Arnoud Sonnenberg

List of Publications by Year
in descending order

103 papers	9,761 citations	36203 51 h-index	37111 96 g-index

105 all docs	105 docs citations	105 times ranked	9341 citing authors

#	Article	IF	Citations
1	Laminin receptor on platelets is the integrin VLA-6. Nature, 1988, 336, 487-489.	13.7	656
2	Integrinâ€“TGFâ€Î² crosstalk in fibrosis, cancer and wound healing. EMBO Reports, 2010, 11, 97-105.	2.0	534
3	Structure and Function of Hemidesmosomes: More Than Simple Adhesion Complexes. Journal of Investigative Dermatology, 1999, 112, 411-418.	0.3	513
4	Nesprin-3, a novel outer nuclear membrane protein, associates with the cytoskeletal linker protein plectin. Journal of Cell Biology, 2005, 171, 799-810.	2.3	409
5	Epithelial detachment due to absence of hemidesmosomes in integrin Î²4 null mice. Nature Genetics, 1996, 13, 366-369.	9.4	386
6	Integrin Î±6Î²4 identifies an adult distal lung epithelial population with regenerative potential in mice. Journal of Clinical Investigation, 2011, 121, 2855-2862.	3.9	379
7	The fibronectin-binding integrins Î±5Î²1 and Î±vÎ²3 differentially modulate RhoAâ€“GTP loading, organization of cell matrix adhesions, and fibronectin fibrillogenesis. Journal of Cell Biology, 2002, 159, 1071-1086.	2.3	321
8	Current insights into the formation and breakdown of hemidesmosomes. Trends in Cell Biology, 2006, 16, 376-383.	3.6	284
9	Mechanisms of integrin activation and trafficking. Current Opinion in Cell Biology, 2011, 23, 607-614.	2.6	266
10	Plakins in development and disease. Experimental Cell Research, 2007, 313, 2189-2203.	1.2	250
11	Kidney failure in mice lacking the tetraspanin CD151. Journal of Cell Biology, 2006, 175, 33-39.	2.3	214
12	The Tetraspan Molecule Cd151, a Novel Constituent of Hemidesmosomes, Associates with the Integrin Î±6Î²4 and May Regulate the Spatial Organization of Hemidesmosomes. Journal of Cell Biology, 2000, 149, 969-982.	2.3	211
13	Analysis of the interactions between BP180, BP230, plectin and the integrin Î±6Î²4 important for hemidesmosome assembly. Journal of Cell Science, 2003, 116, 387-399.	1.2	206
14	Integrins control motile strategy through a Rhoâ€“cofilin pathway. Journal of Cell Biology, 2005, 169, 515-526.	2.3	175
15	Hemidesmosome Formation Is Initiated by the Î²4 Integrin Subunit, Requires Complex Formation of Î²4 and HD1/Plectin, and Involves a Direct Interaction between Î²4 and the Bullous Pemphigoid Antigen 180. Journal of Cell Biology, 1998, 142, 271-284.	2.3	171
16	Binding of Integrin Î±6Î²4 to Plectin Prevents Plectin Association with F-Actin but Does Not Interfere with Intermediate Filament Binding. Journal of Cell Biology, 1999, 147, 417-434.	2.3	171
17	Molecular cloning of the human alpha6 integrin subunit. Alternative splicing of alpha6 mRNA and chromosomal localization of the alpha6 and beta4 genes. FEBS Journal, 1991, 199, 425-433.	0.2	164
18	TorsinA binds the KASH domain of nesprins and participates in linkage between nuclear envelope and cytoskeleton. Journal of Cell Science, 2008, 121, 3476-3486.	1.2	159

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19	Association of the tetraspanin CD151 with the laminin-binding integrinsÎ±3Î²1, Î±6Î²1, Î±6Î²4 and Î±7Î²1 in cells in culture and in vivo. Journal of Cell Science, 2002, 115, 1161-1173.	1.2	143
20	Requirements for the localization of nesprin-3 at the nuclear envelope and its interaction with plectin. Journal of Cell Science, 2007, 120, 3384-3394.	1.2	142
21	Unique and redundant functions of integrins in the epidermis. FASEB Journal, 2010, 24, 4133-4152.	0.2	136
22	Integrin Î±3Î²1 inhibits directional migration and wound re-epithelialization in the skin. Journal of Cell Science, 2009, 122, 278-288.	1.2	130
23	Association of the tetraspanin CD151 with the laminin-binding integrins alpha3beta1, alpha6beta1, alpha6beta4 and alpha7beta1 in cells in culture and in vivo. Journal of Cell Science, 2002, 115, 1161-73.	1.2	129
24	Multiple Functions of the Integrin Î±6Î²4 in Epidermal Homeostasis and Tumorigenesis. Molecular and Cellular Biology, 2006, 26, 2877-2886.	1.1	121
25	Cellâ€“matrix adhesion of podocytes in physiology and disease. Nature Reviews Nephrology, 2013, 9, 200-210.	4.1	115
26	The opposing roles of laminin-binding integrins in cancer. Matrix Biology, 2017, 57-58, 213-243.	1.5	106
27	Integrins: alternative splicing as a mechanism to regulate ligand binding and integrin signaling events. BioEssays, 1999, 21, 499-509.	1.2	105
28	Gain of glycosylation in integrin Î±3 causes lung disease and nephrotic syndrome. Journal of Clinical Investigation, 2012, 122, 4375-4387.	3.9	102
29	Dynamics of the Î±6Î²4 Integrin in Keratinocytes. Molecular Biology of the Cell, 2002, 13, 3845-3858.	0.9	99
30	Regulation of hemidesmosome disassembly by growth factor receptors. Current Opinion in Cell Biology, 2008, 20, 589-596.	2.6	99
31	Interaction of the Bullous Pemphigoid Antigen 1 (BP230) and Desmoplakin with Intermediate Filaments Is Mediated by Distinct Sequences within Their COOH Terminus. Molecular Biology of the Cell, 2003, 14, 1978-1992.	0.9	98
32	Structural and Functional Analysis of the Actin Binding Domain of Plectin Suggests Alternative Mechanisms for Binding to F-Actin and Integrin Î²4. Structure, 2003, 11, 615-625.	1.6	92
33	The Rac activator Tiam1 is required for Î±3Î²1-mediated laminin-5 deposition, cell spreading, and cell migration. Journal of Cell Biology, 2005, 171, 871-881.	2.3	88
34	Distinct Roles of Talin and Kindlin in Regulating Integrin Î±5Î²1 Function and Trafficking. Current Biology, 2012, 22, 1554-1563.	1.8	87
35	Hemidesmosomes modulate force generation via focal adhesions. Journal of Cell Biology, 2020, 219, .	2.3	87
36	Structural basis of the interaction between integrin Î±6Î²4 and plectin at the hemidesmosomes. EMBO Journal, 2009, 28, 1180-1190.	3.5	82

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37	Keratinocytes display normal proliferation, survival and differentiation in conditional Î²4-integrin knockout mice. Journal of Cell Science, 2005, 118, 1045-1060.	1.2	79
38	Demonstration of Type II Hemidesmosomes in a Mammary Gland Epithelial Cell Line, BMGE-H1. Journal of Biochemistry, 1994, 115, 469-476.	0.9	78
39	Nesprin-3 connects plectin and vimentin to the nuclear envelope of Sertoli cells but is not required for Sertoli cell function in spermatogenesis. Molecular Biology of the Cell, 2013, 24, 2454-2466.	0.9	77
40	Serine Phosphorylation of the Integrin Î²4 Subunit Is Necessary for Epidermal Growth Factor Receptorâ€“induced Hemidesmosome Disruption. Molecular Biology of the Cell, 2007, 18, 3512-3522.	0.9	74
41	The Hemidesmosomal Protein Bullous Pemphigoid Antigen 1 and the Integrin Î²4 Subunit Bind to ERBIN. Journal of Biological Chemistry, 2001, 276, 32427-32436.	1.6	73
42	Integrin-Associated CD151 Drives ErbB2-Evoked Mammary Tumor Onset and Metastasis. Neoplasia, 2012, 14, 678-IN3.	2.3	69
43	Epithelial Development and Differentiation in the Mammary Gland Is Not Dependent on Î±3 or Î±6 Integrin Subunits. Developmental Biology, 2001, 233, 449-467.	0.9	67
44	Blood pressure influences end-stage renal disease of Cd151 knockout mice. Journal of Clinical Investigation, 2012, 122, 348-358.	3.9	65
45	Crosstalk between Cell Adhesion Complexes in Regulation of Mechanotransduction. BioEssays, 2020, 42, e2000119.	1.2	64
46	EGF-induced MAPK Signaling Inhibits Hemidesmosome Formation through Phosphorylation of the Integrin Î²4*. Journal of Biological Chemistry, 2010, 285, 37650-37662.	1.6	63
47	Suppression of Mouse Melanoma Metastasis by EA-1, A Monoclonal Antibody Specific for Î±6 Integrins. Cell Adhesion and Communication, 1993, 1, 67-81.	1.7	61
48	The interaction of plectin with actin: evidence for cross-linking of actin filaments by dimerization of the actin-binding domain of plectin. Journal of Cell Science, 2001, 114, 2065-2076.	1.2	59
49	Loss of integrin Î±3 prevents skin tumor formation by promoting epidermal turnover and depletion of slow-cycling cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21468-21473.	3.3	57
50	Cre-loxPâ€“mediated Inactivation of the Î±6A Integrin Splice Variant In Vivo: Evidence for a Specific Functional Role of Î±6A in Lymphocyte Migration but Not in Heart Development. Journal of Cell Biology, 1998, 143, 253-266.	2.3	56
51	Advances and perspectives of the architecture of hemidesmosomes: Lessons from structural biology. Cell Adhesion and Migration, 2009, 3, 361-364.	1.1	53
52	Expression patterns of laminin receptor splice variants Î±6AÎ²1 and Î±6BÎ²1 suggest different roles in mouse development. Developmental Dynamics, 1995, 204, 240-258.	0.8	52
53	The Structure of a Tandem Pair of Spectrin Repeats of Plectin Reveals a Modular Organization of the Plakin Domain. Journal of Molecular Biology, 2007, 368, 1379-1391.	2.0	52
54	CLIC4 regulates cell adhesion and Î²1 integrin trafficking. Journal of Cell Science, 2014, 127, 5189-203.	1.2	50

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55	Two Different Mutations in the Cytoplasmic Domain of the Integrin Î²4 Subunit in Nonlethal Forms of Epidermolysis Bullosa Prevent Interaction of Î²4 with Plectin. Journal of Investigative Dermatology, 2001, 117, 1405-1411.	0.3	49
56	Dual Role of Î±6Î²4 Integrin in Epidermal Tumor Growth: Tumor-suppressive Versus Tumor-promoting Function. Molecular Biology of the Cell, 2007, 18, 4210-4221.	0.9	49
57	Nesprin-3: a versatile connector between the nucleus and the cytoskeleton. Biochemical Society Transactions, 2011, 39, 1719-1724.	1.6	48
58	Specificity of Binding of the Plectin Actin-binding Domain to Î²4 Integrin. Molecular Biology of the Cell, 2003, 14, 4039-4050.	0.9	46
59	Epigenetic Regulation of Galectin-3 Expression by Î²1 Integrins Promotes Cell Adhesion and Migration. Journal of Biological Chemistry, 2012, 287, 44684-44693.	1.6	46
60	Tetraspanin CD151 maintains vascular stability by balancing the forces of cell adhesion and cytoskeletal tension. Blood, 2011, 118, 4274-4284.	0.6	45
61	The Structure of the Plakin Domain of Plectin Reveals a Non-canonical SH3 Domain Interacting with Its Fourth Spectrin Repeat. Journal of Biological Chemistry, 2011, 286, 12429-12438.	1.6	43
62	Phosphorylation of threonine 1736 in the C-terminal tail of integrin Î²4 contributes to hemidesmosome disassembly. Molecular Biology of the Cell, 2012, 23, 1475-1485.	0.9	43
63	Nesprin-3 augments peripheral nuclear localization of intermediate filaments in zebrafish. Journal of Cell Science, 2011, 124, 755-764.	1.2	42
64	Mechanisms of integrin Î±VÎ²5 clustering in flat clathrin lattices. Journal of Cell Science, 2018, 131, .	1.2	42
65	Expression of Î±7Î²1 Integrin Splicing Variants during Skeletal Muscle Regeneration. American Journal of Pathology, 2002, 161, 1023-1031.	1.9	38
66	Combination of X-ray crystallography, SAXS and DEER to obtain the structure of the FnIII-3,4 domains of integrin Î±6Î²4. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 969-985.	2.5	38
67	An Alternatively Spliced Exon in the Extracellular Domain of the Human Î±6 Integrin Subunit-Functional Analysis of the Î±6 Integrin Variants. Cell Adhesion and Communication, 1995, 3, 143-161.	1.7	36
68	The Structure of the Plakin Domain of Plectin Reveals an Extended Rod-like Shape. Journal of Biological Chemistry, 2016, 291, 18643-18662.	1.6	36
69	Structure of the Calx-Î² domain of the integrin Î²4 subunit: insights into function and cation-independent stability. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 858-871.	2.5	33
70	The molecular architecture of hemidesmosomes as revealed by super-resolution microscopy. Journal of Cell Science, 2015, 128, 3714-9.	1.2	32
71	Determination of proteinase 3-Î±1-antitrypsin complexes in inflammatory fluids. FEBS Letters, 1992, 314, 117-121.	1.3	30
72	Expression of the Orphan Protein Plet-1 during Trichilemmal Differentiation of Anagen Hair Follicles. Journal of Investigative Dermatology, 2010, 130, 1500-1513.	0.3	30

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73	The laminin binding Î±3 and Î±6 integrins cooperate to promote epithelial cell adhesion and growth. Matrix Biology, 2019, 77, 101-116.	1.5	30
74	Kindlin-1 Regulates Integrin Dynamics and Adhesion Turnover. PLoS ONE, 2013, 8, e65341.	1.1	29
75	Conditional Deletion of theItgb4Integrin Gene in Schwann Cells Leads to Delayed Peripheral Nerve Regeneration. Journal of Neuroscience, 2008, 28, 11292-11303.	1.7	27
76	Integrin Î±3Î²1 regulates kidney collecting duct development via TRAF6-dependent K63-linked polyubiquitination of Akt. Molecular Biology of the Cell, 2015, 26, 1857-1874.	0.9	27
77	BPAG1 isoform-b: Complex distribution pattern in striated and heart muscle and association with plectin and Î±-actinin. Experimental Cell Research, 2010, 316, 297-313.	1.2	25
78	Integrin alpha6 maintains the structural integrity of the kidney collecting system. Matrix Biology, 2017, 57-58, 244-257.	1.5	24
79	The Unique Cytoplasmic Domain of the Human Integrin Variant Î²4E Is Produced by Partial Retention of Intronic Sequences. Biochemical and Biophysical Research Communications, 1997, 235, 826-830.	1.0	22
80	Regulation of hemidesmosome dynamics and cell signaling by integrin Î±6Î²4. Journal of Cell Science, 2021, 134, .	1.2	22
81	Tetraspanin CD151 and integrin Î±3Î²1 contribute to the stabilization of integrin Î±6Î²4-containing cell-matrix adhesions. Journal of Cell Science, 2019, 132, .	1.2	21
82	Modeling and Experimental Validation of the Binary Complex of the Plectin Actin-binding Domain and the First Pair of Fibronectin Type III (FNIII) Domains of the Î²4 Integrin. Journal of Biological Chemistry, 2005, 280, 22270-22277.	1.6	18
83	The rod domain is not essential for the function of plectin in maintaining tissue integrity. Molecular Biology of the Cell, 2015, 26, 2402-2417.	0.9	18
84	Laminin-binding integrins are essential for the maintenance of functional mammary secretory epithelium in lactation. Development (Cambridge), 2020, 147, .	1.2	17
85	The nesprin-cytoskeleton interface probed directly on single nuclei is a mechanically rich system. Nucleus, 2017, 8, 534-547.	0.6	16
86	Kindlin-1 Mutant Zebrafish as an In Vivo Model System to Study Adhesion Mechanisms in the Epidermis. Journal of Investigative Dermatology, 2013, 133, 2180-2190.	0.3	15
87	Reduced Susceptibility to Two-Stage Skin Carcinogenesis in Mice with Epidermis-Specific Deletion of Cd151. Journal of Investigative Dermatology, 2014, 134, 221-228.	0.3	15
88	Truncated Type XVII Collagen Expression in a Patient with Non-Herlitz Junctional Epidermolysis Bullosa Caused by a Homozygous Splice-Site Mutation. Laboratory Investigation, 2001, 81, 887-894.	1.7	14
89	Absence of integrin Î±3Î²1 promotesÂthe progression of HER2-driven breast cancer in vivo. Breast Cancer Research, 2019, 21, 63.	2.2	14
90	Integrin Î±3Î²1 Is a Key Regulator of Several Protumorigenic Pathways during Skin Carcinogenesis. Journal of Investigative Dermatology, 2021, 141, 732-741.e6.	0.3	12

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91	Integrin Î±6Î²4 Recognition of a Linear Motif of Bullous Pemphigoid Antigen BP230 Controls Its Recruitment to Hemidesmosomes. Structure, 2019, 27, 952-964.e6.	1.6	11
92	Comparative interactomics analysis reveals potential regulators of Î±6Î²4 distribution in keratinocytes. Biology Open, 2020, 9, .	0.6	11
93	MAPK uncouples cell cycle progression from cell spreading and cytoskeletal organization in cycling cells. Cellular and Molecular Life Sciences, 2013, 70, 293-307.	2.4	10
94	Carbonic Anhydrase 5 Regulates Acid-Base Homeostasis in Zebrafish. PLoS ONE, 2012, 7, e39881.	1.1	9
95	PKD2 and RSK1 Regulate Integrin Î²4 Phosphorylation at Threonine 1736. PLoS ONE, 2015, 10, e0143357.	1.1	7
96	Molecular determinants of Î±VÎ²5 localization in flat clathrin lattices â€“ role of Î±VÎ²5 in cell adhesion and proliferation. Journal of Cell Science, 2022, 135, .	1.2	6
97	The regulation of MacMARCKS expression by integrin Î²3. Experimental Cell Research, 2007, 313, 1260-1269.	1.2	5
98	Integrin Î±3Î²1 in hair bulge stem cells modulates CCN2 expression and promotes skin tumorigenesis. Life Science Alliance, 2020, 3, e202000645.	1.3	5
99	PEAK1 Y635 phosphorylation regulates cell migration through association with Tensin3 and integrins. Journal of Cell Biology, 2022, 221, .	2.3	5
100	Investigation into the mechanism regulating MRP localization. Experimental Cell Research, 2008, 314, 330-341.	1.2	4
101	EGFR-dependent tyrosine phosphorylation of integrin Î²4 is not required for downstream signaling events in cancer cell lines. Scientific Reports, 2021, 11, 8675.	1.6	4
102	The laminin-binding integrins regulate nuclear factor ÎºB-dependent epithelial cell polarity and inflammation. Journal of Cell Science, 2021, 134, .	1.2	4
103	Editorial overview. Current Opinion in Cell Biology, 2011, 23, 505-507.	2.6	2