Maksim V Plikus

List of Publications by Year
in descending order

98 papers	10,157 citations	61945 43 h-index	42364 92 g-index
107 all docs	107 docs citations	107 times ranked	10392 citing authors

#	Article	IF	Citations
1	Inference and analysis of cell-cell communication using CellChat. Nature Communications, 2021, 12, 1088.	5.8	2,174
2	Cyclic dermal BMP signalling regulates stem cell activation during hair regeneration. Nature, 2008, 451, 340-344.	13.7	643
3	Regeneration of fat cells from myofibroblasts during wound healing. Science, 2017, 355, 748-752.	6.0	434
4	Dermal adipocytes protect against invasive <i>Staphylococcus aureus</i> skin infection. Science, 2015, 347, 67-71.	6.0	368
5	Single-cell analysis reveals fibroblast heterogeneity and myeloid-derived adipocyte progenitors in murine skin wounds. Nature Communications, 2019, 10, 650.	5.8	345
6	Fibroblasts: Origins, definitions, and functions in health and disease. Cell, 2021, 184, 3852-3872.	13.5	340
7	Anatomical, Physiological, and Functional Diversity of Adipose Tissue. Cell Metabolism, 2018, 27, 68-83.	7.2	298
8	Pharmacological activation of REV-ERBs is lethal in cancer and oncogene-induced senescence. Nature, 2018, 553, 351-355.	13.7	273
9	Fgf9 from dermal Î³Î´ T cells induces hair follicle neogenesis after wounding. Nature Medicine, 2013, 19, 916-923.	15.2	272
10	Activating an adaptive immune response from a hydrogel scaffold imparts regenerative wound healing. Nature Materials, 2021, 20, 560-569.	13.3	260
11	A Guide to Studying Human Hair Follicle Cycling In Vivo. Journal of Investigative Dermatology, 2016, 136, 34-44.	0.3	219
12	Organ-Level Quorum Sensing Directs Regeneration in Hair Stem Cell Populations. Cell, 2015, 161, 277-290.	13.5	195
13	An Integrated Gene Regulatory Network Controls Stem Cell Proliferation in Teeth. PLoS Biology, 2007, 5, e159.	2.6	192
14	Self-Organizing and Stochastic Behaviors During the Regeneration of Hair Stem Cells. Science, 2011, 332, 586-589.	6.0	186
15	Hedgehog stimulates hair follicle neogenesis by creating inductive dermis during murine skin wound healing. Nature Communications, 2018, 9, 4903.	5.8	182
16	Evo-Devo of amniote integuments and appendages.. International Journal of Developmental Biology, 2004, 48, 249-270.	0.3	180
17	Epithelial stem cells and implications for wound repair. Seminars in Cell and Developmental Biology, 2012, 23, 946-953.	2.3	170
18	Morphoregulation of teeth: modulating the number, size, shape and differentiation by tuning Bmp activity. Evolution & Development, 2005, 7, 440-457.	1.1	159

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19	MiR-31 promotes mammary stem cell expansion and breast tumorigenesis by suppressing Wnt signaling antagonists. Nature Communications, 2017, 8, 1036.	5.8	143
20	`Cyclic alopecia' inMsx2mutants: defects in hair cycling and hair shaft differentiation. Development (Cambridge), 2003, 130, 379-389.	1.2	141
21	MicroRNA-31 Reduces Inflammatory Signaling and Promotes Regeneration in Colon Epithelium, and Delivery of Mimics in Microspheres Reduces Colitis in Mice. Gastroenterology, 2019, 156, 2281-2296.e6.	0.6	140
22	The Circadian Clock in Skin. Journal of Biological Rhythms, 2015, 30, 163-182.	1.4	135
23	Complex Hair Cycle Domain Patterns and Regenerative Hair Waves in Living Rodents. Journal of Investigative Dermatology, 2008, 128, 1071-1080.	0.3	130
24	Morpho-Regulation of Ectodermal Organs. American Journal of Pathology, 2004, 164, 1099-1114.	1.9	127
25	YAP-mediated mechanotransduction tunes the macrophage inflammatory response. Science Advances, 2020, 6, .	4.7	127
26	Resting no more: reâ€defining telogen, the maintenance stage of the hair growth cycle. Biological Reviews, 2015, 90, 1179-1196.	4.7	125
27	Local circadian clock gates cell cycle progression of transient amplifying cells during regenerative hair cycling. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2106-15.	3.3	119
28	Evidence for the involvement of Fibroblast Growth Factor 10 in lipofibroblast formation during embryonic lung development. Development (Cambridge), 2015, 142, 4139-50.	1.2	100
29	Evo-Devo of amniote integuments and appendages. International Journal of Developmental Biology, 2004, 48, 249-70.	0.3	100
30	Regenerative Hair Waves in Aging Mice and Extra-Follicular Modulators Follistatin, Dkk1, and Sfrp4. Journal of Investigative Dermatology, 2014, 134, 2086-2096.	0.3	80
31	MiR-31 Mediates Inflammatory Signaling to Promote Re-Epithelialization during Skin Wound Healing. Journal of Investigative Dermatology, 2018, 138, 2253-2263.	0.3	78
32	Age-Related Loss of Innate Immune Antimicrobial Function of Dermal Fat Is Mediated by Transforming Growth Factor Beta. Immunity, 2019, 50, 121-136.e5.	6.6	75
33	New Activators and Inhibitors in the Hair Cycle Clock: Targeting Stem Cellsâ€™ State of Competence. Journal of Investigative Dermatology, 2012, 132, 1321-1324.	0.3	74
34	The Modulatable Stem Cell Niche: Tissue Interactions during Hair and Feather Follicle Regeneration. Journal of Molecular Biology, 2016, 428, 1423-1440.	2.0	71
35	Emerging nonmetabolic functions of skin fat. Nature Reviews Endocrinology, 2018, 14, 163-173.	4.3	67
36	Analyses of regenerative wave patterns in adult hair follicle populations reveal macro-environmental regulation of stem cell activity. International Journal of Developmental Biology, 2009, 53, 857-868.	0.3	61

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37	External light activates hair follicle stem cells through eyes via an ipRGCâ€“SCNâ€“sympathetic neural pathway. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6880-E6889.	3.3	60
38	Phagocytosis of Wnt inhibitor SFRP4 by late wound macrophages drives chronic Wnt activity for fibrotic skin healing. Science Advances, 2020, 6, eaay3704.	4.7	58
39	Principles and mechanisms of regeneration in the mouse model for woundâ€induced hair follicle neogenesis. Regeneration (Oxford, England), 2015, 2, 169-181.	6.3	57
40	A multi-scale model for hair follicles reveals heterogeneous domains driving rapid spatiotemporal hair growth patterning. ELife, 2017, 6, .	2.8	57
41	Stress responsive miR-31 is a major modulator of mouse intestinal stem cells during regeneration and tumorigenesis. ELife, 2017, 6, .	2.8	54
42	PubFocus: semantic MEDLINE/PubMed citations analytics through integration of controlled biomedical dictionaries and ranking algorithm. BMC Bioinformatics, 2006, 7, 424.	1.2	53
43	Epigenetic control of skin and hair regeneration after wounding. Experimental Dermatology, 2015, 24, 167-170.	1.4	47
44	Macroenvironmental Regulation of Hair Cycling and Collective Regenerative Behavior. Cold Spring Harbor Perspectives in Medicine, 2014, 4, a015198-a015198.	2.9	45
45	Organotypic Skin Culture. Journal of Investigative Dermatology, 2013, 133, 1-4.	0.3	44
46	Mucoadhesive-to-penetrating controllable peptosomes-in-microspheres co-loaded with anti-miR-31 oligonucleotide and Curcumin for targeted colorectal cancer therapy. Theranostics, 2020, 10, 3594-3611.	4.6	40
47	Engineering Stem Cells into Organs: Topobiological Transformations Demonstrated by Beak, Feather, and Other Ectodermal Organ Morphogenesis. Current Topics in Developmental Biology, 2005, 72, 237-274.	1.0	39
48	The Role of Symmetric Stem Cell Divisions in Tissue Homeostasis. PLoS Computational Biology, 2015, 11, e1004629.	1.5	39
49	Cycling Stem Cells Are Radioresistant and Regenerate the Intestine. Cell Reports, 2020, 32, 107952.	2.9	37
50	Msi2 Maintains Quiescent State of Hair Follicle Stem Cells by Directly Repressing the Hh Signaling Pathway. Journal of Investigative Dermatology, 2017, 137, 1015-1024.	0.3	36
51	Mobilizing Transit-Amplifying Cell-Derived Ectopic Progenitors Prevents Hair Loss from Chemotherapy or Radiation Therapy. Cancer Research, 2017, 77, 6083-6096.	0.4	36
52	Dermal Adipose Tissue Secretes HGF to Promote Human Hair Growth and Pigmentation. Journal of Investigative Dermatology, 2021, 141, 1633-1645.e13.	0.3	35
53	Secreted stromal protein ISLR promotes intestinal regeneration by suppressing epithelial Hippo signaling. EMBO Journal, 2020, 39, e103255.	3.5	34
54	An Ovol2â€Zeb1 transcriptional circuit regulates epithelial directional migration and proliferation. EMBO Reports, 2019, 20, .	2.0	32

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55	Hair Follicle Signaling Networks: A Dermal Papillaâ€“Centric Approach. Journal of Investigative Dermatology, 2013, 133, 2306-2308.	0.3	30
56	Genomic and anatomical comparisons of skin support independent adaptation to life in water by cetaceans and hippos. Current Biology, 2021, 31, 2124-2139.e3.	1.8	30
57	CD133 Expression Correlates with Membrane Beta-Catenin and E-Cadherin Loss from Human Hair Follicle Placodes during Morphogenesis. Journal of Investigative Dermatology, 2015, 135, 45-55.	0.3	29
58	Inducing hair follicle neogenesis with secreted proteins enriched in embryonic skin. Biomaterials, 2018, 167, 121-131.	5.7	29
59	Distinct mechanisms underlie pattern formation in the skin and skin appendages. Birth Defects Research Part C: Embryo Today Reviews, 2006, 78, 280-291.	3.6	26
60	Accelerated closure of skin wounds in mice deficient in the homeobox gene Msx2. Wound Repair and Regeneration, 2009, 17, 639-648.	1.5	25
61	Diet-induced obesity promotes infection by impairment of the innate antimicrobial defense function of dermal adipocyte progenitors. Science Translational Medicine, 2021, 13, .	5.8	25
62	Hedgehog signaling reprograms hair follicle niche fibroblasts to a hyper-activated state. Developmental Cell, 2022, 57, 1758-1775.e7.	3.1	25
63	Wound Regeneration Deficit in Rats Correlates with Low Morphogenetic Potential and Distinct Transcriptome ProfileÂof Epidermis. Journal of Investigative Dermatology, 2018, 138, 1409-1419.	0.3	24
64	Msx2 Supports Epidermal CompetencyÂduring Wound-Induced HairÂFollicle Neogenesis. Journal of Investigative Dermatology, 2018, 138, 2041-2050.	0.3	23
65	High-resolution infrared imaging of biological samples with third-order sum-frequency generation microscopy. Biomedical Optics Express, 2018, 9, 4807.	1.5	23
66	Modelling Hair Follicle Growth Dynamics as an Excitable Medium. PLoS Computational Biology, 2012, 8, e1002804.	1.5	22
67	Gene loss in keratinization programs accompanies adaptation of cetacean skin to aquatic lifestyle. Experimental Dermatology, 2015, 24, 572-573.	1.4	19
68	Making Waves with Hairs. Journal of Investigative Dermatology, 2004, 122, vii-ix.	0.3	18
69	Epithelial Migration and Non-adhesive Periderm Are Required for Digit Separation during Mammalian Development. Developmental Cell, 2020, 52, 764-778.e4.	3.1	17
70	The Msi1-mTOR pathway drives the pathogenesis of mammary and extramammary Pagetâ€™s disease. Cell Research, 2020, 30, 854-872.	5.7	17
71	A multiscale hybrid mathematical model of epidermalâ€dermal interactions during skin wound healing. Experimental Dermatology, 2019, 28, 493-502.	1.4	16
72	MiR-22 modulates brown adipocyte thermogenesis by synergistically activating the glycolytic and mTORC1 signaling pathways. Theranostics, 2021, 11, 3607-3623.	4.6	16

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73	Msi1 promotes breast cancer metastasis by regulating invadopodia-mediated extracellular matrix degradation via the Timp3â€"Mmp9 pathway. Oncogene, 2021, 40, 4832-4845.	2.6	16
74	Lepr+ mesenchymal cells sense diet to modulate intestinal stem/progenitor cells via Leptinâ€"Igf1 axis. Cell Research, 2022, 32, 670-686.	5.7	14
75	Skin as a window to body-clock time. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12095-12097.	3.3	12
76	At the crossroads of 2 alopecias: Androgenetic alopecia pattern of hair regrowth in patients with alopecia areata treated with oral Janus kinase inhibitors. JAAD Case Reports, 2020, 6, 444-446.	0.4	12
77	GRHL3 activates FSCN1 to relax cell-cell adhesions between migrating keratinocytes during wound reepithelialization. JCI Insight, 2021, 6, .	2.3	8
78	Deadly hairs, lethal feathers â€" convergent evolution of poisonous integument in mammals and birds. Experimental Dermatology, 2014, 23, 466-468.	1.4	7
79	Near Equilibrium Calculus of Stem Cells in Application to the Airway Epithelium Lineage. PLoS Computational Biology, 2016, 12, e1004990.	1.5	7
80	Gli -fully Halting the Progression of Fibrosis. Cell Stem Cell, 2017, 20, 735-736.	5.2	7
81	At the dawn of hair research â€" testing the limits of hair follicle regeneration. Experimental Dermatology, 2014, 23, 314-315.	1.4	6
82	Regenerative metamorphosis in hairs and feathers: follicle as a programmable biological printer. Experimental Dermatology, 2015, 24, 262-264.	1.4	6
83	Estrogen modulates mesenchymal-epidermal interactions in the adult nipple. Development (Cambridge), 2017, 144, 1498-1509.	1.2	4
84	Fostering a healthy culture: Biological relevance of <i>in vitro</i> and <i>ex vivo</i> skin models. Experimental Dermatology, 2021, 30, 298-303.	1.4	4
85	Moving On after Trauma: Fibroblasts Thrive in the Right Environment. Cell Stem Cell, 2020, 27, 349-351.	5.2	3
86	The emerging functions of regulatory <scp>RNA</scp> species in skin biology. Experimental Dermatology, 2015, 24, 827-828.	1.4	2
87	Understanding skin morphogenesis across developmental, regenerative and evolutionary levels. Experimental Dermatology, 2019, 28, 327-331.	1.4	2
88	More than just bricks and mortar: Fibroblasts and ECM in skin health and disease. Experimental Dermatology, 2021, 30, 4-9.	1.4	2
89	Dormant Nfatc1 reporter-marked basal stem/progenitor cells contribute to mammary lobuloalveoli formation. IScience, 2022, 25, 103982.	1.9	2
90	Equal opportunities in stemness. Nature Cell Biology, 2019, 21, 921-923.	4.6	1

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91	Fibroblasts feel evolutionary pressure to regenerate. Developmental Cell, 2021, 56, 2685-2687.	3.1	1
92	Altered Epithelial-mesenchymal Plasticity as a Result of Ovol2 Deletion Minimally Impacts the Self-renewal of Adult Mammary Basal Epithelial Cells. Journal of Mammary Gland Biology and Neoplasia, 2021, 26, 377-386.	1.0	1
93	026â€¨Altered Skin Wound Healing in Homeobox Gene Msx-2 Knockout Mice. Wound Repair and Regeneration, 2008, 13, A4-A27.	1.5	0
94	Cutaneous Epithelial Stem Cells. , 2014, , 1581-1594.		0
95	Light-Emitting Hair Follicles: Studying Skin Regeneration With In Vivo Imaging. Journal of Investigative Dermatology, 2014, 134, 1496-1498.	0.3	0
96	Getting ready for the next decade of <i>Experimental Dermatology</i>. Experimental Dermatology, 2019, 28, 1199-1200.	1.4	0
97	Cutaneous epithelial stem cells. , 2020, , 1289-1307.		0
98	Anatomical and functional landscapes of hair regeneration across the body. FASEB Journal, 2018, 32, 232.1.	0.2	0