An Zwijsen

List of Publications by Year
in descending order

77 papers	4,674 citations	117625 34 h-index	102487 66 g-index
84 all docs	84 docs citations	84 times ranked	7266 citing authors

#	Article	IF	Citations
1	Presenilin 2 deficiency causes a mild pulmonary phenotype and no changes in amyloid precursor protein processing but enhances the embryonic lethal phenotype of presenilin 1 deficiency. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11872-11877.	7.1	481
2	Endocardial cushion and myocardial defects after cardiac myocyte-specific conditional deletion of the bone morphogenetic protein receptor ALK3. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2878-2883.	7.1	259
3	Epidermal differentiation does not involve the pro-apoptotic executioner caspases, but is associated with caspase-14 induction and processing. Cell Death and Differentiation, 2000, 7, 1218-1224.	11.2	218
4	Stalk Cell Phenotype Depends on Integration of Notch and Smad1/5 Signaling Cascades. Developmental Cell, 2012, 22, 501-514.	7.0	198
5	Conditional Deletion of Smad1 and Smad5 in Somatic Cells of Male and Female Gonads Leads to Metastatic Tumor Development in Mice. Molecular and Cellular Biology, 2008, 28, 248-257.	2.3	189
6	Differential contribution of the three Aph1 genes to Î³-secretase activity in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1719-1724.	7.1	173
7	The Notch intracellular domain integrates signals from Wnt, Hedgehog, TGFÎ²/BMP and hypoxia pathways. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 303-313.	4.1	159
8	Smad5 Is Essential for Leftâ€“Right Asymmetry in Mice. Developmental Biology, 2000, 219, 71-78.	2.0	138
9	BMP signaling in vascular biology and dysfunction. Cytokine and Growth Factor Reviews, 2016, 27, 65-79.	7.2	136
10	Alk3/Bmpr1a Receptor Is Required for Development of the Atrioventricular Canal Into Valves and Annulus Fibrosus. Circulation Research, 2005, 97, 219-226.	4.5	130
11	On the origin of amniotic stem cells: of mice and men. International Journal of Developmental Biology, 2010, 54, 761-777.	0.6	127
12	Bone Morphogenetic Proteins in Vascular Homeostasis and Disease. Cold Spring Harbor Perspectives in Biology, 2018, 10, a031989.	5.5	118
13	Zeb2 recruits HDACâ€“NuRD to inhibit Notch and controls Schwann cell differentiation and remyelination. Nature Neuroscience, 2016, 19, 1060-1072.	14.8	113
14	Slowed Conduction and Thin Myelination of Peripheral Nerves Associated with Mutant Rho Guanine-Nucleotide Exchange Factor 10. American Journal of Human Genetics, 2003, 73, 926-932.	6.2	107
15	Functional Redundancy of TGF-beta Family Type I Receptors and Receptor-Smads in Mediating Anti-MÃ¼llerian Hormone-Induced MÃ¼llerian Duct Regression in the Mouse1. Biology of Reproduction, 2008, 78, 994-1001.	2.7	102
16	New intracellular components of bone morphogenetic protein/Smad signaling cascades. FEBS Letters, 2003, 546, 133-139.	2.8	96
17	Lineage-specific functions of TET1 in the postimplantation mouse embryo. Nature Genetics, 2017, 49, 1061-1072.	21.4	96
18	Few Smad proteins and many Smad-interacting proteins yield multiple functions and action modes in TGFÎ²/BMP signaling in vivo. Cytokine and Growth Factor Reviews, 2011, 22, 287-300.	7.2	95

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19	FGF-regulated BMP signaling is required for eyelid closure and to specify conjunctival epithelial cell fate. Development (Cambridge), 2009, 136, 1741-1750.	2.5	85
20	Role of bone morphogenetic proteins in sprouting angiogenesis: differential BMP receptorâ€dependent signaling pathways balance stalkvs. tip cell competence. FASEB Journal, 2017, 31, 4720-4733.	0.5	83
21	The type I BMP receptors, Bmpr1a and Acvr1, activate multiple signaling pathways to regulate lens formation. Developmental Biology, 2009, 335, 305-316.	2.0	73
22	Amnion formation in the mouse embryo: the single amniochorionic fold model. BMC Developmental Biology, 2011, 11, 48.	2.1	72
23	Real time monitoring of BMP Smads transcriptional activity during mouse development. Genesis, 2008, 46, 335-346.	1.6	70
24	Robustness in angiogenesis: Notch and BMP shaping waves. Trends in Genetics, 2013, 29, 140-149.	6.7	70
25	Smad1/5 is required for erythropoietin-mediated suppression of hepcidin in mice. Blood, 2017, 130, 73-83.	1.4	69
26	Characterization of a Rat C6 Glioma-Secreted Follistatin-Related Protein (FRP). Cloning and Sequence of the Human Homologue. FEBS Journal, 1994, 225, 937-946.	0.2	57
27	Smad1 and its target gene Wif1 coordinate BMP and Wnt signaling activities to regulate fetal lung development. Development (Cambridge), 2011, 138, 925-935.	2.5	50
28	Transforming Growth Factor type Î² and Smad family signaling in stem cell function. Cytokine and Growth Factor Reviews, 2009, 20, 449-458.	7.2	43
29	Functions of the Type 1 BMP Receptor Acvr1 (Alk2) in Lens Development: Cell Proliferation, Terminal Differentiation, and Survival. , 2008, 49, 4953.		42
30	Functional and Topological Analysis of Pen-2, the Fourth Subunit of the Î³-Secretase Complex. Journal of Biological Chemistry, 2011, 286, 12271-12282.	3.4	42
31	Generation of a floxed allele ofSmad5 for cre-mediated conditional knockout in the mouse. Genesis, 2003, 37, 5-11.	1.6	41
32	Inactivation of Smad5 in Endothelial Cells and Smooth Muscle Cells Demonstrates that Smad5 Is Required for Cardiac Homeostasis. American Journal of Pathology, 2007, 170, 1460-1472.	3.8	38
33	Mice with a homozygous gene trap vector insertion in mgcRacGAP die during pre-implantation development. Mechanisms of Development, 2001, 102, 33-44.	1.7	37
34	A broken heart: A stretch too far. International Journal of Cardiology, 2008, 131, 33-44.	1.7	37
35	A novel role of BMP4 in adult hematopoietic stem and progenitor cell homing via Smad independent regulation of integrin-Î±4 expression. Blood, 2013, 121, 781-790.	1.4	37
36	Thyroid follicle development requires Smad1/Smad5- and endothelial-dependent basement membrane assembly. Development (Cambridge), 2016, 143, 1958-70.	2.5	35

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37	Astrocyte-derived Jagged-1 mitigates deleterious Notch signaling in amyotrophic lateral sclerosis. Neurobiology of Disease, 2018, 119, 26-40.	4.4	35
38	Smad5 is dispensable for adult murine hematopoiesis. Blood, 2006, 108, 3707-3712.	1.4	33
39	Impaired SMAD1/5 Mechanotransduction and Cx37 (Connexin37) Expression Enable Pathological Vessel Enlargement and Shunting. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, e87-e104.	2.4	33
40	Cadherin-dependent cell aggregation is affected by decapeptide derived from rat extracellular super-oxide dismutase. FEBS Letters, 1995, 363, 289-292.	2.8	32
41	Mouse embryonic stem cells with aberrant transforming growth factor Î² signalling exhibit impaired differentiation in vitro and in vivo. Differentiation, 1998, 63, 101-113.	1.9	29
42	Antagonism of Nodal signaling by BMP/Smad5 prevents ectopic primitive streak formation in the mouse amnion. Development (Cambridge), 2012, 139, 3343-3354.	2.5	29
43	BMP-SMAD Signaling Regulates Lineage Priming, but Is Dispensable for Self-Renewal in Mouse Embryonic Stem Cells. Stem Cell Reports, 2016, 6, 85-94.	4.8	27
44	PDGFRÎ±+ Cells in Embryonic Stem Cell Cultures Represent the InÂVitro Equivalent of the Pre-implantation Primitive Endoderm Precursors. Stem Cell Reports, 2017, 8, 318-333.	4.8	26
45	EGFL7 Mediates BMP9-Induced Sprouting Angiogenesis of Endothelial Cells Derived from Human Embryonic Stem Cells. Stem Cell Reports, 2019, 12, 1250-1259.	4.8	26
46	Smad5 determines murine amnion fate through the control of bone morphogenetic protein expression and signalling levels. Development (Cambridge), 2006, 133, 3399-3409.	2.5	24
47	Loss of Smad5 leads to the disassembly of the apical junctional complex and increased susceptibility to experimental colitis. American Journal of Physiology - Renal Physiology, 2011, 300, G586-G597.	3.4	24
48	Smad1/5 and Smad4 Expression Are Important for Osteoclast Differentiation. Journal of Cellular Biochemistry, 2015, 116, 1350-1360.	2.6	24
49	BMP-SMAD1/5 Signaling Regulates Retinal Vascular Development. Biomolecules, 2020, 10, 488.	4.0	24
50	Identification of two distinct functions for TGF-Î² in early mouse development. Differentiation, 1998, 64, 19-31.	1.9	23
51	Ozzy, a Jag1 vestibular mouse mutant, displays characteristics of Alagille syndrome. Neurobiology of Disease, 2006, 24, 28-40.	4.4	23
52	Transforming growth factor Î² signalling in vitro and in vivo: activin ligandâ€“receptor interaction, Smad5 in vasculogenesis, and repression of target genes by the Î´EF1/ZEB-related SIP1 in the vertebrate embryo. Molecular and Cellular Endocrinology, 2001, 180, 13-24.	3.2	22
53	Ectopic expression of the transforming growth factor ? type II receptor disrupts mesoderm organisation during mouse gastrulation. Developmental Dynamics, 1999, 214, 141-151.	1.8	21
54	Expression of the inhibitory Smad7 in early mouse development and upregulation during embryonic vasculogenesis. Developmental Dynamics, 2000, 218, 663-670.	1.8	20

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55	Periostin as a Biomarker of the Amniotic Membrane. Stem Cells International, 2012, 2012, 1-10.	2.5	20
56	MAPC culture conditions support the derivation of cells with nascent hypoblast features from bone marrow and blastocysts. Journal of Molecular Cell Biology, 2012, 4, 423-426.	3.3	20
57	Smad1/5/8 are myogenic regulators of murine and human mesoangioblasts. Journal of Molecular Cell Biology, 2016, 8, 73-87.	3.3	19
58	Amniotic ectoderm expansion occurs via distinct modes and requires SMAD5-mediated signalling. Development (Cambridge), 2018, 145, .	2.5	18
59	Expression of the follistatin/EGF-containing transmembrane protein M7365 (tomoregulin-1) during mouse development. Mechanisms of Development, 2000, 97, 167-171.	1.7	17
60	Endothelial Msx1 transduces hemodynamic changes into an arteriogenic remodeling response. Journal of Cell Biology, 2015, 210, 1239-1256.	5.2	17
61	BMP-SMAD signalling output is highly regionalized in cardiovascular and lymphatic endothelial networks. BMC Developmental Biology, 2016, 16, 34.	2.1	17
62	Slc25a17 Gene Trapped Mice: PMP34 Plays a Role in the Peroxisomal Degradation of Phytanic and Pristanic Acid. Frontiers in Cell and Developmental Biology, 2020, 8, 144.	3.7	17
63	Functional redundancy of extracellular matrix protein 1 in epidermal differentiation. British Journal of Dermatology, 2007, 157, 771-775.	1.5	16
64	Endothelial Zeb2 preserves the hepatic angioarchitecture and protects against liver fibrosis. Cardiovascular Research, 2022, 118, 1262-1275.	3.8	16
65	Prdm16 Supports Arterial Flow Recovery by Maintaining Endothelial Function. Circulation Research, 2021, 129, 63-77.	4.5	15
66	Erratum to â€œPeriostin as a Biomarker of the Amniotic Membraneâ€• Stem Cells International, 2013, 2013, 1-1.	2.5	14
67	A conserved role for non-neural ectoderm cells in early neural development. Development (Cambridge), 2014, 141, 4127-4138.	2.5	14
68	Cyclic amp-induced differentiation increases the synthesis of extracellular superoxide dismutase in rat c6 glioma. Free Radical Biology and Medicine, 1996, 21, 481-486.	2.9	13
69	A SMAD1/5-YAP signaling module drives radial glia self-amplification and growth of the developing cerebral cortex. Development (Cambridge), 2020, 147, .	2.5	12
70	The BMP Pathway in Blood Vessel and Lymphatic Vessel Biology. International Journal of Molecular Sciences, 2021, 22, 6364.	4.1	6
71	Keratin filaments mediate the expansion of extraâ€embryonic membranes in the postâ€gastrulation mouse embryo. EMBO Journal, 2022, 41, e108747.	7.8	6
72	Essential validation of gene trap mouse ES cell lines: a test case with the gene Ttrap. International Journal of Developmental Biology, 2009, 53, 1045-1051.	0.6	4

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73	Synaptopodin and 4 novel genes identified in primary sensory neurons. Molecular and Cellular Neurosciences, 2005, 30, 316-325.	2.2	3
74	Real time monitoring of BMP Smads transcriptional activity during mouse development. Genesis, 2008, 46, spcone-spcone.	1.6	3
75	The epicardium obscures interpretations on endothelial-to-mesenchymal transition in the mouse atrioventricular canal explant assay. Scientific Reports, 2018, 8, 4722.	3.3	3
76	Thyroid follicle development requires Smad1/Smad5- and endothelial-dependent basement membrane assembly. Journal of Cell Science, 2016, 129, e1.1-e1.1.	2.0	1
77	13-P039 Endothelial specific Smad1 and Smad5 deficiency reveals a crutial role of BMP Smads in angiogenesis and lymphangiogenesis. Mechanisms of Development, 2009, 126, S206.	1.7	0