

# Reinhard Fässler

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2464228/publications.pdf>

Version: 2024-02-01

115  
papers

13,709  
citations

25034

57  
h-index

24258

110  
g-index

129  
all docs

129  
docs citations

129  
times ranked

13540  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrin-mediated mechanotransduction. Journal of Cell Biology, 2016, 215, 445-456.	5.2	728
2	The Tail of Integrins, Talin, and Kindlins. Science, 2009, 324, 895-899.	12.6	672
3	Perlecan Maintains the Integrity of Cartilage and Some Basement Membranes. Journal of Cell Biology, 1999, 147, 1109-1122.	5.2	651
4	ILK, PINCH and parvin: the tIPP of integrin signalling. Nature Reviews Molecular Cell Biology, 2006, 7, 20-31.	37.0	602
5	Kindlin-3 is essential for integrin activation and platelet aggregation. Nature Medicine, 2008, 14, 325-330.	30.7	599
6	The integrin adhesome: from genes and proteins to human disease. Nature Reviews Molecular Cell Biology, 2014, 15, 273-288.	37.0	526
7	Î²1- and Î±v-class integrins cooperate to regulate myosin II during rigidity sensing of fibronectin-based microenvironments. Nature Cell Biology, 2013, 15, 625-636.	10.3	386
8	Kindlin-2 controls bidirectional signaling of integrins. Genes and Development, 2008, 22, 1325-1330.	5.9	381
9	Integrin activation by talin, kindlin and mechanical forces. Nature Cell Biology, 2019, 21, 25-31.	10.3	365
10	Fetal and Adult Hematopoietic Stem Cells Require Î²1 Integrin Function for Colonizing Fetal Liver, Spleen, and Bone Marrow. Immunity, 2000, 12, 653-663.	14.3	340
11	Impaired migration but not differentiation of haematopoietic stem cells in the absence of Î²1 integrins. Nature, 1996, 380, 171-175.	27.8	339
12	Mechanisms that regulate adaptor binding to Î²2-integrin cytoplasmic tails. Journal of Cell Science, 2009, 122, 187-198.	2.0	339
13	Skin and hair follicle integrity is crucially dependent on Î²1 integrin expression on keratinocytes. EMBO Journal, 2000, 19, 3990-4003.	7.8	322
14	Quantitative proteomics of the integrin adhesome show a myosin II-dependent recruitment of LIM domain proteins. EMBO Reports, 2011, 12, 259-266.	4.5	315
15	Plasma fibronectin supports neuronal survival and reduces brain injury following transient focal cerebral ischemia but is not essential for skin-wound healing and hemostasis.. Nature Medicine, 2001, 7, 324-330.	30.7	311
16	Collagen II Is Essential for the Removal of the Notochord and the Formation of Intervertebral Discs. Journal of Cell Biology, 1998, 143, 1399-1412.	5.2	277
17	The Cysteine-Rich Domain of Human Adam 12 Supports Cell Adhesion through Syndecans and Triggers Signaling Events That Lead to Î²1 Integrin-Dependent Cell Spreading. Journal of Cell Biology, 2000, 149, 1143-1156.	5.2	244
18	Loss of talin1 in platelets abrogates integrin activation, platelet aggregation, and thrombus formation in vitro and in vivo. Journal of Experimental Medicine, 2007, 204, 3113-3118.	8.5	227

#	ARTICLE	IF	CITATIONS
19	Loss of fibronectin from the aged stem cell niche affects the regenerative capacity of skeletal muscle in mice. <i>Nature Medicine</i> , 2016, 22, 897-905.	30.7	226
20	The Kindlins: Subcellular localization and expression during murine development. <i>Experimental Cell Research</i> , 2006, 312, 3142-3151.	2.6	217
21	Kindlin-2 cooperates with talin to activate integrins and induces cell spreading by directly binding paxillin. <i>ELife</i> , 2016, 5, e10130.	6.0	213
22	Distinct roles for talin-1 and kindlin-3 in LFA-1 extension and affinity regulation. <i>Blood</i> , 2012, 119, 4275-4282.	1.4	204
23	Disruption of the talin gene arrests mouse development at the gastrulation stage. <i>Developmental Dynamics</i> , 2000, 219, 560-574.	1.8	195
24	Roles of integrins and fibronectin in the entry of <i>Streptococcus pyogenes</i> into cells via protein F1. <i>Molecular Microbiology</i> , 1998, 30, 625-637.	2.5	185
25	Loss of Kindlin-1 Causes Skin Atrophy and Lethal Neonatal Intestinal Epithelial Dysfunction. <i>PLoS Genetics</i> , 2008, 4, e1000289.	3.5	185
26	The kindlin family: functions, signaling properties and implications for human disease. <i>Journal of Cell Science</i> , 2016, 129, 17-27.	2.0	184
27	$\alpha 21$ Integrin Is Essential for Teratoma Growth and Angiogenesis. <i>Journal of Cell Biology</i> , 1997, 139, 265-278.	5.2	180
28	Integrin Trafficking Regulated by Rab21 Is Necessary for Cytokinesis. <i>Developmental Cell</i> , 2008, 15, 371-385.	7.0	177
29	Sorting nexin 17 prevents lysosomal degradation of $\alpha 21$ integrins by binding to the $\alpha 21$ -integrin tail. <i>Nature Cell Biology</i> , 2012, 14, 584-592.	10.3	177
30	The Kindlin protein family: new members to the club of focal adhesion proteins. <i>Trends in Cell Biology</i> , 2009, 19, 504-513.	7.9	149
31	Induction of Cell Scattering by Expression of $\alpha 21$ Integrins in $\alpha 21$ -Deficient Epithelial Cells Requires Activation of Members of the Rho Family of Gtpases and Downregulation of Cadherin and Catenin Function. <i>Journal of Cell Biology</i> , 1999, 147, 1325-1340.	5.2	147
32	Kank2 activates talin, reduces force transduction across integrins and induces central adhesion formation. <i>Nature Cell Biology</i> , 2016, 18, 941-953.	10.3	144
33	The Mechanism of Kindlin-Mediated Activation of Integrin $\alpha 5\beta 3$ . <i>Current Biology</i> , 2013, 23, 2288-2295.	3.9	131
34	Fgf10-Hippo Epithelial-Mesenchymal Crosstalk Maintains and Recruits Lung Basal Stem Cells. <i>Developmental Cell</i> , 2017, 43, 48-59.e5.	7.0	123
35	Kindlin-1 controls Wnt and TGF- $\beta 2$ availability to regulate cutaneous stem cell proliferation. <i>Nature Medicine</i> , 2014, 20, 350-359.	30.7	112
36	Fibronectin-bound $\alpha 5\beta 1$ integrins sense load and signal to reinforce adhesion in less than a second. <i>Nature Materials</i> , 2017, 16, 1262-1270.	27.5	109

#	ARTICLE	IF	CITATIONS
37	Mouse Ten-m/Odz Is a New Family of Dimeric Type II Transmembrane Proteins Expressed in Many Tissues. <i>Journal of Cell Biology</i> , 1999, 145, 563-577.	5.2	108
38	Sensing the mechano-chemical properties of the extracellular matrix. <i>Matrix Biology</i> , 2017, 64, 6-16.	3.6	104
39	The murine Ten-m/Odz genes show distinct but overlapping expression patterns during development and in adult brain. <i>Gene Expression Patterns</i> , 2003, 3, 397-405.	0.8	101
40	A novel gene, <i>tendin</i> , is strongly expressed in tendons and ligaments and shows high homology with chondromodulin. <i>Developmental Dynamics</i> , 2001, 221, 72-80.	1.8	99
41	The chondroitin sulphate proteoglycan brevican is upregulated by astrocytes after entorhinal cortex lesions in adult rats. <i>European Journal of Neuroscience</i> , 2000, 12, 2547-2558.	2.6	97
42	Kindlin-2 recruits paxillin and Arp2/3 to promote membrane protrusions during initial cell spreading. <i>Journal of Cell Biology</i> , 2017, 216, 3785-3798.	5.2	94
43	The Architecture of Talin1 Reveals an Autoinhibition Mechanism. <i>Cell</i> , 2019, 179, 120-131.e13.	28.9	93
44	$\alpha$ 5 $\beta$ 1 integrins exert dual roles on $\alpha$ 5 $\beta$ 1 integrins to strengthen adhesion to fibronectin. <i>Nature Communications</i> , 2017, 8, 14348.	12.8	92
45	Genetic analysis of $\beta$ 1 integrin $\alpha$ -activation motifs in mice. <i>Journal of Cell Biology</i> , 2006, 174, 889-899.	5.2	91
46	Mammalian Skeletogenesis and Extracellular Matrix. What can We Learn from Knockout Mice?. <i>Cell Structure and Function</i> , 2000, 25, 73-84.	1.1	85
47	Cre recombinase induces DNA damage and tetraploidy in the absence of <i>LoxP</i> sites. <i>Cell Cycle</i> , 2014, 13, 462-470.	2.6	85
48	Loss of the Rap1 effector RIAM results in leukocyte adhesion deficiency due to impaired $\beta$ 2 integrin function in mice. <i>Blood</i> , 2015, 126, 2704-2712.	1.4	85
49	Expression of an Activated Integrin Promotes Long-Distance Sensory Axon Regeneration in the Spinal Cord. <i>Journal of Neuroscience</i> , 2016, 36, 7283-7297.	3.6	84
50	$\beta$ 1 integrin signaling promotes neuronal migration along vascular scaffolds in the post-stroke brain. <i>EBioMedicine</i> , 2017, 16, 195-203.	6.1	84
51	The late endosomal p14 <sup>6</sup> MP1 (LAMTOR2/3) complex regulates focal adhesion dynamics during cell migration. <i>Journal of Cell Biology</i> , 2014, 205, 525-540.	5.2	82
52	Integrin adhesion and force coupling are independently regulated by localized PtdIns(4,5) <sub>2</sub> synthesis. <i>EMBO Journal</i> , 2011, 30, 4539-4553.	7.8	80
53	Functional characteristics of urinary tract smooth muscles in mice lacking cGMP protein kinase type I. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2000, 279, R1112-R1120.	1.8	79
54	Disruption of Focal Adhesions by Integrin Cytoplasmic Domain-associated Protein-1 $\beta$ . <i>Journal of Biological Chemistry</i> , 2003, 278, 6567-6574.	3.4	79

#	ARTICLE	IF	CITATIONS
55	Knockdown and knockout of $\beta$ 1-integrin in hepatocytes impairs liver regeneration through inhibition of growth factor signalling. <i>Nature Communications</i> , 2014, 5, 3862.	12.8	71
56	Integrin-linked kinase: integrin's mysterious partner. <i>Current Opinion in Cell Biology</i> , 2004, 16, 565-571.	5.4	69
57	PINCH2 is a new five LIM domain protein, homologous to PINCH and localized to focal adhesions. <i>Experimental Cell Research</i> , 2003, 284, 237-248.	2.6	64
58	Impaired relaxation of stomach smooth muscle in mice lacking cyclic GMP-dependent protein kinase I. <i>British Journal of Pharmacology</i> , 2000, 129, 395-401.	5.4	53
59	Early expression of endomucin on endothelium of the mouse embryo and on putative hematopoietic clusters in the dorsal aorta. <i>Developmental Dynamics</i> , 2001, 222, 410-419.	1.8	53
60	$\beta$ 1 integrins: zip codes and signaling relay for blood cells. <i>Current Opinion in Cell Biology</i> , 2006, 18, 482-490.	5.4	52
61	Induction of membrane circular dorsal ruffles requires co-signalling of integrin-ILK-complex and EGF receptor. <i>Journal of Cell Science</i> , 2012, 125, 435-448.	2.0	48
62	Integrin-Mediated Focal Anchorage Drives Epithelial Zippering during Mouse Neural Tube Closure. <i>Developmental Cell</i> , 2020, 52, 321-334.e6.	7.0	46
63	Minimal amounts of kindlin-3 suffice for basal platelet and leukocyte functions in mice. <i>Blood</i> , 2015, 126, 2592-2600.	1.4	45
64	$\beta$ 1 Integrin-Mediated Adhesion Signalling Is Essential for Epidermal Progenitor Cell Expansion. <i>PLoS ONE</i> , 2009, 4, e5488.	2.5	44
65	Integrins synergize to induce expression of the MRTF-A/SRF target gene ISG15 for promoting cancer cell invasion. <i>Journal of Cell Science</i> , 2016, 129, 1391-403.	2.0	41
66	mTORC1 activity is supported by spatial association with focal adhesions. <i>Journal of Cell Biology</i> , 2021, 220, .	5.2	41
67	Cell-Intrinsic Adaptation Arising from Chronic Ablation of a Key Rho GTPase Regulator. <i>Developmental Cell</i> , 2016, 39, 28-43.	7.0	40
68	Hippo signaling promotes lung epithelial lineage commitment by curbing Fgf10 and $\beta$ -catenin signaling. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	40
69	Molecular motion and tridimensional nanoscale localization of kindlin control integrin activation in focal adhesions. <i>Nature Communications</i> , 2021, 12, 3104.	12.8	37
70	Neutrophils direct preexisting matrix to initiate repair in damaged tissues. <i>Nature Immunology</i> , 2022, 23, 518-531.	14.5	37
71	The Kank family proteins in adhesion dynamics. <i>Current Opinion in Cell Biology</i> , 2018, 54, 130-136.	5.4	32
72	$\beta$ 1 integrin cytoplasmic tyrosines promote skin tumorigenesis independent of their phosphorylation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 15213-15218.	7.1	31

#	ARTICLE	IF	CITATIONS
73	Quantitative single-protein imaging reveals molecular complex formation of integrin, talin, and kindlin during cell adhesion. <i>Nature Communications</i> , 2021, 12, 919.	12.8	31
74	Active integrins regulate white adipose tissue insulin sensitivity and brown fat thermogenesis. <i>Molecular Metabolism</i> , 2021, 45, 101147.	6.5	30
75	Nascent Adhesions: From Fluctuations to a Hierarchical Organization. <i>Current Biology</i> , 2014, 24, R801-R803.	3.9	29
76	Implications of the differing roles of the $\beta 1$ and $\beta 3$ transmembrane and cytoplasmic domains for integrin function. <i>ELife</i> , 2016, 5, .	6.0	29
77	Sorting Nexin 31 Binds Multiple $\beta 2$ Integrin Cytoplasmic Domains and Regulates $\beta 1$ Integrin Surface Levels and Stability. <i>Journal of Molecular Biology</i> , 2014, 426, 3180-3194.	4.2	27
78	Kindlin-3-mediated integrin adhesion is dispensable for quiescent but essential for activated hematopoietic stem cells. <i>Journal of Experimental Medicine</i> , 2015, 212, 1415-1432.	8.5	26
79	Integrin $\beta 1$ coordinates survival and morphogenesis of the embryonic lineage upon implantation and pluripotency transition. <i>Cell Reports</i> , 2021, 34, 108834.	6.4	26
80	Identification of $\beta 1C-2$ , a novel variant of the integrin $\beta 1$ subunit generated by utilization of an alternative splice acceptor site in exon C. <i>Biochemical Journal</i> , 1998, 330, 1255-1263.	3.7	25
81	Low density lipoprotein receptor-related protein 1 couples $\beta 1$ integrin activation to degradation. <i>Cellular and Molecular Life Sciences</i> , 2018, 75, 1671-1685.	5.4	25
82	$\beta 1$ integrin promotes but is not essential for metastasis of ras-myc transformed fibroblasts. <i>Oncogene</i> , 1999, 18, 3852-3861.	5.9	24
83	Lentiviral transgene vectors. <i>EMBO Reports</i> , 2004, 5, 28-29.	4.5	23
84	The focal adhesion protein PINCH-1 associates with EPLIN at integrin adhesion sites. <i>Journal of Cell Science</i> , 2015, 128, 1023-33.	2.0	22
85	Protease-activated receptor signalling initiates $\beta 5\beta 1$ -integrin-mediated adhesion in non-haematopoietic cells. <i>Nature Materials</i> , 2020, 19, 218-226.	27.5	20
86	CDK1-cyclin-B1-induced kindlin degradation drives focal adhesion disassembly at mitotic entry. <i>Nature Cell Biology</i> , 2022, 24, 723-736.	10.3	20
87	Endochondral Ossification Is Dependent on the Mechanical Properties of Cartilage Tissue and on Intracellular Signals in Chondrocytes. <i>Annals of the New York Academy of Sciences</i> , 1998, 857, 74-85.	3.8	19
88	$\alpha v$ -Class integrin binding to fibronectin is solely mediated by RGD and unaffected by an RGE mutation. <i>Journal of Cell Biology</i> , 2020, 219, .	5.2	17
89	LCP1 preferentially binds clasped $\beta 2$ integrin and attenuates leukocyte adhesion under flow. <i>Journal of Cell Science</i> , 2018, 131, .	2.0	16
90	$\beta 1$ Integrins with Individually Disrupted Cytoplasmic NPxY Motifs Are Embryonic Lethal but Partially Active in the Epidermis. <i>Journal of Investigative Dermatology</i> , 2013, 133, 2722-2731.	0.7	15

#	ARTICLE	IF	CITATIONS
91	Kindlin-3 loss curbs chronic myeloid leukemia in mice by mobilizing leukemic stem cells from protective bone marrow niches. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24326-24335.	7.1	15
92	Lucky kindlin: A cloverleaf at the integrin tail. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9234-9236.	7.1	12
93	Membrane tension drives ligand-independent integrin signaling. EMBO Journal, 2014, 33, 2439-2441.	7.8	11
94	Differential requirement of kindlin-3 for T cell progenitor homing to the non-vascularized and vascularized thymus. ELife, 2018, 7, .	6.0	11
95	Rabgap1 promotes recycling of active $\beta 1$ integrins to support effective cell migration. Journal of Cell Science, 2020, 133, .	2.0	10
96	Fibronectin Is Not the Only Important Molecule Required for Fibrinogen/VWF-Independent Platelet Aggregation: Study of Thrombosis in a New Strain of Triple Deficient Mice.. Blood, 2006, 108, 1515-1515.	1.4	9
97	Talin regulates integrin $\beta 1$ dependent and independent cell functions in ureteric bud development. Development (Cambridge), 2017, 144, 4148-4158.	2.5	8
98	Microenvironment-derived ADAM28 prevents cancer dissemination. Oncotarget, 2018, 9, 37185-37199.	1.8	8
99	SHP1 regulates a STAT6-ITGB3 axis in FLT3ITD-positive AML cells. Leukemia, 2020, 34, 1444-1449.	7.2	7
100	Molecular determinants of $\beta 5$ localization in flat clathrin lattices – role of $\beta 5$ in cell adhesion and proliferation. Journal of Cell Science, 2022, 135, .	2.0	6
101	The focal adhesion protein $\beta$ -parvin controls cardiomyocyte shape and sarcomere assembly in response to mechanical load. Current Biology, 2022, 32, 3033-3047.e9.	3.9	6
102	Tissue distribution and subcellular localization of the family of Kidney Ankyrin Repeat Domain (KANK) proteins. Experimental Cell Research, 2021, 398, 112391.	2.6	5
103	Disruption of the integrin-linked kinase (ILK) pseudokinase domain affects kidney development in mice. Journal of Biological Chemistry, 2021, 296, 100361.	3.4	5
104	A $\text{FAK}$ conundrum is solved: activation and organization of focal adhesion kinase at the plasma membrane. EMBO Journal, 2020, 39, e106234.	7.8	4
105	New insights into the phosphorylation of the threonine motif of the $\beta 1$ integrin cytoplasmic domain. Life Science Alliance, 2022, 5, e202101301.	2.8	4
106	Cell-cell adhesion and extracellular matrix: diversity counts. Current Opinion in Cell Biology, 2012, 24, 559-561.	5.4	3
107	Integrins, anchors and signal transducers of hematopoietic stem cells during development and in adulthood. Current Topics in Developmental Biology, 2022, , 203-261.	2.2	3
108	Introduction to the ECR special issue, “Mechanosensing via Cell-Matrix Adhesions”. Experimental Cell Research, 2016, 343, 1-2.	2.6	2

#	ARTICLE	IF	CITATIONS
109	A forceful connection: mechanoregulation of oncogenic YAP. EMBO Journal, 2017, 36, 2467-2469.	7.8	2
110	Î²1 integrin regulates convergent extension in mouse notogenesis, ensures notochord integrity and the morphogenesis of vertebrae and intervertebral discs. Development (Cambridge), 2020, 147, .	2.5	2
111	Pinch2 regulates myelination in the mouse central nervous system. Development (Cambridge), 2022, 149, .	2.5	2
112	Functional properties of CYLD. International Congress Series, 2007, 1302, 36-42.	0.2	0
113	Beta1 integrin and collecting system development. FASEB Journal, 2007, 21, A141.	0.5	0
114	Integrins Cooperate during Mechanosensing. FASEB Journal, 2015, 29, 92.1.	0.5	0
115	ICAPâ€1 loss impairs CD8 <sup>+</sup> thymocyte development and leads to reduced marginal zone B cells in mice. European Journal of Immunology, 2022, , .	2.9	0