Frederic J De Sauvage

List of Publications by Year
in descending order

142	38,398	3531	11052
papers	citations	90 h-index	137 g-index

146	146	146	45986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of tumour micro-environment heterogeneity on therapeutic response. Nature, 2013, 501, 346-354.	27.8	2,093
2	Interleukin-22 mediates early host defense against attaching and effacing bacterial pathogens. Nature Medicine, 2008, 14, 282-289.	30.7	1,670
3	Interleukin-23 Promotes a Distinct CD4 T Cell Activation State Characterized by the Production of Interleukin-17. Journal of Biological Chemistry, 2003, 278, 1910-1914.	3.4	1,595
4	Stimulation of megakaryocytopoiesis and thrombopoiesis by the c-Mpl ligand. Nature, 1994, 369, 533-538.	27.8	1,329
5	Activating Smoothened mutations in sporadic basal-cell carcinoma. Nature, 1998, 391, 90-92.	27.8	1,209
6	Diverse somatic mutation patterns and pathway alterations in human cancers. Nature, 2010, 466, 869-873.	27.8	1,189
7	The tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog. Nature, 1996, 384, 129-134.	27.8	1,065
8	Inhibition of the Hedgehog Pathway in Advanced Basal-Cell Carcinoma. New England Journal of Medicine, 2009, 361, 1164-1172.	27.0	1,054
9	A reserve stem cell population in small intestine renders Lgr5-positive cells dispensable. Nature, 2011, 478, 255-259.	27.8	994
10	Treatment of Medulloblastoma with Hedgehog Pathway Inhibitor GDC-0449. New England Journal of Medicine, 2009, 361, 1173-1178.	27.0	951
11	Comprehensive genomic analysis identifies SOX2 as a frequently amplified gene in small-cell lung cancer. Nature Genetics, 2012, 44, 1111-1116.	21.4	906
12	A paracrine requirement for hedgehog signalling in cancer. Nature, 2008, 455, 406-410.	27.8	904
13	Recurrent R-spondin fusions in colon cancer. Nature, 2012, 488, 660-664.	27.8	862
14	Smoothened Mutation Confers Resistance to a Hedgehog Pathway Inhibitor in Medulloblastoma. Science, 2009, 326, 572-574.	12.6	774
15	Interleukin 27 limits autoimmune encephalomyelitis by suppressing the development of interleukin 17â€“producing T cells. Nature Immunology, 2006, 7, 929-936.	14.5	763
16	Comprehensive genomic analysis of malignant pleural mesothelioma identifies recurrent mutations, gene fusions and splicing alterations. Nature Genetics, 2016, 48, 407-416.	21.4	730
17	Targeting the Hedgehog pathway in cancer. Nature Reviews Drug Discovery, 2006, 5, 1026-1033.	46.4	724
18	Mechanisms of Hedgehog pathway activation in cancer and implications for therapy. Trends in Pharmacological Sciences, 2009, 30, 303-312.	8.7	615

#	Article	IF	Citations
19	A distinct role for Lgr5+ stem cells in primary and metastatic colon cancer. Nature, 2017, 543, 676-680.	27.8	587
20	Decreased sensitivity to tumour-necrosis factor but normal T-cell development in TNF receptor-2-deficient mice. Nature, 1994, 372, 560-563.	27.8	586
21	A comprehensive transcriptional portrait of human cancer cell lines. Nature Biotechnology, 2015, 33, 306-312.	17.5	556
22	Persephin, a Novel Neurotrophic Factor Related to GDNF and Neurturin. Neuron, 1998, 20, 245-253.	8.1	460
23	The mutation spectrum revealed by paired genome sequences from a lung cancer patient. Nature, 2010, 465, 473-477.	27.8	453
24	Replacement of Lost Lgr5-Positive Stem Cells through Plasticity of Their Enterocyte-Lineage Daughters. Cell Stem Cell, 2016, 18, 203-213.	11.1	451
25	Lgr5+ Stem Cells Are Indispensable for Radiation-Induced Intestinal Regeneration. Cell Stem Cell, 2014, 14, 149-159.	11.1	449
26	The great escape: tumour cell plasticity in resistance to targeted therapy. Nature Reviews Drug Discovery, 2020, 19, 39-56.	46.4	439
27	Intestinal crypt homeostasis revealed at single-stem-cell level by in vivo live imaging. Nature, 2014, 507, 362-365.	27.8	431
28	Randomized Phase Ib/II Study of Gemcitabine Plus Placebo or Vismodegib, a Hedgehog Pathway Inhibitor, in Patients With Metastatic Pancreatic Cancer. Journal of Clinical Oncology, 2015, 33, 4284-4292.	1.6	431
29	IL-27 regulates IL-12 responsiveness of naive CD4+ T cells through Stat1-dependent and -independent mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15047-15052.	7.1	416
30	Genomic analysis identifies new drivers and progression pathways in skin basal cell carcinoma. Nature Genetics, 2016, 48, 398-406.	21.4	370
31	Hedgehog signaling is restricted to the stromal compartment during pancreatic carcinogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4254-4259.	7.1	366
32	Development of Th1-type immune responses requires the type I cytokine receptor TCCR. Nature, 2000, 407, 916-920.	27.8	352
33	The endothelial-cell-derived secreted factor Egfl7 regulates vascular tube formation. Nature, 2004, 428, 754-758.	27.8	349
34	Role of c-mpl in Early Hematopoiesis. Blood, 1998, 92, 4-10.	1.4	342
35	Small Molecule Inhibition of GDC-0449 Refractory Smoothened Mutants and Downstream Mechanisms of Drug Resistance. Cancer Research, 2011, 71, 435-444.	0.9	339
36	Oncogenic ERBB3 Mutations in Human Cancers. Cancer Cell, 2013, 23, 603-617.	16.8	318

#	Article	IF	Citations
37	A mouse knockout library for secreted and transmembrane proteins. Nature Biotechnology, 2010, 28, 749-755.	17.5	316
38	Genomic Analysis of Smoothened Inhibitor Resistance in Basal Cell Carcinoma. Cancer Cell, 2015, 27, 327-341.	16.8	316
39	Spectrum of diverse genomic alterations define nonâ€“clear cell renal carcinoma subtypes. Nature Genetics, 2015, 47, 13-21.	21.4	310
40	Somatic Mutations in p85Î± Promote Tumorigenesis through Class IA PI3K Activation. Cancer Cell, 2009, 16, 463-474.	16.8	291
41	Sonic hedgehog signaling by the Patchedâ€“Smoothened receptor complex. Current Biology, 1999, 9, 76-84.	3.9	290
42	Activity-Dependent Internalization of Smoothened Mediated by Â-Arrestin 2 and GRK2. Science, 2004, 306, 2257-2260.	12.6	264
43	The effects of hepatitis B virus integration into the genomes of hepatocellular carcinoma patients. Genome Research, 2012, 22, 593-601.	5.5	257
44	TRPS1 Targeting by miR-221/222 Promotes the Epithelial-to-Mesenchymal Transition in Breast Cancer. Science Signaling, 2011, 4, ra41.	3.6	252
45	Translational value of mouse models in oncology drug development. Nature Medicine, 2015, 21, 431-439.	30.7	242
46	Molecular cloning of a retina-specific membrane guanylyl cyclase. Neuron, 1992, 9, 727-737.	8.1	232
47	Kinetics of Hedgehog-Dependent Full-Length Gli3 Accumulation in Primary Cilia and Subsequent Degradation. Molecular and Cellular Biology, 2010, 30, 1910-1922.	2.3	230
48	Antibody-Drug Conjugates for the Treatment of Nonâ€“Hodgkin's Lymphoma: Target and Linker-Drug Selection. Cancer Research, 2009, 69, 2358-2364.	0.9	229
49	The Hedgehog Signaling Pathway in Cancer. Clinical Cancer Research, 2006, 12, 5924-5928.	7.0	225
50	Parasitic helminths induce fetal-like reversion in the intestinal stem cell niche. Nature, 2018, 559, 109-113.	27.8	223
51	The Mammalian Cos2 Homolog Kif7 Plays an Essential Role in Modulating Hh Signal Transduction during Development. Current Biology, 2009, 19, 1320-1326.	3.9	219
52	Distinct Mesenchymal Cell Populations Generate the Essential Intestinal BMP Signaling Gradient. Cell Stem Cell, 2020, 26, 391-402.e5.	11.1	211
53	Targeting PTPRK-RSPO3 colon tumours promotes differentiation and loss of stem-cell function. Nature, 2016, 529, 97-100.	27.8	203
54	Cutting Edge: IL-27 Is a Potent Inducer of IL-10 but Not FoxP3 in Murine T Cells. Journal of Immunology, 2008, 180, 2752-2756.	0.8	197

#	Article	IF	Citations
55	IL-27 Limits IL-2 Production during Th1 Differentiation. Journal of Immunology, 2006, 176, 237-247.	0.8	196
56	Paracrine Hedgehog Signaling in Cancer. Cancer Research, 2009, 69, 6007-6010.	0.9	195
57	IL-27 supports germinal center function by enhancing IL-21 production and the function of T follicular helper cells. Journal of Experimental Medicine, 2010, 207, 2895-2906.	8.5	185
58	Compromised Humoral and Delayed-Type Hypersensitivity Responses in IL-23-Deficient Mice. Journal of Immunology, 2004, 172, 2827-2833.	0.8	182
59	Genome and transcriptome sequencing of lung cancers reveal diverse mutational and splicing events. Genome Research, 2012, 22, 2315-2327.	5.5	177
60	Lgr5-Expressing Cells Are Sufficient and Necessary for Postnatal Mammary Gland Organogenesis. Cell Reports, 2013, 3, 70-78.	6.4	175
61	Clinical Experience With Hedgehog Pathway Inhibitors. Journal of Clinical Oncology, 2010, 28, 5321-5326.	1.6	171
62	Opposing Activities of Notch and Wnt Signaling Regulate Intestinal Stem Cells and Gut Homeostasis. Cell Reports, 2015, 11, 33-42.	6.4	165
63	Maternal Embryonic Leucine Zipper Kinase/Murine Protein Serine-Threonine Kinase 38 Is a Promising Therapeutic Target for Multiple Cancers. Cancer Research, 2005, 65, 9751-9761.	0.9	159
64	Hedgehog Signaling Is Dispensable for Adult Murine Hematopoietic Stem Cell Function and Hematopoiesis. Cell Stem Cell, 2009, 4, 559-567.	11.1	157
65	Hedgehog signaling regulates the generation of ameloblast progenitors in the continuously growing mouse incisor. Development (Cambridge), 2010, 137, 3753-3761.	2.5	155
66	Positive and Negative Regulation of the IL-27 Receptor during Lymphoid Cell Activation. Journal of Immunology, 2005, 174, 7684-7691.	0.8	154
67	Hedgehog Fights Back: Mechanisms of Acquired Resistance against Smoothened Antagonists. Cancer Research, 2011, 71, 5057-5061.	0.9	151
68	Human Platelets as a Model for the Binding and Degradation of Thrombopoietin. Blood, 1997, 89, 2782-2788.	1.4	141
69	Activation of Expression of Hedgehog Target Genes in Basal Cell Carcinomas. Journal of Investigative Dermatology, 2001, 116, 739-742.	0.7	139
70	The seven-transmembrane receptor Smoothened cell-autonomously induces multiple ventral cell types. Nature Neuroscience, 2000, 3, 41-46.	14.8	138
71	Gli regulation by the opposing activities of Fused and Suppressor of Fused. Nature Cell Biology, 2000, 2, 310-312.	10.3	133
72	Notch signaling is required for normal prostatic epithelial cell proliferation and differentiation. Developmental Biology, 2006, 290, 66-80.	2.0	132

#	Article	IF	Citations
73	The structure of SHH in complex with HHIP reveals a recognition role for the Shh pseudo active site in signaling. Nature Structural and Molecular Biology, 2009, 16, 691-697.	8.2	132
74	Comparative Oncogenomics Identifies PSMB4 and SHMT2 as Potential Cancer Driver Genes. Cancer Research, 2014, 74, 3114-3126.	0.9	128
75	Normal Platelets and Megakaryocytes Are Produced In Vivo in the Absence of Thrombopoietin. Blood, 1997, 90, 3423-3429.	1.4	127
76	Interleukin-27R (WSX-1/T-Cell Cytokine Receptor) Gene-Deficient Mice Display Enhanced Resistance to Leishmania donovani Infection but Develop Severe Liver Immunopathology. American Journal of Pathology, 2006, 168, 158-169.	3.8	126
77	Hedgehog Pathway Antagonist 5E1 Binds Hedgehog at the Pseudo-active Site. Journal of Biological Chemistry, 2010, 285, 26570-26580.	3.4	120
78	Cellular Plasticity in Intestinal Homeostasis and Disease. Cell Stem Cell, 2019, 24, 54-64.	11.1	118
79	Suppressor of Fused Regulates Gli Activity through a Dual Binding Mechanism. Molecular and Cellular Biology, 2004, 24, 8627-8641.	2.3	117
80	Hedgehog Signal Transduction: From Flies to Vertebrates. Experimental Cell Research, 1999, 253, 25-33.	2.6	113
81	Loss of the Serine/Threonine Kinase Fused Results in Postnatal Growth Defects and Lethality Due to Progressive Hydrocephalus. Molecular and Cellular Biology, 2005, 25, 7054-7068.	2.3	111
82	miR-221/222 Targeting of Trichorhinophalangeal 1 (TRPS1) Promotes Epithelial-to-Mesenchymal Transition in Breast CancerA presentation from the Keystone Symposium on Epithelial Plasticity and Epithelial to Mesenchymal Transition, Vancouver, Canada, 21 to 26 January 2011. This Presentation also complements the Science Signaling Research Article by Stinson et al. published 14 June 2011.. Science Signaling, 2011, 4, pt5.	3.6	109
83	Distinct expression patterns of notch family receptors and ligands during development of the mammalian inner ear. Mechanisms of Development, 1998, 78, 159-163.	1.7	108
84	Primary Role of the Liver in Thrombopoietin Production Shown by Tissue-Specific Knockout. Blood, 1998, 92, 2189-2191.	1.4	108
85	Regulation of the oncoprotein Smoothened by small molecules. Nature Chemical Biology, 2015, 11, 246-255.	8.0	107
86	A cell identity switch allows residual BCC to survive Hedgehog pathway inhibition. Nature, 2018, 562, 429-433.	27.8	105
87	Lgr5+Âtelocytes are a signaling source at the intestinal villus tip. Nature Communications, 2020, 11, 1936.	12.8	105
88	Canonical hedgehog signaling augments tumor angiogenesis by induction of VEGF-A in stromal perivascular cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9589-9594.	7.1	100
89	Smoothened Activates GÎ±i-mediated Signaling in Frog Melanophores. Journal of Biological Chemistry, 2000, 275, 26322-26327.	3.4	98
90	Pharmacokineticâ€“Pharmacodynamic Analysis of Vismodegib in Preclinical Models of Mutational and Ligand-Dependent Hedgehog Pathway Activation. Clinical Cancer Research, 2011, 17, 4682-4692.	7.0	96

#	Article	IF	Citations
91	Hematopoietic Deficiencies in câ€mpl and TPO Knockout Mice. Stem Cells, 1998, 16, 1-6.	3.2	95
92	Inhibition of Epithelial Ductal Branching in the Prostate by Sonic Hedgehog Is Indirectly Mediated by Stromal Cells. Journal of Biological Chemistry, 2003, 278, 18506-18513.	3.4	83
93	Kinome siRNA Screen Identifies Regulators of Ciliogenesis and Hedgehog Signal Transduction. Science Signaling, 2008, 1, ra7.	3.6	79
94	Integrated exome and transcriptome sequencing reveals ZAK isoform usage in gastric cancer. Nature Communications, 2014, 5, 3830.	12.8	77
95	IL-31â€"IL-31R interactions negatively regulate type 2 inflammation in the lung. Journal of Experimental Medicine, 2007, 204, 481-487.	8.5	75
96	Regulation of the Serum Concentration of Thrombopoietin in Thrombocytopenic NF-E2 Knockout Mice. Blood, 1997, 90, 1821-1827.	1.4	68
97	Induction of ectopic taste buds by SHH reveals the competency and plasticity of adult lingual epithelium. Development (Cambridge), 2014, 141, 2993-3002.	2.5	68
98	A Novel Type I Cytokine Receptor Is Expressed on Monocytes, Signals Proliferation, and Activates STAT-3 and STAT-5. Journal of Biological Chemistry, 2002, 277, 16831-16836.	3.4	66
99	Physical Mapping and Genomic Structure of the HumanTNFR2Gene. Genomics, 1996, 35, 94-100.	2.9	65
100	Targeting Superficial or Nodular Basal Cell Carcinoma with Topically Formulated Small Molecule Inhibitor of Smoothened. Clinical Cancer Research, 2011, 17, 3378-3387.	7.0	65
101	Efficacy of Hedgehog Pathway Inhibitors in Basal Cell Carcinoma. Molecular Cancer Therapeutics, 2015, 14, 633-641.	4.1	64
102	Stem cell plasticity enables hair regeneration following Lgr5+ cell loss. Nature Cell Biology, 2017, 19, 666-676.	10.3	61
103	Pronounced thrombocytosis in transgenic mice expressing reduced levels of Mpl in platelets and terminally differentiated megakaryocytes. Blood, 2009, 113, 1768-1777.	1.4	57
104	Atoh1 ⁺ secretory progenitors possess renewal capacity independent of Lgr5 ⁺ cells during colonic regeneration. EMBO Journal, 2019, 38, .	7.8	56
105	Discovery and preclinical development of vismodegib. Expert Opinion on Drug Discovery, 2014, 9, 969-984.	5.0	52
106	Role of the Distal Half of the c-Mpl Intracellular Domain in Control of Platelet Production by Thrombopoietin In Vivo. Molecular and Cellular Biology, 2000, 20, 507-515.	2.3	51
107	PTEN Loss Mitigates the Response of Medulloblastoma to Hedgehog Pathway Inhibition. Cancer Research, 2013, 73, 7034-7042.	0.9	51
108	A selective peptide inhibitor of Frizzled 7 receptors disrupts intestinal stem cells. Nature Chemical Biology, 2018, 14, 582-590.	8.0	50

#	Article	IF	Citations
109	Direct histological processing of EUS biopsies enables rapid molecular biomarker analysis for interventional pancreatic cancer trials. Pancreatology, 2012, 12, 8-15.	1.1	49
110	A tumor-specific stem cell. Nature Genetics, 2013, 45, 7-9.	21.4	47
111	Tissue regeneration: Reserve or reverse?. Science, 2021, 371, 784-786.	12.6	46
112	Downregulation of Hedgehog Signaling Is Required for Organogenesis of the Small Intestine in Xenopus. Developmental Biology, 2001, 229, 188-202.	2.0	45
113	Gremlin 1+ fibroblastic niche maintains dendritic cell homeostasis in lymphoid tissues. Nature Immunology, 2021, 22, 571-585.	14.5	44
114	Structural Ties between Cholesterol Transport and Morphogen Signaling. Cell, 2009, 138, 1055-1056.	28.9	42
115	TMEFF2 Is a PDGF-AA Binding Protein with Methylation-Associated Gene Silencing in Multiple Cancer Types Including Glioma. PLoS ONE, 2011, 6, e18608.	2.5	40
116	A Clinically Applicable Gene-Expression Classifier Reveals Intrinsic and Extrinsic Contributions to Consensus Molecular Subtypes in Primary and Metastatic Colon Cancer. Clinical Cancer Research, 2019, 25, 4431-4442.	7.0	40
117	Subtle Changes in the Levels of BCL-2 Proteins Cause Severe Craniofacial Abnormalities. Cell Reports, 2018, 24, 3285-3295.e4.	6.4	35
118	Stromal Indian Hedgehog Signaling Is Required for Intestinal Adenoma Formation in Mice. Gastroenterology, 2015, 148, 170-180.e6.	1.3	33
119	IL-1R1â€“dependent signaling coordinates epithelial regeneration in response to intestinal damage. Science Immunology, 2021, 6, .	11.9	31
120	Regulation of myeloid progenitor cell proliferation/survival by IL-31 receptor and IL-31. Experimental Hematology, 2007, 35, 78-86.	0.4	24
121	Prostate-specific Klf6 Inactivation Impairs Anterior Prostate Branching Morphogenesis through Increased Activation of the Shh Pathway. Journal of Biological Chemistry, 2009, 284, 21057-21065.	3.4	24
122	Regulation of megakaryocytopoiesis and platelet production: Lessons from animal models. Translational Research, 1998, 131, 496-501.	2.3	23
123	Requirement for mitogen-activated protein kinase activation in the response of embryonic stem cellâ€“derived hematopoietic cells to thrombopoietin in vitro. Blood, 2002, 99, 1174-1182.	1.4	16
124	Second generation 2-pyridyl biphenyl amide inhibitors of the hedgehog pathway. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 6748-6753.	2.2	14
125	Structure of SAP18:Â A Ubiquitin Fold in Histone Deacetylase Complex Assemblyâ€¡. Biochemistry, 2006, 45, 11974-11982.	2.5	12
126	Embryonic stem cell differentiation to hematopoietic cells. Experimental Hematology, 2000, 28, 1363-1372.	0.4	11

#	Article	IF	Citations
127	An oxysterol ligand for Smoothened. Nature Chemical Biology, 2012, 8, 139-140.	8.0	9
128	NRG1 is a critical regulator of differentiation in TP63-driven squamous cell carcinoma. ELife, 2019, 8, .	6.0	9
129	Characterization of Novel Neutralizing Monoclonal Antibodies Specific to Human Neurturin. Hybridoma, 2000, 19, 303-315.	0.6	8
130	Abstract LB-138: Efficacy data of GDC-0449, a systemic Hedgehog pathway antagonist, in a first-in-human, first-in-class Phase I study with locally advanced, multifocal or metastatic basal cell carcinoma patients. Cancer Research, 2008, 68, LB-138-LB-138.	0.9	8
131	Recapitulating human cancer in a mouse. Nature Biotechnology, 2013, 31, 392-395.	17.5	7
132	Highly efficient somatic-mutation identification using Escherichia coli mismatch-repair detection. Nature Methods, 2007, 4, 713-715.	19.0	6
133	Frequency and Genomic Aspects of Intrinsic Resistance to Vismodegib in Locally Advanced Basal Cell Carcinoma. Clinical Cancer Research, 2022, 28, 1422-1432.	7.0	6
134	Modeling Colorectal Cancer Progression Through Orthotopic Implantation of Organoids. Methods in Molecular Biology, 2020, 2171, 331-346.	0.9	5
135	Grking the Smoothened signal. Science Signaling, 2018, 11, .	3.6	4
136	Vive la science ! Vive le hÃ©risson !. EMBO Reports, 2010, 11, 566-568.	4.5	0
137	Prostate-specific Klf6 inactivation impairs anterior prostate branching morphogenesis through increased activation of the Shh pathway.. Journal of Biological Chemistry, 2011, 286, 43587.	3.4	0
138	Abstract 305: Frequent PIK3R1 somatic mutations promote oncogenic signaling. , 2010, , .		0
139	Abstract PL04-03: Targeting the hedgehog pathway in meduloblastoma and basal cell carcinoma. , 2011, , .		0
140	Abstract SY37-03: Targeting developmental pathways in colon cancer cells and stem cells. , 2012, , .		0
141	Abstract 4428: Oncogenic ERBB3 mutations in human cancers. , 2014, , .		0
142	Abstract LB-136: Characterization of residual Basal Cell Carcinoma after vismodegib treatment. , 2017, , .		0