

# Gregor Bucher

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

5,073  
citations

147566

31  
h-index

123241

61  
g-index

78  
all docs

78  
docs citations

78  
times ranked

4087  
citing authors

#	ARTICLE	IF	CITATIONS
1	The genome of the model beetle and pest <i>Tribolium castaneum</i> . <i>Nature</i> , 2008, 452, 949-955.	13.7	1,255
2	Parental RNAi in <i>Tribolium</i> (Coleoptera). <i>Current Biology</i> , 2002, 12, R85-R86.	1.8	459
3	Exploring systemic RNA interference in insects: a genome-wide survey for RNAi genes in <i>Tribolium</i> . <i>Genome Biology</i> , 2008, 9, R10.	13.9	459
4	The house spider genome reveals an ancient whole-genome duplication during arachnid evolution. <i>BMC Biology</i> , 2017, 15, 62.	1.7	286
5	Six3 demarcates the anterior-most developing brain region in bilaterian animals. <i>EvoDevo</i> , 2010, 1, 14.	1.3	149
6	The iBeetle large-scale RNAi screen reveals gene functions for insect development and physiology. <i>Nature Communications</i> , 2015, 6, 7822.	5.8	139
7	iBeetle-Base: a database for RNAi phenotypes in the red flour beetle <i>Tribolium castaneum</i> . <i>Nucleic Acids Research</i> , 2015, 43, D720-D725.	6.5	124
8	The Red Flour Beetle, <i>Tribolium castaneum</i> (Coleoptera): A Model for Studies of Development and Pest Biology: Figure 1.. <i>Cold Spring Harbor Protocols</i> , 2009, 2009, pdb.emo126.	0.2	119
9	Large scale RNAi screen in <i>Tribolium</i> reveals novel target genes for pest control and the proteasome as prime target. <i>BMC Genomics</i> , 2015, 16, 674.	1.2	119
10	Divergent segmentation mechanism in the short germ insect <i>Tribolium</i> revealed by giant expression and function. <i>Development (Cambridge)</i> , 2004, 131, 1729-1740.	1.2	112
11	Divergent functions of orthodenticle, empty spiracles and buttonhead in early head patterning of the beetle <i>Tribolium castaneum</i> (Coleoptera). <i>Developmental Biology</i> , 2008, 317, 600-613.	0.9	98
12	Large-scale insertional mutagenesis of a coleopteran stored grain pest, the red flour beetle <i>Tribolium castaneum</i> , identifies embryonic lethal mutations and enhancer traps. <i>BMC Biology</i> , 2009, 7, 73.	1.7	93
13	Functionality of the GAL4/UAS system in <i>Tribolium</i> requires the use of endogenous core promoters. <i>BMC Developmental Biology</i> , 2010, 10, 53.	2.1	90
14	Breakdown of abdominal patterning in the <i>Tribolium</i> Krüppel mutant jaws. <i>Development (Cambridge)</i> , 2005, 132, 5353-5363.	1.2	85
15	Enhanced genome assembly and a new official gene set for <i>Tribolium castaneum</i> . <i>BMC Genomics</i> , 2020, 21, 47.	1.2	84
16	Pair-rule and gap gene mutants in the flour beetle <i>Tribolium castaneum</i> . <i>Development Genes and Evolution</i> , 1998, 208, 558-568.	0.4	80
17	RNAi in the Red Flour Beetle ( <i>Tribolium</i> ). <i>Cold Spring Harbor Protocols</i> , 2009, 2009, pdb.prot5256-pdb.prot5256.	0.2	73
18	Genetics, development and composition of the insect head – A beetle’s view. <i>Arthropod Structure and Development</i> , 2010, 39, 399-410.	0.8	66

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19	Candidate Gene Screen in the Red Flour Beetle <i>Tribolium</i> Reveals Six3 as Ancient Regulator of Anterior Median Head and Central Complex Development. <i>PLoS Genetics</i> , 2011, 7, e1002416.	1.5	66
20	Asymmetrically expressed <i>axin</i> required for anterior development in <i>Tribolium</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 7782-7786.	3.3	65
21	The insect upper lip (labrum) is a nonsegmental appendage-like structure. <i>Evolution &amp; Development</i> , 2009, 11, 480-488.	1.1	57
22	Probing the <i>Drosophila</i> retinal determination gene network in <i>Tribolium</i> (II): The Pax6 genes <i>eyeless</i> and <i>twin of eyeless</i> . <i>Developmental Biology</i> , 2009, 333, 215-227.	0.9	56
23	Anterior localization of maternal mRNAs in a short germ insect lacking <i>bicoid</i> . <i>Evolution &amp; Development</i> , 2005, 7, 142-149.	1.1	52
24	Single and Double Whole-Mount In Situ Hybridization in Red Flour Beetle ( <i>Tribolium</i> ) Embryos. <i>Cold Spring Harbor Protocols</i> , 2009, 2009, pdb.prot5258-pdb.prot5258.	0.2	52
25	The <i>Tribolium</i> ortholog of <i>knirps</i> and <i>knirps</i> -related is crucial for head segmentation but plays a minor role during abdominal patterning. <i>Developmental Biology</i> , 2008, 321, 284-294.	0.9	49
26	EST based phylogenomics of <i>Syndermata</i> questions monophyly of <i>Eurotatoria</i> . <i>BMC Evolutionary Biology</i> , 2008, 8, 345.	3.2	44
27	RNAi phenotypes are influenced by the genetic background of the injected strain. <i>BMC Genomics</i> , 2013, 14, 5.	1.2	43
28	Wnt/ $\beta$ -catenin signaling integrates patterning and metabolism of the insect growth zone. <i>Development (Cambridge)</i> , 2014, 141, 4740-4750.	1.2	43
29	Formation of the insect head involves lateral contribution of the intercalary segment, which depends on Tc-labial function. <i>Developmental Biology</i> , 2010, 338, 107-116.	0.9	41
30	Heat shock-mediated misexpression of genes in the beetle <i>Tribolium castaneum</i> . <i>Development Genes and Evolution</i> , 2012, 222, 287-298.	0.4	39
31	A system to efficiently maintain embryonic lethal mutations in the flour beetle <i>Tribolium castaneum</i> . <i>Development Genes and Evolution</i> , 1999, 209, 382-389.	0.4	37
32	Profiling of RNAi sensitivity after foliar dsRNA exposure in different European populations of Colorado potato beetle reveals a robust response with minor variability. <i>Pesticide Biochemistry and Physiology</i> , 2020, 166, 104569.	1.6	37
33	Expanded and updated data and a query pipeline for iBeetle-Base. <i>Nucleic Acids Research</i> , 2018, 46, D831-D835.	6.5	35
34	Changes in anterior head patterning underlie the evolution of long germ embryogenesis. <i>Developmental Biology</i> , 2013, 374, 174-184.	0.9	33
35	Double abdomen in a short-germ insect: Zygotic control of axis formation revealed in the beetle <i>Tribolium castaneum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 1819-1824.	3.3	31
36	The insect central complex as model for heterochronic brain development—background, concepts, and tools. <i>Development Genes and Evolution</i> , 2016, 226, 209-219.	0.4	30

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37	The Insect Ortholog of the Human Orphan Cytokine Receptor CRLF3 Is a Neuroprotective Erythropoietin Receptor. <i>Frontiers in Molecular Neuroscience</i> , 2017, 10, 223.	1.4	28
38	Notch signaling induces cell proliferation in the labrum in a regulatory network different from the thoracic legs. <i>Developmental Biology</i> , 2015, 408, 164-177.	0.9	24
39	An ancestral apical brain region contributes to the central complex under the control of foxQ2 in the beetle <i>Tribolium</i> . <i>ELife</i> , 2019, 8, .	2.8	23
40	Maintenance of segment and appendage primordia by the <i>Tribolium</i> gene <i>knÄ¶del</i> . <i>Mechanisms of Development</i> , 2006, 123, 430-439.	1.7	22
41	A morphological novelty evolved by co-option of a reduced gene regulatory network and gene recruitment in a beetle. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2018, 285, 20181373.	1.2	22
42	Establishing RNAi for basic research and pest control and identification of the most efficient target genes for pest control: a brief guide. <i>Frontiers in Zoology</i> , 2021, 18, 60.	0.9	21
43	Insect <i>Tc-six4</i> marks a unit with similarity to vertebrate placodes. <i>Developmental Biology</i> , 2011, 350, 208-216.	0.9	20
44	<i>foxQ2</i> has a key role in anterior head and central brain patterning in insects. <i>Development (Cambridge)</i> , 2017, 144, 2969-2981.	1.2	19
45	<i>six3</i> acts upstream of <i>foxQ2</i> in labrum and neural development in the spider <i>Parasteatoda tepidariorum</i> . <i>Development Genes and Evolution</i> , 2020, 230, 95-104.	0.4	19
46	The mustard leaf beetle, <i>Phaedon cochleariae</i> , as a screening model for exogenous RNAi-based control of coleopteran pests. <i>Pesticide Biochemistry and Physiology</i> , 2021, 176, 104870.	1.6	18
47	The red flour beetle <i>T. castaneum</i> : elaborate genetic toolkit and unbiased large scale RNAi screening to study insect biology and evolution. <i>EvoDevo</i> , 2022, 13, .	1.3	18
48	TrOn: An Anatomical Ontology for the Beetle <i>Tribolium castaneum</i> . <i>PLoS ONE</i> , 2013, 8, e70695.	1.1	15
49	Sequence heterochrony led to a gain of functionality in an immature stage of the central complex: A flyâ€ beetle insight. <i>PLoS Biology</i> , 2020, 18, e3000881.	2.6	15
50	A Large Scale Systemic RNAi Screen in the Red Flour Beetle <i>Tribolium castaneum</i> Identifies Novel Genes Involved in Insect Muscle Development. <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 1009-1026.	0.8	13
51	Whole-mount in situ hybridization in the Rotifer <i>Brachionus plicatilis</i> representing a basal branch of lophotrochozoans. <i>Development Genes and Evolution</i> , 2008, 218, 445-451.	0.4	12
52	<i>Tc-knirps</i> plays different roles in the specification of antennal and mandibular parasegment boundaries and is regulated by a pair-rule gene in the beetle <i>Tribolium castaneum</i> . <i>BMC Developmental Biology</i> , 2013, 13, 25.	2.1	12
53	Screens in fly and beetle reveal vastly divergent gene sets required for developmental processes. <i>BMC Biology</i> , 2022, 20, 38.	1.7	11
54	The Red Flour Beetle as Model for Comparative Neural Development: Genome Editing to Mark Neural Cells in <i>Tribolium</i> Brain Development. <i>Methods in Molecular Biology</i> , 2020, 2047, 191-217.	0.4	10

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55	Identifying essential genes across eukaryotes by machine learning. NAR Genomics and Bioinformatics, 2021, 3, lqab110.	1.5	10
56	An atlas of the developing <i>Tribolium castaneum</i> brain reveals conservation in anatomy and divergence in timing to <i>Drosophila melanogaster</i> . Journal of Comparative Neurology, 2022, 530, 2335-2371.	0.9	8
57	Immunohistochemistry and Fluorescent Whole Mount RNA In Situ Hybridization in Larval and Adult Brains of Tribolium. Methods in Molecular Biology, 2020, 2047, 233-251.	0.4	7
58	A Protocol for Double Fluorescent In Situ Hybridization and Immunohistochemistry for the Study of Embryonic Brain Development in Tribolium castaneum. Methods in Molecular Biology, 2020, 2047, 219-232.	0.4	7
59	Insertional mutagenesis screening identifies the zinc finger homeodomain 2 (zfh2) gene as a novel factor required for embryonic leg development in Tribolium castaneum. Development Genes and Evolution, 2009, 219, 399-407.	0.4	6
60	Tribolium mae expression suggests roles in terminal and midline patterning and in the specification of mesoderm. Development Genes and Evolution, 2005, 215, 478-481.	0.4	5
61	Shaking hands is a homeodomain transcription factor that controls axon outgrowth of central complex neurons in the insect model <i>Tribolium</i> . Development (Cambridge), 2021, 148, .	1.2	2
62	Title is missing!. , 2020, 18, e3000881.		0
63	Title is missing!. , 2020, 18, e3000881.		0
64	Title is missing!. , 2020, 18, e3000881.		0
65	Title is missing!. , 2020, 18, e3000881.		0
66	Title is missing!. , 2020, 18, e3000881.		0
67	Title is missing!. , 2020, 18, e3000881.		0