95	Mesenchymal stem cell therapy: Two steps forward, one step back. Trends in Molecular Medicine, 2010, 16, 203-209.	6.7	545
96	Controlling Cell Fate In Vivo. ChemBioChem, 2009, 10, 2308-2310.	2.6	9
97	Self-assembled prodrugs: An enzymatically triggered drug-delivery platform. Biomaterials, 2009, 30, 383-393.	11.4	141
98	Mesenchymal Stem Cell Homing: The Devil Is in the Details. Cell Stem Cell, 2009, 4, 206-216.	11.1	1,241
99	Cell surface conjugation of sialyl Lewis X induces a rolling response for mesenchymal stem cells. , 2009, , .		1
100	Enzyme responsive acetaminophen hydrogels. , 2009, , .		0
101	Chemical Engineering of Mesenchymal Stem Cells to Induce a Cell Rolling Response. Bioconjugate Chemistry, 2008, 19, 2105-2109.	3.6	105
102	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.	7.1	490
103	Microfluidic Separation of Cells by Rolling on Patterned Receptors. , 2008, , .		0
104	Controlling size, shape and homogeneity of embryoid bodies using poly(ethylene glycol) microwells. Lab on A Chip, 2007, 7, 786.	6.0	344
105	Development and therapeutic applications of advanced biomaterials. Current Opinion in Biotechnology, 2007, 18, 454-459.	6.6	112
106	Nanocarriers as an emerging platform for cancer therapy. Nature Nanotechnology, 2007, 2, 751-760.	31.5	7,469
107	A photolithographic method to create cellular micropatterns. Biomaterials, 2006, 27, 4755-4764.	11.4	118
108	Cultivation of Human Embryonic Stem Cells Without the Embryoid Body Step Enhances Osteogenesis In Vitro. Stem Cells, 2006, 24, 835-843.	3.2	163

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109	Nanoparticleâ€“aptamer bioconjugates for cancer targeting. Expert Opinion on Drug Delivery, 2006, 3, 311-324.	5.0	245
110	Thrombin mediated migration of osteogenic cells. Bone, 2005, 37, 337-348.	2.9	43
111	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.	3.1	5
112	Fibrin-filled scaffolds for bone-tissue engineering: Anin vivo study. Journal of Biomedical Materials Research Part B, 2004, 71A, 162-171.	3.1	97
113	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.	3.1	152
114	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.	0.7	33
115	Part C: Directed Differentiation of Human Embryonic Stem Cells into Osteoblasts Cells. , 0, , 249-271.		0