Jeffrey M Karp

List of Publications by Year in Descending Order

108 papers	16,741 citations	45 h-index	122 g-index
122 ext. papers	18,943 ext. citations	12.9 avg, IF	6.81 L-index

#	Paper	IF	Citations
108	Robust differentiation of human enteroendocrine cells from intestinal stem cells.. *Nature Communications*, **2022**, 13, 261	17.4	0
107	Daily transient coating of the intestine leads to weight loss and improved glucose tolerance. *Metabolism: Clinical and Experimental*, **2022**, 126, 154917	12.7	0
106	An Blood-brain Barrier Model to Study the Penetration of Nanoparticles.. *Bio-protocol*, **2022**, 12, e4334	0.9	
105	Cabozantinib Unlocks Efficient Targeted Delivery of Neutrophil-Loaded Nanoparticles into Murine Prostate Tumors. *Molecular Cancer Therapeutics*, **2021**, 20, 438-449	6.1	4
104	Zinc-dependent histone deacetylases drive neutrophil extracellular trap formation and potentiate local and systemic inflammation. *IScience*, **2021**, 24, 103256	6.1	5
103	A cell-based drug delivery platform for treating central nervous system inflammation. *Journal of Molecular Medicine*, **2021**, 99, 663-671	5.5	4
102	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	2.6	6
101	A therapeutic convection-enhanced macroencapsulation device for enhancing □cell viability and insulin secretion. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	7
100	BBB pathophysiology-independent delivery of siRNA in traumatic brain injury. *Science Advances*, **2021**, 7,	14.3	20
99	Acute Experimental Barrier Injury Triggers Ulcerative Colitis-Specific Innate Hyperresponsiveness and Ulcerative Colitis-Type Microbiome Changes in Humans. *Cellular and Molecular Gastroenterology and Hepatology*, **2021**, 12, 1281-1296	7.9	4
98	Toxin-Mediated siRNA Delivery. *Trends in Pharmacological Sciences*, **2020**, 41, 511-513	13.2	1
97	Overcoming the translational barriers of tissue adhesives. *Nature Reviews Materials*, **2020**, 5, 310-329	73.3	89
96	A 3D culture platform enables development of zinc-binding prodrugs for targeted proliferation of □cells. *Science Advances*, **2020**, 6,	14.3	10
95	Shattering barriers toward clinically meaningful MSC therapies. *Science Advances*, **2020**, 6, eaba6884	14.3	137
94	Engineering designer beta cells with a CRISPR-Cas9 conjugation platform. *Nature Communications*, **2020**, 11, 4043	17.4	20
93	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	6.1	1
92	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	3.7	9

91	Challenges in IBD Research: Novel Technologies. *Inflammatory Bowel Diseases*, **2019**, 25, S24-S30	4.5	8
90	In Reply. *Stem Cells Translational Medicine*, **2019**, 8, 739-740	6.9	1
89	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	6.9	33
88	A resistance-sensing mechanical injector for the precise delivery of liquids to target tissue. *Nature Biomedical Engineering*, **2019**, 3, 621-631	19	8
87	Bioprocess decision support tool for scalable manufacture of extracellular vesicles. *Biotechnology and Bioengineering*, **2019**, 116, 307-319	4.9	11
86	The Kinetics of Small Extracellular Vesicle Delivery Impacts Skin Tissue Regeneration. *ACS Nano*, **2019**, 13, 8694-8707	16.7	54
85	Genetically Programmable Self-Regenerating Bacterial Hydrogels. *Advanced Materials*, **2019**, 31, e1901826	24	46
84	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	0.7	10
83	A Radial Clutch Needle for Facile and Safe Tissue Compartment Access. *Medical Devices & Sensors*, **2019**, 2, e10049	1.6	
82	Towards an arthritis flare-responsive drug delivery system. *Nature Communications*, **2018**, 9, 1275	17.4	108
81	Progress and challenges towards targeted delivery of cancer therapeutics. *Nature Communications*, **2018**, 9, 1410	17.4	976
80	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	15.6	24
79	Harnessing single-cell genomics to improve the physiological fidelity of organoid-derived cell types. *BMC Biology*, **2018**, 16, 62	7.3	22
78	Therapeutic luminal coating of the intestine. *Nature Materials*, **2018**, 17, 834-842	27	22
77	Decision Support Tools for Regenerative Medicine: Systematic Review. *Journal of Medical Internet Research*, **2018**, 20, e12448	7.6	3
76	Clonal Expansion of Lgr5-Positive Cells from Mammalian Cochlea and High-Purity Generation of Sensory Hair Cells. *Cell Reports*, **2017**, 18, 1917-1929	10.6	103
75	Cabozantinib Eradicates Advanced Murine Prostate Cancer by Activating Antitumor Innate Immunity. *Cancer Discovery*, **2017**, 7, 750-765	24.4	77
74	Culturing human intestinal stem cells for regenerative applications in the treatment of inflammatory bowel disease. *EMBO Molecular Medicine*, **2017**, 9, 558-570	12	54

73	A self-adherent, bullet-shaped microneedle patch for controlled transdermal delivery of insulin. *Journal of Controlled Release*, **2017**, 265, 48-56	11.7	87
72	Isolation of Circulating Plasma Cells in Multiple Myeloma Using CD138 Antibody-Based Capture in a Microfluidic Device. *Scientific Reports*, **2017**, 7, 45681	4.9	26
71	A Growth-Accommodating Implant for Paediatric Applications. *Nature Biomedical Engineering*, **2017** , 1, 818-825	19	20
70	Multiscale technologies for treatment of ischemic cardiomyopathy. *Nature Nanotechnology*, **2017**, 12, 845-855	28.7	84
69	A Slick and Stretchable Surgical Adhesive. *New England Journal of Medicine*, **2017**, 377, 2092-2094	59.2	7
68	The Need to Study, Mimic, and Target Stem Cell Niches **2017**, 3-13		2
67	A prodrug-doped cellular Trojan Horse for the potential treatment of prostate cancer. *Biomaterials*, **2016**, 91, 140-150	15.6	55
66	Bioinspired polydimethylsiloxane-based composites with high shear resistance against wet tissue. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 61, 87-95	4.1	22
65	Engineering Stem Cell Organoids. *Cell Stem Cell*, **2016**, 18, 25-38	18	494
64	Controlled Inhibition of the Mesenchymal Stromal Cell Pro-inflammatory Secretome via Microparticle Engineering. *Stem Cell Reports*, **2016**, 6, 926-939	8	18
63	A small-molecule screen for enhanced homing of systemically infused cells. *Cell Reports*, **2015**, 10, 1261-1268	12.8	38
62	Accelerating the Translation of Nanomaterials in Biomedicine. *ACS Nano*, **2015**, 9, 6644-54	16.7	220
61	Application of biomaterials to advance induced pluripotent stem cell research and therapy. *EMBO Journal*, **2015**, 34, 987-1008	13	64
60	A light-reflecting balloon catheter for atraumatic tissue defect repair. *Science Translational Medicine*, **2015**, 7, 306ra149	17.5	28
59	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. *Science Translational Medicine*, **2015**, 7, 300ra128	17.5	196
58	Beyond Hit-and-Run: Stem Cells Leave a Lasting Memory. *Cell Metabolism*, **2015**, 22, 541-3	24.6	22
57	Medical Adhesives: Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair (Adv. Healthcare Mater. 16/2015). *Advanced Healthcare Materials*, **2015**, 4, 2318-2318	10.1	
56	Stomaching Notch. *EMBO Journal*, **2015**, 34, 2489-91	13	1

55	Bioinspired Nanoparticulate Medical Glues for Minimally Invasive Tissue Repair. *Advanced Healthcare Materials*, **2015**, 4, 2587-96	10.1	26
54	Generating iPSCs: translating cell reprogramming science into scalable and robust biomanufacturing strategies. *Cell Stem Cell*, **2015**, 16, 13-7	18	45
53	Enabling consistency in pluripotent stem cell-derived products for research and development and clinical applications through material standards. *Stem Cells Translational Medicine*, **2015**, 4, 217-23	6.9	29
52	Performance-enhanced mesenchymal stem cells via intracellular delivery of steroids. *Scientific Reports*, **2014**, 4, 4645	4.9	60
51	Self-assembled hydrogel fibers for sensing the multi-compartment intracellular milieu. *Scientific Reports*, **2014**, 4, 4466	4.9	14
50	Mesenchymal stem cells: immune evasive, not immune privileged. *Nature Biotechnology*, **2014**, 32, 252-60	44.5	825
49	Bioengineering tools to elucidate and control the fate of transplanted stem cells. *Biochemical Society Transactions*, **2014**, 42, 679-87	5.1	11
48	A blood-resistant surgical glue for minimally invasive repair of vessels and heart defects. *Science Translational Medicine*, **2014**, 6, 218ra6	17.5	193
47	Engineering cells with intracellular agent-loaded microparticles to control cell phenotype. *Nature Protocols*, **2014**, 9, 233-45	18.8	75
46	Niche-independent high-purity cultures of Lgr5+ intestinal stem cells and their progeny. *Nature Methods*, **2014**, 11, 106-12	21.6	332
45	Emerging medical devices for minimally invasive cell therapy. *Mayo Clinic Proceedings*, **2014**, 89, 259-73	6.4	35
44	Quantitative assessment of barriers to the clinical development and adoption of cellular therapies: A pilot study. *Journal of Tissue Engineering*, **2014**, 5, 2041731414551764	7.5	18
43	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, 16490-5	11.5	25
42	Micro/Nano-Engineering of Cells for Delivery of Therapeutics **2014**, 253-279		1
41	Combined surface micropatterning and reactive chemistry maximizes tissue adhesion with minimal inflammation. *Advanced Healthcare Materials*, **2014**, 3, 565-71	10.1	15
40	A single localized dose of enzyme-responsive hydrogel improves long-term survival of a vascularized composite allograft. *Science Translational Medicine*, **2014**, 6, 249ra110	17.5	100
39	Prodrugs as self-assembled hydrogels: a new paradigm for biomaterials. *Current Opinion in Biotechnology*, **2013**, 24, 1174-82	11.4	59
38	A highly tunable biocompatible and multifunctional biodegradable elastomer. *Advanced Materials*, **2013**, 25, 1209-15	24	79

37	The implementation of novel collaborative structures for the identification and resolution of barriers to pluripotent stem cell translation. *Stem Cells and Development*, **2013**, 22 Suppl 1, 63-72	4.4	6
36	mRNA-engineered mesenchymal stem cells for targeted delivery of interleukin-10 to sites of inflammation. *Blood*, **2013**, 122, e23-32	2.2	139
35	Overview of Tissue Engineering Concepts and Applications **2013**, 1122-1137		3
34	A bio-inspired swellable microneedle adhesive for mechanical interlocking with tissue. *Nature Communications*, **2013**, 4, 1702	17.4	230
33	Applications of Microfabrication and Microfluidic Techniques in Mesenchymal Stem Cell Research **2013**, 69-95		
32	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, 19626-31	11.5	228
31	Intraoperative stem cell therapy. *Annual Review of Biomedical Engineering*, **2012**, 14, 325-49	12	41
30	Tracking mesenchymal stem cells with iron oxide nanoparticle loaded poly(lactide-co-glycolide) microparticles. *Nano Letters*, **2012**, 12, 4131-9	11.5	116
29	A portable chemotaxis platform for short and long term analysis. *PLoS ONE*, **2012**, 7, e44995	3.7	11
28	Harnessing the mesenchymal stem cell secretome for the treatment of cardiovascular disease. *Cell Stem Cell*, **2012**, 10, 244-58	18	622
27	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, 21289-94	11.5	78
26	Nanoparticle-based monitoring of cell therapy. *Nanotechnology*, **2011**, 22, 494001	3.4	59
25	Cellular and extracellular programming of cell fate through engineered intracrine-, paracrine-, and endocrine-like mechanisms. *Biomaterials*, **2011**, 32, 3053-61	15.6	51
24	Animal models for nickel allergy. *Nature Nanotechnology*, **2011**, 6, 533-533	28.7	3
23	Mesenchymal stem cell therapy: Two steps forward, one step back. *Trends in Molecular Medicine*, **2010**, 16, 203-9	11.5	455
22	Chemistry and material science at the cell surface. *Materials Today*, **2010**, 13, 14-21	21.8	35
21	Controlling cell fate in vivo. *ChemBioChem*, **2009**, 10, 2308-10	3.8	7
20	Self-assembled prodrugs: an enzymatically triggered drug-delivery platform. *Biomaterials*, **2009**, 30, 383-936	15.6	131

19	Mesenchymal stem cell homing: the devil is in the details. *Cell Stem Cell*, **2009**, 4, 206-16	18	1059
18	Cell surface conjugation of sialyl Lewis X induces a rolling response for mesenchymal stem cells **2009**,		1
17	Chemical engineering of mesenchymal stem cells to induce a cell rolling response. *Bioconjugate Chemistry*, **2008**, 19, 2105-9	6.3	90
16	A biodegradable and biocompatible gecko-inspired tissue adhesive. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 2307-12	11.5	417
15	Controlling size, shape and homogeneity of embryoid bodies using poly(ethylene glycol) microwells. *Lab on A Chip*, **2007**, 7, 786-94	7.2	323
14	Development and therapeutic applications of advanced biomaterials. *Current Opinion in Biotechnology*, **2007**, 18, 454-9	11.4	100
13	Nanocarriers as an emerging platform for cancer therapy. *Nature Nanotechnology*, **2007**, 2, 751-60	28.7	6530
12	A photolithographic method to create cellular micropatterns. *Biomaterials*, **2006**, 27, 4755-64	15.6	103
11	Cultivation of human embryonic stem cells without the embryoid body step enhances osteogenesis in vitro. *Stem Cells*, **2006**, 24, 835-43	5.8	151
10	Nanoparticle-aptamer bioconjugates for cancer targeting. *Expert Opinion on Drug Delivery*, **2006**, 3, 311-24		208
9	Thrombin mediated migration of osteogenic cells. *Bone*, **2005**, 37, 337-48	4.7	36
8	Opinions and trends in biomaterials education: report of a 2003 Society for Biomaterials survey. *Journal of Biomedical Materials Research Part B*, **2004**, 70, 1-9		3
7	Fibrin-filled scaffolds for bone-tissue engineering: An in vivo study. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 162-71		86
6	Fabrication of precise cylindrical three-dimensional tissue engineering scaffolds for in vitro and in vivo bone engineering applications. *Journal of Craniofacial Surgery*, **2003**, 14, 317-23	1.2	28
5	Bone formation on two-dimensional poly(DL-lactide-co-glycolide) (PLGA) films and three-dimensional PLGA tissue engineering scaffolds in vitro. *Journal of Biomedical Materials Research Part B*, **2003**, 64, 388-96		138
4	Part C: Directed Differentiation of Human Embryonic Stem Cells into Osteoblasts Cells249-271		
3	High-throughput organoid screening enables engineering of intestinal epithelial composition		1
2	Cabozantinib unlocks efficient in vivo targeted delivery of neutrophil-loaded nanoparticles into murine prostate tumors		1

1 Robust differentiation of human enteroendocrine cells from intestinal stem cells 1