

# Arnoud Sonnenberg

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

102  
papers

8,412  
citations

48  
h-index

91  
g-index

105  
ext. papers

9,140  
ext. citations

6.4  
avg, IF

5.95  
L-index

#	Paper	IF	Citations
102	Laminin receptor on platelets is the integrin VLA-6. <i>Nature</i> , <b>1988</b> , 336, 487-9	50.4	587
101	Integrin-TGF-beta crosstalk in fibrosis, cancer and wound healing. <i>EMBO Reports</i> , <b>2010</b> , 11, 97-105	6.5	445
100	Structure and function of hemidesmosomes: more than simple adhesion complexes. <i>Journal of Investigative Dermatology</i> , <b>1999</b> , 112, 411-8	4.3	428
99	Nesprin-3, a novel outer nuclear membrane protein, associates with the cytoskeletal linker protein plectin. <i>Journal of Cell Biology</i> , <b>2005</b> , 171, 799-810	7.3	363
98	Epithelial detachment due to absence of hemidesmosomes in integrin beta 4 null mice. <i>Nature Genetics</i> , <b>1996</b> , 13, 366-9	36.3	362
97	Integrin $\beta 4$ identifies an adult distal lung epithelial population with regenerative potential in mice. <i>Journal of Clinical Investigation</i> , <b>2011</b> , 121, 2855-62	15.9	297
96	The fibronectin-binding integrins alpha5beta1 and alphavbeta3 differentially modulate RhoA-GTP loading, organization of cell matrix adhesions, and fibronectin fibrillogenesis. <i>Journal of Cell Biology</i> , <b>2002</b> , 159, 1071-86	7.3	262
95	Mechanisms of integrin activation and trafficking. <i>Current Opinion in Cell Biology</i> , <b>2011</b> , 23, 607-14	9	242
94	Current insights into the formation and breakdown of hemidesmosomes. <i>Trends in Cell Biology</i> , <b>2006</b> , 16, 376-83	18.3	240
93	Plakins in development and disease. <i>Experimental Cell Research</i> , <b>2007</b> , 313, 2189-203	4.2	223
92	Kidney failure in mice lacking the tetraspanin CD151. <i>Journal of Cell Biology</i> , <b>2006</b> , 175, 33-9	7.3	200
91	The tetraspan molecule CD151, a novel constituent of hemidesmosomes, associates with the integrin alpha6beta4 and may regulate the spatial organization of hemidesmosomes. <i>Journal of Cell Biology</i> , <b>2000</b> , 149, 969-82	7.3	195
90	Analysis of the interactions between BP180, BP230, plectin and the integrin alpha6beta4 important for hemidesmosome assembly. <i>Journal of Cell Science</i> , <b>2003</b> , 116, 387-99	5.3	186
89	Integrins control motile strategy through a Rho-cofilin pathway. <i>Journal of Cell Biology</i> , <b>2005</b> , 169, 515-26.3	7.3	161
88	Binding of integrin alpha6beta4 to plectin prevents plectin association with F-actin but does not interfere with intermediate filament binding. <i>Journal of Cell Biology</i> , <b>1999</b> , 147, 417-34	7.3	157
87	Hemidesmosome formation is initiated by the beta4 integrin subunit, requires complex formation of beta4 and HD1/plectin, and involves a direct interaction between beta4 and the bullous pemphigoid antigen 180. <i>Journal of Cell Biology</i> , <b>1998</b> , 142, 271-84	7.3	154
86	Molecular cloning of the human alpha 6 integrin subunit. Alternative splicing of alpha 6 mRNA and chromosomal localization of the alpha 6 and beta 4 genes. <i>FEBS Journal</i> , <b>1991</b> , 199, 425-33		144

85	TorsinA binds the KASH domain of nesprins and participates in linkage between nuclear envelope and cytoskeleton. <i>Journal of Cell Science</i> , <b>2008</b> , 121, 3476-86	5.3	137
84	Requirements for the localization of nesprin-3 at the nuclear envelope and its interaction with plectin. <i>Journal of Cell Science</i> , <b>2007</b> , 120, 3384-94	5.3	130
83	Association of the tetraspanin CD151 with the laminin-binding integrins $\beta 1$ , $\beta 4$ , $\beta 7$ and $\beta 8$ in cells in culture and in vivo. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 1161-1173	5.3	130
82	Integrin alpha3beta1 inhibits directional migration and wound re-epithelialization in the skin. <i>Journal of Cell Science</i> , <b>2009</b> , 122, 278-88	5.3	120
81	Unique and redundant functions of integrins in the epidermis. <i>FASEB Journal</i> , <b>2010</b> , 24, 4133-52	0.9	117
80	Association of the tetraspanin CD151 with the laminin-binding integrins alpha3beta1, alpha6beta1, alpha6beta4 and alpha7beta1 in cells in culture and in vivo. <i>Journal of Cell Science</i> , <b>2002</b> , 115, 1161-73	5.3	116
79	Multiple functions of the integrin alpha6beta4 in epidermal homeostasis and tumorigenesis. <i>Molecular and Cellular Biology</i> , <b>2006</b> , 26, 2877-86	4.8	112
78	Integrins: alternative splicing as a mechanism to regulate ligand binding and integrin signaling events. <i>BioEssays</i> , <b>1999</b> , 21, 499-509	4.1	97
77	Cell-matrix adhesion of podocytes in physiology and disease. <i>Nature Reviews Nephrology</i> , <b>2013</b> , 9, 200-104.9	4.9	94
76	Regulation of hemidesmosome disassembly by growth factor receptors. <i>Current Opinion in Cell Biology</i> , <b>2008</b> , 20, 589-96	9	91
75	Interaction of the bullous pemphigoid antigen 1 (BP230) and desmoplakin with intermediate filaments is mediated by distinct sequences within their COOH terminus. <i>Molecular Biology of the Cell</i> , <b>2003</b> , 14, 1978-92	3.5	91
74	Dynamics of the alpha6beta4 integrin in keratinocytes. <i>Molecular Biology of the Cell</i> , <b>2002</b> , 13, 3845-58	3.5	91
73	Structural and functional analysis of the actin binding domain of plectin suggests alternative mechanisms for binding to F-actin and integrin beta4. <i>Structure</i> , <b>2003</b> , 11, 615-25	5.2	86
72	Gain of glycosylation in integrin $\beta$ causes lung disease and nephrotic syndrome. <i>Journal of Clinical Investigation</i> , <b>2012</b> , 122, 4375-87	15.9	86
71	The Rac activator Tiam1 is required for (alpha)3(beta)1-mediated laminin-5 deposition, cell spreading, and cell migration. <i>Journal of Cell Biology</i> , <b>2005</b> , 171, 871-81	7.3	85
70	The opposing roles of laminin-binding integrins in cancer. <i>Matrix Biology</i> , <b>2017</b> , 57-58, 213-243	11.4	81
69	Distinct roles of talin and kindlin in regulating integrin $\beta 1$ function and trafficking. <i>Current Biology</i> , <b>2012</b> , 22, 1554-63	6.3	81
68	Demonstration of type II hemidesmosomes in a mammary gland epithelial cell line, BMGE-H. <i>Journal of Biochemistry</i> , <b>1994</b> , 115, 469-76	3.1	75

67	Structural basis of the interaction between integrin alpha6beta4 and plectin at the hemidesmosomes. <i>EMBO Journal</i> , <b>2009</b> , 28, 1180-90	13	72
66	Serine phosphorylation of the integrin beta4 subunit is necessary for epidermal growth factor receptor induced hemidesmosome disruption. <i>Molecular Biology of the Cell</i> , <b>2007</b> , 18, 3512-22	3.5	70
65	Keratinocytes display normal proliferation, survival and differentiation in conditional beta4-integrin knockout mice. <i>Journal of Cell Science</i> , <b>2005</b> , 118, 1045-60	5.3	69
64	The hemidesmosomal protein bullous pemphigoid antigen 1 and the integrin beta 4 subunit bind to ERBIN. Molecular cloning of multiple alternative splice variants of ERBIN and analysis of their tissue expression. <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 32427-36	5.4	65
63	Integrin-associated CD151 drives ErbB2-evoked mammary tumor onset and metastasis. <i>Neoplasia</i> , <b>2012</b> , 14, 678-89	6.4	63
62	Epithelial development and differentiation in the mammary gland is not dependent on alpha 3 or alpha 6 integrin subunits. <i>Developmental Biology</i> , <b>2001</b> , 233, 449-67	3.1	63
61	Blood pressure influences end-stage renal disease of Cd151 knockout mice. <i>Journal of Clinical Investigation</i> , <b>2012</b> , 122, 348-58	15.9	62
60	Nesprin-3 connects plectin and vimentin to the nuclear envelope of Sertoli cells but is not required for Sertoli cell function in spermatogenesis. <i>Molecular Biology of the Cell</i> , <b>2013</b> , 24, 2454-66	3.5	57
59	Suppression of Mouse Melanoma Metastasis by EA-1, A Monoclonal Antibody Specific for $\beta$ Integrins. <i>Cell Adhesion and Communication</i> , <b>1993</b> , 1, 67-81		57
58	EGF-induced MAPK signaling inhibits hemidesmosome formation through phosphorylation of the integrin {beta}4. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 37650-62	5.4	55
57	Cre-loxP-mediated inactivation of the alpha6A integrin splice variant in vivo: evidence for a specific functional role of alpha6A in lymphocyte migration but not in heart development. <i>Journal of Cell Biology</i> , <b>1998</b> , 143, 253-66	7.3	52
56	Loss of integrin $\beta$ prevents skin tumor formation by promoting epidermal turnover and depletion of slow-cycling cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 21468-73	11.5	51
55	The interaction of plectin with actin: evidence for cross-linking of actin filaments by dimerization of the actin-binding domain of plectin. <i>Journal of Cell Science</i> , <b>2001</b> , 114, 2065-2076	5.3	51
54	Expression patterns of laminin receptor splice variants alpha 6A beta 1 and alpha 6B beta 1 suggest different roles in mouse development. <i>Developmental Dynamics</i> , <b>1995</b> , 204, 240-58	2.9	47
53	Dual Role of alpha6beta4 integrin in epidermal tumor growth: tumor-suppressive versus tumor-promoting function. <i>Molecular Biology of the Cell</i> , <b>2007</b> , 18, 4210-21	3.5	46
52	The structure of a tandem pair of spectrin repeats of plectin reveals a modular organization of the plakin domain. <i>Journal of Molecular Biology</i> , <b>2007</b> , 368, 1379-91	6.5	46
51	Advances and perspectives of the architecture of hemidesmosomes: lessons from structural biology. <i>Cell Adhesion and Migration</i> , <b>2009</b> , 3, 361-4	3.2	45
50	Specificity of binding of the plectin actin-binding domain to beta4 integrin. <i>Molecular Biology of the Cell</i> , <b>2003</b> , 14, 4039-50	3.5	42

49	Two different mutations in the cytoplasmic domain of the integrin beta 4 subunit in nonlethal forms of epidermolysis bullosa prevent interaction of beta 4 with plectin. <i>Journal of Investigative Dermatology</i> , <b>2001</b> , 117, 1405-11	4.3	42
48	Nesprin-3: a versatile connector between the nucleus and the cytoskeleton. <i>Biochemical Society Transactions</i> , <b>2011</b> , 39, 1719-24	5.1	41
47	Hemidesmosomes modulate force generation via focal adhesions. <i>Journal of Cell Biology</i> , <b>2020</b> , 219,	7.3	39
46	Nesprin-3 augments peripheral nuclear localization of intermediate filaments in zebrafish. <i>Journal of Cell Science</i> , <b>2011</b> , 124, 755-64	5.3	38
45	Phosphorylation of threonine 1736 in the C-terminal tail of integrin $\beta$ contributes to hemidesmosome disassembly. <i>Molecular Biology of the Cell</i> , <b>2012</b> , 23, 1475-85	3.5	38
44	CLIC4 regulates cell adhesion and $\beta$ integrin trafficking. <i>Journal of Cell Science</i> , <b>2014</b> , 127, 5189-203	5.3	37
43	Epigenetic regulation of galectin-3 expression by $\beta$ integrins promotes cell adhesion and migration. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 44684-93	5.4	37
42	The structure of the plakin domain of plectin reveals a non-canonical SH3 domain interacting with its fourth spectrin repeat. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 12429-38	5.4	37
41	Tetraspanin CD151 maintains vascular stability by balancing the forces of cell adhesion and cytoskeletal tension. <i>Blood</i> , <b>2011</b> , 118, 4274-84	2.2	36
40	An alternatively spliced exon in the extracellular domain of the human alpha 6 integrin subunit--functional analysis of the alpha 6 integrin variants. <i>Cell Adhesion and Communication</i> , <b>1995</b> , 3, 143-61		35
39	Expression of alpha7beta1 integrin splicing variants during skeletal muscle regeneration. <i>American Journal of Pathology</i> , <b>2002</b> , 161, 1023-31	5.8	34
38	Combination of X-ray crystallography, SAXS and DEER to obtain the structure of the FnIII-3,4 domains of integrin $\beta$ . <i>Acta Crystallographica Section D: Biological Crystallography</i> , <b>2015</b> , 71, 969-85		31
37	The molecular architecture of hemidesmosomes, as revealed with super-resolution microscopy. <i>Journal of Cell Science</i> , <b>2015</b> , 128, 3714-9	5.3	27
36	Determination of proteinase 3-alpha 1-antitrypsin complexes in inflammatory fluids. <i>FEBS Letters</i> , <b>1992</b> , 314, 117-21	3.8	27
35	Mechanisms of integrin $\alpha$ $\beta$ clustering in flat clathrin lattices. <i>Journal of Cell Science</i> , <b>2018</b> , 131,	5.3	27
34	Expression of the orphan protein Plet-1 during trichilemmal differentiation of anagen hair follicles. <i>Journal of Investigative Dermatology</i> , <b>2010</b> , 130, 1500-13	4.3	26
33	Structure of the Calx-beta domain of the integrin beta4 subunit: insights into function and cation-independent stability. <i>Acta Crystallographica Section D: Biological Crystallography</i> , <b>2009</b> , 65, 858-71		25
32	Conditional deletion of the Itgb4 integrin gene in Schwann cells leads to delayed peripheral nerve regeneration. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 11292-303	6.6	23

31	Kindlin-1 regulates integrin dynamics and adhesion turnover. <i>PLoS ONE</i> , <b>2013</b> , 8, e65341	3.7	22
30	The unique cytoplasmic domain of the human integrin variant beta4E is produced by partial retention of intronic sequences. <i>Biochemical and Biophysical Research Communications</i> , <b>1997</b> , 235, 826-30	3.4	21
29	The laminin binding $\beta$ and $\beta$ integrins cooperate to promote epithelial cell adhesion and growth. <i>Matrix Biology</i> , <b>2019</b> , 77, 101-116	11.4	21
28	Integrin alpha6 maintains the structural integrity of the kidney collecting system. <i>Matrix Biology</i> , <b>2017</b> , 57-58, 244-257	11.4	20
27	Crosstalk between Cell Adhesion Complexes in Regulation of Mechanotransduction. <i>BioEssays</i> , <b>2020</b> , 42, e2000119	4.1	20
26	The Structure of the Plakin Domain of Plectin Reveals an Extended Rod-like Shape. <i>Journal of Biological Chemistry</i> , <b>2016</b> , 291, 18643-62	5.4	19
25	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 beta4 integrin. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 22270-7	5.4	18
24	Tetraspanin CD151 and integrin $\beta$ contribute to the stabilization of integrin $\beta$ -containing cell-matrix adhesions. <i>Journal of Cell Science</i> , <b>2019</b> , 132,	5.3	17
23	Integrin $\beta$ regulates kidney collecting duct development via TRAF6-dependent K63-linked polyubiquitination of Akt. <i>Molecular Biology of the Cell</i> , <b>2015</b> , 26, 1857-74	3.5	16
22	BPAG1 isoform-b: complex distribution pattern in striated and heart muscle and association with plectin and alpha-actinin. <i>Experimental Cell Research</i> , <b>2010</b> , 316, 297-313	4.2	16
21	Reduced susceptibility to two-stage skin carcinogenesis in mice with epidermis-specific deletion of CD151. <i>Journal of Investigative Dermatology</i> , <b>2014</b> , 134, 221-228	4.3	14
20	Laminin-binding integrins are essential for the maintenance of functional mammary secretory epithelium in lactation. <i>Development (Cambridge)</i> , <b>2020</b> , 147,	6.6	13
19	Kindlin-1 mutant zebrafish as an in vivo model system to study adhesion mechanisms in the epidermis. <i>Journal of Investigative Dermatology</i> , <b>2013</b> , 133, 2180-90	4.3	13
18	The rod domain is not essential for the function of plectin in maintaining tissue integrity. <i>Molecular Biology of the Cell</i> , <b>2015</b> , 26, 2402-17	3.5	11
17	Truncated typeXVII collagen expression in a patient with non-herlitz junctional epidermolysis bullosa caused by a homozygous splice-site mutation. <i>Laboratory Investigation</i> , <b>2001</b> , 81, 887-94	5.9	11
16	Absence of integrin $\beta$ promotes the progression of HER2-driven breast cancer in vivo. <i>Breast Cancer Research</i> , <b>2019</b> , 21, 63	8.3	10
15	The nesprin-cytoskeleton interface probed directly on single nuclei is a mechanically rich system. <i>Nucleus</i> , <b>2017</b> , 8, 534-547	3.9	10
14	MAPK uncouples cell cycle progression from cell spreading and cytoskeletal organization in cycling cells. <i>Cellular and Molecular Life Sciences</i> , <b>2013</b> , 70, 293-307	10.3	8

13	Integrin $\beta 4$ Recognition of a Linear Motif of Bullous Pemphigoid Antigen BP230 Controls Its Recruitment to Hemidesmosomes. <i>Structure</i> , <b>2019</b> , 27, 952-964.e6	5.2	7
12	Integrin $\beta 1$ Is a Key Regulator of Several Protumorigenic Pathways during Skin Carcinogenesis. <i>Journal of Investigative Dermatology</i> , <b>2021</b> , 141, 732-741.e6	4.3	6
11	Carbonic anhydrase 5 regulates acid-base homeostasis in zebrafish. <i>PLoS ONE</i> , <b>2012</b> , 7, e39881	3.7	5
10	The regulation of MacMARCKS expression by integrin beta3. <i>Experimental Cell Research</i> , <b>2007</b> , 313, 1260-9	4.2	5
9	Integrin $\beta 1$ in hair bulge stem cells modulates CCN2 expression and promotes skin tumorigenesis. <i>Life Science Alliance</i> , <b>2020</b> , 3,	5.8	5
8	Comparative interactomics analysis reveals potential regulators of $\beta 4$ distribution in keratinocytes. <i>Biology Open</i> , <b>2020</b> , 9,	2.2	5
7	Investigation into the mechanism regulating MRP localization. <i>Experimental Cell Research</i> , <b>2008</b> , 314, 330-41	4.2	4
6	PKD2 and RSK1 Regulate Integrin $\beta$ Phosphorylation at Threonine 1736. <i>PLoS ONE</i> , <b>2015</b> , 10, e0143357	3.7	4
5	Regulation of hemidesmosome dynamics and cell signaling by integrin $\beta 4$ . <i>Journal of Cell Science</i> , <b>2021</b> , 134,	5.3	3
4	Mechanisms of integrin $\alpha 5 \beta 1$ clustering in flat clathrin lattices		2
3	EGFR-dependent tyrosine phosphorylation of integrin $\beta 4$ is not required for downstream signaling events in cancer cell lines. <i>Scientific Reports</i> , <b>2021</b> , 11, 8675	4.9	2
2	The laminin-binding integrins regulate nuclear factor kappa- $\beta$ -dependent epithelial cell polarity and inflammation. <i>Journal of Cell Science</i> , <b>2021</b> ,	5.3	1
1	Integrin $\beta 4$ recognition of a linear motif of bullous pemphigoid antigen BP230 controls its recruitment to hemidesmosomes		1