

# Reinhard Fässler

## List of Publications by Year in descending order

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114  
papers

13,949  
citations

22378

56  
h-index

18947

113  
g-index

133  
all docs

133  
docs citations

133  
times ranked

12976  
citing authors

#	ARTICLE	IF	CITATIONS
1	Integrin-mediated mechanotransduction. <i>Journal of Cell Biology</i> , 2016, 215, 445-456.	5.1	767
2	The Tail of Integrins, Talin, and Kindlins. <i>Science</i> , 2009, 324, 895-899.	19.8	682
3	Perlecan Maintains the Integrity of Cartilage and Some Basement Membranes. <i>Journal of Cell Biology</i> , 1999, 147, 1109-1122.	5.1	664
4	ILK, PINCH and parvin: the tIPP of integrin signalling. <i>Nature Reviews Molecular Cell Biology</i> , 2006, 7, 20-31.	36.9	608
5	Kindlin-3 is essential for integrin activation and platelet aggregation. <i>Nature Medicine</i> , 2008, 14, 325-330.	29.9	602
6	The integrin adhesome: from genes and proteins to human disease. <i>Nature Reviews Molecular Cell Biology</i> , 2014, 15, 273-288.	36.9	541
7	Î²1- and Î±v-class integrins cooperate to regulate myosin II during rigidity sensing of fibronectin-based microenvironments. <i>Nature Cell Biology</i> , 2013, 15, 625-636.	9.9	392
8	Integrin activation by talin, kindlin and mechanical forces. <i>Nature Cell Biology</i> , 2019, 21, 25-31.	9.9	391
9	Kindlin-2 controls bidirectional signaling of integrins. <i>Genes and Development</i> , 2008, 22, 1325-1330.	5.8	383
10	Fetal and Adult Hematopoietic Stem Cells Require Î²1 Integrin Function for Colonizing Fetal Liver, Spleen, and Bone Marrow. <i>Immunity</i> , 2000, 12, 653-663.	14.0	344
11	Mechanisms that regulate adaptor binding to Î²2-integrin cytoplasmic tails. <i>Journal of Cell Science</i> , 2009, 122, 187-198.	2.0	341
12	Impaired migration but not differentiation of haematopoietic stem cells in the absence of Î²1 integrins. <i>Nature</i> , 1996, 380, 171-175.	35.8	339
13	Skin and hair follicle integrity is crucially dependent on Î²1 integrin expression on keratinocytes. <i>EMBO Journal</i> , 2000, 19, 3990-4003.	7.6	327
14	Quantitative proteomics of the integrin adhesome show a myosin II-dependent recruitment of LIM domain proteins. <i>EMBO Reports</i> , 2011, 12, 259-266.	4.5	324
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.. <i>Nature Medicine</i> , 2001, 7, 324-330.	29.9	319
16	Collagen II Is Essential for the Removal of the Notochord and the Formation of Intervertebral Discs. <i>Journal of Cell Biology</i> , 1998, 143, 1399-1412.	5.1	284
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. <i>Journal of Cell Biology</i> , 2000, 149, 1143-1156.	5.1	245
18	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.	29.9	240

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19	Loss of talin1 in platelets abrogates integrin activation, platelet aggregation, and thrombus formation in vitro and in vivo. <i>Journal of Experimental Medicine</i> , 2007, 204, 3113-3118.	8.7	228
20	The Kindlins: Subcellular localization and expression during murine development. <i>Experimental Cell Research</i> , 2006, 312, 3142-3151.	2.6	219
21	Kindlin-2 cooperates with talin to activate integrins and induces cell spreading by directly binding paxillin. <i>ELife</i> , 2016, 5, e10130.	5.9	219
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	206
23	Disruption of the talin gene arrests mouse development at the gastrulation stage. <i>Developmental Dynamics</i> , 2000, 219, 560-574.	1.9	196
24	Loss of Kindlin-1 Causes Skin Atrophy and Lethal Neonatal Intestinal Epithelial Dysfunction. <i>PLoS Genetics</i> , 2008, 4, e1000289.	3.3	187
25	The kindlin family: functions, signaling properties and implications for human disease. <i>Journal of Cell Science</i> , 2016, 129, 17-27.	2.0	187
26	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	186
27	$\alpha 2 \beta 1$ Integrin Is Essential for Teratoma Growth and Angiogenesis. <i>Journal of Cell Biology</i> , 1997, 139, 265-278.	5.1	180
28	Integrin Trafficking Regulated by Rab21 Is Necessary for Cytokinesis. <i>Developmental Cell</i> , 2008, 15, 371-385.	7.0	180
29	Sorting nexin 17 prevents lysosomal degradation of $\alpha 2 \beta 1$ integrins by binding to the $\alpha 2 \beta 1$ -integrin tail. <i>Nature Cell Biology</i> , 2012, 14, 584-592.	9.9	180
30	The Kindlin protein family: new members to the club of focal adhesion proteins. <i>Trends in Cell Biology</i> , 2009, 19, 504-513.	8.0	151
31	Induction of Cell Scattering by Expression of $\alpha 2 \beta 1$ Integrins in $\alpha 2 \beta 1$ -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.	5.1	148
32	Kank2 activates talin, reduces force transduction across integrins and induces central adhesion formation. <i>Nature Cell Biology</i> , 2016, 18, 941-953.	9.9	148
33	The Mechanism of Kindlin-Mediated Activation of Integrin $\alpha 5 \beta 3$ . <i>Current Biology</i> , 2013, 23, 2288-2295.	4.0	133
34	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.	26.3	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.	29.9	114
36	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.	5.1	109

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37	Sensing the mechano-chemical properties of the extracellular matrix. <i>Matrix Biology</i> , 2017, 64, 6-16.	3.7	105
38	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	102
39	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.	1.9	100
40	The Architecture of Talin1 Reveals an Autoinhibition Mechanism. <i>Cell</i> , 2019, 179, 120-131.e13.	27.7	100
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.	3.5	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.	5.1	97
43	$\beta$ -V-class integrins exert dual roles on $\beta$ 1 integrins to strengthen adhesion to fibronectin. <i>Nature Communications</i> , 2017, 8, 14348.	13.0	94
44	$\beta$ 1 integrin signaling promotes neuronal migration along vascular scaffolds in the post-stroke brain. <i>EBioMedicine</i> , 2017, 16, 195-203.	6.0	93
45	Genetic analysis of $\beta$ 1 integrin $\alpha$ -activation motifs in mice. <i>Journal of Cell Biology</i> , 2006, 174, 889-899.	5.1	91
46	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	88
47	Mammalian Skeletogenesis and Extracellular Matrix. <i>What can We Learn from Knockout Mice?</i> . <i>Cell Structure and Function</i> , 2000, 25, 73-84.	1.1	85
48	The late endosomal p14 <sup>MP1</sup> (LAMTOR2/3) complex regulates focal adhesion dynamics during cell migration. <i>Journal of Cell Biology</i> , 2014, 205, 525-540.	5.1	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.	3.8	84
50	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	81
51	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.	7.6	81
52	Disruption of Focal Adhesions by Integrin Cytoplasmic Domain-associated Protein-1 $\beta$ . <i>Journal of Biological Chemistry</i> , 2003, 278, 6567-6574.	3.5	79
53	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.	13.0	72
54	Integrin-linked kinase: integrin <sup>TM</sup> s mysterious partner. <i>Current Opinion in Cell Biology</i> , 2004, 16, 565-571.	5.5	69

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55	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
56	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.	1.9	54
57	$\beta$ 1 integrins: zip codes and signaling relay for blood cells. <i>Current Opinion in Cell Biology</i> , 2006, 18, 482-490.	5.5	53
58	Induction of membrane circular dorsal ruffles requires co-signalling of integrin-linked ILK-complex and EGF receptor. <i>Journal of Cell Science</i> , 2012, 125, 435-448.	2.0	50
59	Minimal amounts of kindlin-3 suffice for basal platelet and leukocyte functions in mice. <i>Blood</i> , 2015, 126, 2592-2600.	1.4	47
60	Integrin-Mediated Focal Anchorage Drives Epithelial Zippering during Mouse Neural Tube Closure. <i>Developmental Cell</i> , 2020, 52, 321-334.e6.	7.0	46
61	$\beta$ 1 Integrin-Mediated Adhesion Signalling Is Essential for Epidermal Progenitor Cell Expansion. <i>PLoS ONE</i> , 2009, 4, e5488.	2.5	45
62	Integrins synergise to induce expression of the MRTF-A-SRF target gene ISG15 for promoting cancer cell invasion. <i>Journal of Cell Science</i> , 2016, 129, 1391-1403.	2.0	45
63	Climate-induced pumping. <i>Nature Geoscience</i> , 2017, 10, 71-71.	11.7	45
64	Neutrophils direct preexisting matrix to initiate repair in damaged tissues. <i>Nature Immunology</i> , 2022, 23, 518-531.	13.7	44
65	mTORC1 activity is supported by spatial association with focal adhesions. <i>Journal of Cell Biology</i> , 2021, 220, .	5.1	42
66	Molecular motion and tridimensional nanoscale localization of kindlin control integrin activation in focal adhesions. <i>Nature Communications</i> , 2021, 12, 3104.	13.0	42
67	Hippo signaling promotes lung epithelial lineage commitment by curbing Fgf10 and $\beta$ -catenin signaling. <i>Development (Cambridge)</i> , 2019, 146, .	2.6	41
68	Cell-Intrinsic Adaptation Arising from Chronic Ablation of a Key Rho GTPase Regulator. <i>Developmental Cell</i> , 2016, 39, 28-43.	7.0	40
69	Quantitative single-protein imaging reveals molecular complex formation of integrin, talin, and kindlin during cell adhesion. <i>Nature Communications</i> , 2021, 12, 919.	13.0	40
70	The Kank family proteins in adhesion dynamics. <i>Current Opinion in Cell Biology</i> , 2018, 54, 130-136.	5.5	35
71	$\beta$ 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.	7.5	32
72	Integrin $\beta$ 1 coordinates survival and morphogenesis of the embryonic lineage upon implantation and pluripotency transition. <i>Cell Reports</i> , 2021, 34, 108834.	6.3	31

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73	Active integrins regulate white adipose tissue insulin sensitivity and brown fat thermogenesis. <i>Molecular Metabolism</i> , 2021, 45, 101147.	6.6	31
74	Nascent Adhesions: From Fluctuations to a Hierarchical Organization. <i>Current Biology</i> , 2014, 24, R801-R803.	4.0	30
75	Implications of the differing roles of the $\beta 1$ and $\beta 3$ transmembrane and cytoplasmic domains for integrin function. <i>ELife</i> , 2016, 5, .	5.9	30
76	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.	4.3	27
77	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.	8.7	27
78	CDK1-cyclin-B1-induced kindlin degradation drives focal adhesion disassembly at mitotic entry. <i>Nature Cell Biology</i> , 2022, 24, 723-736.	9.9	27
79	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	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	$\beta 1$ integrin promotes but is not essential for metastasis of ras-myc transformed fibroblasts. <i>Oncogene</i> , 1999, 18, 3852-3861.	5.9	24
82	Lentiviral transgene vectors. <i>EMBO Reports</i> , 2004, 5, 28-29.	4.5	23
83	Protease-activated receptor signalling initiates $\beta 1$ -integrin-mediated adhesion in non-haematopoietic cells. <i>Nature Materials</i> , 2020, 19, 218-226.	26.3	21
84	$\alpha v$ -Class integrin binding to fibronectin is solely mediated by RGD and unaffected by an RGE mutation. <i>Journal of Cell Biology</i> , 2020, 219, .	5.1	21
85	LCP1 preferentially binds clasped $\beta 2$ integrin and attenuates leukocyte adhesion under flow. <i>Journal of Cell Science</i> , 2018, 131, .	2.0	17
86	Kindlin-3 loss curbs chronic myeloid leukemia in mice by mobilizing leukemic stem cells from protective bone marrow niches. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 24326-24335.	7.5	16
87	$\beta 1$ 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
88	Lucky kindlin: A cloverleaf at the integrin tail. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9234-9236.	7.5	13
89	In mitosis integrins reduce adhesion to extracellular matrix and strengthen adhesion to adjacent cells. <i>Nature Communications</i> , 2023, 14, .	13.0	13
90	Membrane tension drives ligand-independent integrin signaling. <i>EMBO Journal</i> , 2014, 33, 2439-2441.	7.6	11

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91	Differential requirement of kindlin-3 for T cell progenitor homing to the non-vascularized and vascularized thymus. <i>ELife</i> , 2018, 7, .	5.9	11
92	Rabgap1 promotes recycling of active $\beta$ 21 integrins to support effective cell migration. <i>Journal of Cell Science</i> , 2020, 133, .	2.0	10
93	Talin regulates integrin $\beta$ 21 dependent and independent cell functions in ureteric bud development. <i>Development (Cambridge)</i> , 2017, 144, 4148-4158.	2.6	8
94	Microenvironment-derived ADAM28 prevents cancer dissemination. <i>Oncotarget</i> , 2018, 9, 37185-37199.	1.9	8
95	SHP1 regulates a STAT6-ITGB3 axis in FLT3ITD-positive AML cells. <i>Leukemia</i> , 2020, 34, 1444-1449.	7.4	7
96	Molecular determinants of $\beta$ 25 localization in flat clathrin lattices – role of $\beta$ 25 in cell adhesion and proliferation. <i>Journal of Cell Science</i> , 2022, 135, .	2.0	7
97	The focal adhesion protein $\beta$ -parvin controls cardiomyocyte shape and sarcomere assembly in response to mechanical load. <i>Current Biology</i> , 2022, 32, 3033-3047.e9.	4.0	7
98	Tissue distribution and subcellular localization of the family of Kidney Ankyrin Repeat Domain (KANK) proteins. <i>Experimental Cell Research</i> , 2021, 398, 112391.	2.6	5
99	Disruption of the integrin-linked kinase (ILK) pseudokinase domain affects kidney development in mice. <i>Journal of Biological Chemistry</i> , 2021, 296, 100361.	3.5	5
100	New insights into the phosphorylation of the threonine motif of the $\beta$ 21 integrin cytoplasmic domain. <i>Life Science Alliance</i> , 2022, 5, e202101301.	2.9	5
101	Integrin $\beta$ 21 regulates marginal zone B cell differentiation and PI3K signaling. <i>Journal of Experimental Medicine</i> , 2023, 220, .	8.7	5
102	Talin and kindlin use integrin tail allostery and direct binding to activate integrins. <i>Nature Structural and Molecular Biology</i> , 2023, 30, 1913-1924.	8.0	5
103	A FAK conundrum is solved: activation and organization of focal adhesion kinase at the plasma membrane. <i>EMBO Journal</i> , 2020, 39, e106234.	7.6	4
104	Cell-cell adhesion and extracellular matrix: diversity counts. <i>Current Opinion in Cell Biology</i> , 2012, 24, 559-561.	5.5	3
105	$\beta$ 21 integrin regulates convergent extension in mouse notogenesis, ensures notochord integrity and the morphogenesis of vertebrae and intervertebral discs. <i>Development (Cambridge)</i> , 2020, 147, .	2.6	3
106	Integrins, anchors and signal transducers of hematopoietic stem cells during development and in adulthood. <i>Current Topics in Developmental Biology</i> , 2022, , 203-261.	5.7	3
107	Introduction to the ECR special issue, “Mechanosensing via Cell-Matrix Adhesions”. <i>Experimental Cell Research</i> , 2016, 343, 1-2.	2.6	2
108	A forceful connection: mechanoregulation of oncogenic YAP. <i>EMBO Journal</i> , 2017, 36, 2467-2469.	7.6	2

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109	Pinch2 regulates myelination in the mouse central nervous system. <i>Development (Cambridge)</i> , 2022, 149, .	2.6	2
110	Endothelial cells regulate alveolar morphogenesis by constructing basement membranes acting as a scaffold for myofibroblasts. <i>Nature Communications</i> , 2024, 15, .	13.0	2
111	Functional properties of CYLD. <i>International Congress Series</i> , 2007, 1302, 36-42.	0.2	0
112	Integrins Cooperate during Mechanosensing. <i>FASEB Journal</i> , 2015, 29, 92.1.	0.4	0
113	ICAP <sup>1</sup> loss impairs CD8 <sup>+</sup> thymocyte development and leads to reduced marginal zone B cells in mice. <i>European Journal of Immunology</i> , 2022, , .	3.3	0
114	Caskin2 is a novel talin- and Abi1-binding protein that promotes cell motility. <i>Journal of Cell Science</i> , 2024, 137, .	2.0	0