Siegfried Roth

List of Publications by Year
in descending order

84 papers	6,848 citations	81743 39 h-index	64668 79 g-index
141 all docs	141 docs citations	141 times ranked	5614 citing authors

#	Article	IF	Citations
1	Expression and Function of Toll Pathway Components in the Early Development of the Wasp Nasonia vitripennis. Journal of Developmental Biology, 2022, 10, 7.	0.9	1
2	Screens in fly and beetle reveal vastly divergent gene sets required for developmental processes. BMC Biology, 2022, 20, 38.	1.7	11
3	Convergent Adaptation of Ootheca Formation as a Reproductive Strategy in Polyneoptera. Molecular Biology and Evolution, 2022, 39, .	3.5	8
4	Striking parallels between dorsoventral patterning in Drosophila and Gryllus reveal a complex evolutionary history behind a model gene regulatory network. ELife, 2021, 10, .	2.8	20
5	Juvenile hormone signaling promotes ovulation and maintains egg shape by inducing expression of extracellular matrix genes. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	37
6	Enhanced genome assembly and a new official gene set for Tribolium castaneum. BMC Genomics, 2020, 21, 47.	1.2	84
7	Molecular evolutionary trends and feeding ecology diversification in the Hemiptera, anchored by the milkweed bug genome. Genome Biology, 2019, 20, 64.	3.8	114
8	Fog signaling has diverse roles in epithelial morphogenesis in insects. ELife, 2019, 8, .	2.8	20
9	A novel role for Ets4 in axis specification and cell migration in the spider Parasteatoda tepidariorum. ELife, 2017, 6, .	2.8	26
10	Global analysis of dorsoventral patterning in the wasp Nasonia reveals extensive incorporation of novelty in a regulatory network. BMC Biology, 2016, 14, 63.	1.7	13
11	A Genome-Wide Screen for Dendritically Localized RNAs Identifies Genes Required for Dendrite Morphogenesis. G3: Genes, Genomes, Genetics, 2016, 6, 2397-2405.	0.8	14
12	Toll Genes Have an Ancestral Role in Axis Elongation. Current Biology, 2016, 26, 1609-1615.	1.8	81
13	Hans Meinhardt (1938â€“2016). Current Biology, 2016, 26, R448-R449.	1.8	1
14	Genome wide identification ofTriboliumdorsoventral patterning genes. Development (Cambridge), 2016, 143, 2443-54.	1.2	24
15	Deep, Staged Transcriptomic Resources for the Novel Coleopteran Models Atrachya menetriesi and Callosobruchus maculatus. PLoS ONE, 2016, 11, e0167431.	1.1	7
16	The iBeetle large-scale RNAi screen reveals gene functions for insect development and physiology. Nature Communications, 2015, 6, 7822.	5.8	139
17	The significance and scope of evolutionary developmental biology: a vision for the 21st century. Evolution & Development, 2015, 17, 198-219.	1.1	92
18	Dynamic BMP signaling polarized by Toll patterns the dorsoventral axis in a hemimetabolous insect. ELife, 2015, 4, e05502.	2.8	40

#	Article	IF	Citations
19	Kant, Polanyi, and Molecular Biology. , 2014, , 275-292.		3
20	Dorsoventral Polarity of the Nasonia Embryo Primarily Relies on a BMP Gradient Formed without Input from Toll. Current Biology, 2014, 24, 2393-2398.	1.8	38
21	Ancient and diverged TGF-Î² signaling components in Nasonia vitripennis. Development Genes and Evolution, 2014, 224, 223-233.	0.4	20
22	Co-option of a coordinate system defined by the EGFr and Dpp pathways in the evolution of a morphological novelty. EvoDevo, 2013, 4, 7.	1.3	15
23	Development: Getting into the Groove, or Evolving off the Rails?. Current Biology, 2013, 23, R1101-R1103.	1.8	4
24	Patterning the dorsalâ€“ventral axis of the wasp Nasonia vitripennis. Developmental Biology, 2013, 381, 189-202.	0.9	36
25	High plasticity in epithelial morphogenesis during insect dorsal closure. Biology Open, 2013, 2, 1108-1118.	0.6	34
26	Developmental Gene Discovery in a Hemimetabolous Insect: De Novo Assembly and Annotation of a Transcriptome for the Cricket Gryllus bimaculatus. PLoS ONE, 2013, 8, e61479.	1.1	41
27	Drosophilatubulin-binding cofactor B is required for microtubule network formation and for cell polarity. Molecular Biology of the Cell, 2012, 23, 3591-3601.	0.9	22
28	Making Waves for Segments. Science, 2012, 336, 306-307.	6.0	4
29	Axis Formation: Microtubules Push in the Right Direction. Current Biology, 2012, 22, R537-R539.	1.8	2
30	Does the Bicoid Gradient Matter?. Cell, 2012, 149, 511-512.	13.5	11
31	Molecular mechanisms of EGF signaling-dependent regulation of pipe, a gene crucial for dorsoventral axis formation in Drosophila. Development Genes and Evolution, 2012, 222, 1-17.	0.4	9
32	Mathematics and biology: a Kantian view on the history of pattern formation theory. Development Genes and Evolution, 2011, 221, 255-279.	0.4	41
33	The maternal and early embryonic transcriptome of the milkweed bug Oncopeltus fasciatus. BMC Genomics, 2011, 12, 61.	1.2	110
34	The evolution of dorsalâ€“ventral patterning mechanisms in insects. Genes and Development, 2011, 25, 107-118.	2.7	98
35	The Phylogenetic Origin of oskar Coincided with the Origin of Maternally Provisioned Germ Plasm and Pole Cells at the Base of the Holometabola. PLoS Genetics, 2011, 7, e1002029.	1.5	71
36	Evolution und Fortschritt Zum Problem der HÃ¶herentwicklung in der organischen Evolution. , 2011, , 195-247.		1

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37	EGF Signaling and the Origin of Axial Polarity among the Insects. Current Biology, 2010, 20, 1042-1047.	1.8	70
38	Generation of distinct signaling modes via diversification of the Egfr ligand-processing cassette. Development (Cambridge), 2010, 137, 3427-3437.	1.2	14
39	Epithelial reorganization events during late extraembryonic development in a hemimetabolous insect. Developmental Biology, 2010, 340, 100-115.	0.9	29
40	Evolution of extracellular Dpp modulators in insects: The roles of tolloid and twisted-gastrulation in dorsoventral patterning of the Tribolium embryo. Developmental Biology, 2010, 345, 80-93.	0.9	43
41	Generation of distinct signaling modes via diversification of the Egfr ligand-processing cassette. Journal of Cell Science, 2010, 123, e1-e1.	1.2	0
42	Symmetry Breaking During Drosophila Oogenesis. Cold Spring Harbor Perspectives in Biology, 2009, 1, a001891-a001891.	2.3	141
43	Evolution of axis formation: mRNA localization, regulatory circuits and posterior specification in non-model arthropods. Current Opinion in Genetics and Development, 2009, 19, 404-411.	1.5	20
44	TGFÎ² signaling in Tribolium: vertebrate-like components in a beetle. Development Genes and Evolution, 2008, 218, 203-213.	0.4	63
45	Development of Tribolium castaneum. Development Genes and Evolution, 2008, 218, 115-118.	0.4	18
46	The genome of the model beetle and pest Tribolium castaneum. Nature, 2008, 452, 949-955.	13.7	1,255
47	Self-Regulatory Circuits in Dorsoventral Axis Formation of the Short-Germ Beetle Tribolium castaneum. Developmental Cell, 2008, 14, 605-615.	3.1	80
48	The Drosophila KASH domain proteins Msp-300 and Klarsicht and the SUN domain protein Klaroid have no essential function during oogenesis. Fly, 2008, 2, 82-91.	0.9	47
49	PIP5K-dependent production of PIP2 sustains microtubule organization to establish polarized transport in the Drosophila oocyte. Development (Cambridge), 2008, 135, 3970-3970.	1.2	1
50	PIP5K-dependent production of PIP2 sustains microtubule organization to establish polarized transport in theDrosophilaoocyte. Development (Cambridge), 2008, 135, 3829-3838.	1.2	56
51	16. Kant und die Biologie seiner Zeit (Â§Â§ 79â€“81). , 2008, , 275-287.		3
52	The role of Dpp and its inhibitors during eggshell patterning in Drosophila. Development (Cambridge), 2007, 134, 2261-2271.	1.2	41
53	Vertebrate rel proteins exhibit dorsal-like activities in earlyDrosophila embryogenesis. Developmental Dynamics, 2006, 235, 949-957.	0.8	1
54	Drosophila Cornichon acts as cargo receptor for ER export of the TGFÎ±-like growth factor Gurken. Development (Cambridge), 2006, 133, 459-470.	1.2	85

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55	Sog/Chordin is required for ventral-to-dorsal Dpp/BMP transport and head formation in a short germ insect. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16307-16312.	3.3	102
56	Distinct Functions of the Tribolium zerknuÂ¨llt Genes in Serosa Specification and Dorsal Closure. Current Biology, 2005, 15, 624-636.	1.8	176
57	Dorsoventral Axis Formation in the Drosophila Embryoâ€"Shaping and Transducing a Morphogen Gradient. Current Biology, 2005, 15, R887-R899.	1.8	214
58	Tribolium castaneum twist: gastrulation and mesoderm formation in a short-germ beetle. Development Genes and Evolution, 2005, 215, 13-31.	0.4	93
59	A Serpin Regulates Dorsal-Ventral Axis Formation in the Drosophila Embryo. Current Biology, 2003, 13, 2097-2102.	1.8	90
60	The origin of dorsoventral polarity in Drosophila. Philosophical Transactions of the Royal Society B: Biological Sciences, 2003, 358, 1317-1329.	1.8	84
61	DrosophilaStathmin: A Microtubule-destabilizing Factor Involved in Nervous System Formation. Molecular Biology of the Cell, 2002, 13, 698-710.	0.9	66
62	Polar Transport in the Drosophila Oocyte Requires Dynein and Kinesin I Cooperation. Current Biology, 2002, 12, 1971-1981.	1.8	205
63	Sharp peaks from shallow sources. Nature, 2002, 419, 261-262.	13.7	13
64	Mechanisms of Gurken-dependentpiperegulation and the robustness of dorsoventral patterning inDrosophila. Development (Cambridge), 2002, 129, 2965-2975.	1.2	35
65	Mechanisms of Gurken-dependent pipe regulation and the robustness of dorsoventral patterning in Drosophila. Development (Cambridge), 2002, 129, 2965-75.	1.2	20
66	Stable Anterior Anchoring of the Oocyte Nucleus Is Required to Establish Dorsoventral Polarity of the Drosophila Egg. Developmental Biology, 2001, 237, 93-106.	0.9	56
67	Drosophila oogenesis: Coordinating germ line and soma. Current Biology, 2001, 11, R779-R781.	1.8	45
68	Tribolium embryogenesis: a SEM study of cell shapes and movements from blastoderm to serosal closure. Development Genes and Evolution, 2000, 210, 167-179.	0.4	117
69	Local Gurken signaling and dynamic MAPK activation during Drosophila oogenesis. Mechanisms of Development, 1999, 81, 75-88.	1.7	97
70	Toll homolog expression in the beetle Tribolium suggests a different mode of dorsoventral patterning than in Drosophila embryos. Mechanisms of Development, 1999, 83, 107-114.	1.7	33
71	The Drosophila Gene brinker Reveals a Novel Mechanism of Dpp Target Gene Regulation. Cell, 1999, 96, 563-573.	13.5	241
72	Drosophila development: The secrets of delayed induction. Current Biology, 1998, 8, R906-R910.	1.8	16

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73	Chicken Acidic Leucine-rich EGF-like Domain Containing Brain Protein (CALEB), a Neural Member of the EGF Family of Differentiation Factors, Is Implicated in Neurite Formation. Journal of Cell Biology, 1997, 136, 895-906.	2.3	51
74	The Role of the dpp-Group Genes in Dorsoventral Patterning of the Drosophila Embryo. Advances in Developmental Biology (1992), 1996, 4, 27-82.	1.1	8
75	The Drosophila cell cycle gene fizzy is required for normal degradation of cyclins A and B during mitosis and has homology to the CDC20 gene of Saccharomyces cerevisiae.. Journal of Cell Biology, 1995, 129, 725-737.	2.3	185
76	cornichon and the EGF receptor signaling process are necessary for both anterior-posterior and dorsal-ventral pattern formation in Drosophila. Cell, 1995, 81, 967-978.	13.5	477
77	Axis Determination: Proteolytic generation of a morphogen. Current Biology, 1994, 4, 755-757.	1.8	23
78	Dorsoventral patterning in Drosophila oogenesis. Current Opinion in Genetics and Development, 1994, 4, 502-507.	1.5	59
79	The functional domains of the Drosophila morphogen dorsal: evidence from the analysis of mutants.. Genes and Development, 1992, 6, 619-630.	2.7	68
80	The polarity of the dorsoventral axis in the drosophila embryo is defined by an extracellular signal. Cell, 1991, 65, 725-735.	13.5	252
81	A gradient of nuclear localization of the dorsal protein determines dorsoventral pattern in the Drosophila embryo. Cell, 1989, 59, 1189-1202.	13.5	652
82	Axis Determination in Insect Embryos. Novartis Foundation Symposium, 1989, 144, 37-64.	1.2	16
83	Chaotic dynamics of two coupled biochemical oscillators. Physica D: Nonlinear Phenomena, 1987, 26, 215-224.	1.3	14
84	Biochemical characterization of polypeptide components involved in neurite fasciculation and elongation. FEBS Journal, 1987, 168, 551-561.	0.2	43