

# Gregor Bucher

## List of Publications by Year in descending order

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64  
papers

5,289  
citations

142488

31  
h-index

124102

61  
g-index

85  
all docs

85  
docs citations

85  
times ranked

4626  
citing authors

#	ARTICLE	IF	CITATIONS
1	Temporal control of RNAi reveals both robust and labile feedback loops in the segmentation clock of the red flour beetle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2024, 121, .	7.6	0
2	Screens in fly and beetle reveal vastly divergent gene sets required for developmental processes. <i>BMC Biology</i> , 2022, 20, 38.	3.9	14
3	An atlas of the developing <i>Tribolium castaneum</i> brain reveals conservation in anatomy and divergence in timing to <i>Drosophila melanogaster</i> . <i>Journal of Comparative Neurology</i> , 2022, 530, 2335-2371.	2.0	10
4	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, .	3.3	23
5	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.	3.6	22
6	Shaking hands is a homeodomain transcription factor that controls axon outgrowth of central complex neurons in the insect model <i>Tribolium</i> . <i>Development (Cambridge)</i> , 2021, 148, .	2.6	3
7	Identifying essential genes across eukaryotes by machine learning. <i>NAR Genomics and Bioinformatics</i> , 2021, 3, lqab110.	3.2	13
8	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.	2.1	34
9	six3 acts upstream of foxQ2 in labrum and neural development in the spider <i>Parasteatoda tepidariorum</i> . <i>Development Genes and Evolution</i> , 2020, 230, 95-104.	0.9	20
10	Enhanced genome assembly and a new official gene set for <i>Tribolium castaneum</i> . <i>BMC Genomics</i> , 2020, 21, 47.	2.9	98
11	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.	3.6	39
12	Immunohistochemistry and Fluorescent Whole Mount RNA In Situ Hybridization in Larval and Adult Brains of <i>Tribolium</i> . <i>Methods in Molecular Biology</i> , 2020, 2047, 233-251.	0.0	9
13	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.	0.0	10
14	A Protocol for Double Fluorescent In Situ Hybridization and Immunohistochemistry for the Study of Embryonic Brain Development in <i>Tribolium castaneum</i> . <i>Methods in Molecular Biology</i> , 2020, 2047, 219-232.	0.0	8
15	Sequence heterochrony led to a gain of functionality in an immature stage of the central complex: A fly's beetle insight. <i>PLoS Biology</i> , 2020, 18, e3000881.	5.4	19
16	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.	1.9	15
17	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, .	5.9	26
18	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.	7.6	34

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19	Expanded and updated data and a query pipeline for iBeetle-Base. <i>Nucleic Acids Research</i> , 2018, 46, D831-D835.	14.0	37
20	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.	2.8	23
21	A key role for <i>foxQ2</i> in anterior head and central brain patterning in insects. <i>Development (Cambridge)</i> , 2017, 144, 2969-2981.	2.6	19
22	The Insect Ortholog of the Human Orphan Cytokine Receptor CRLF3 Is a Neuroprotective Erythropoietin Receptor. <i>Frontiers in Molecular Neuroscience</i> , 2017, 10, 223.	2.9	31
23	The house spider genome reveals an ancient whole-genome duplication during arachnid evolution. <i>BMC Biology</i> , 2017, 15, 62.	3.9	301
24	The insect central complex as model for heterochronic brain development—background, concepts, and tools. <i>Development Genes and Evolution</i> , 2016, 226, 209-219.	0.9	34
25	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.	2.1	25
26	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.	2.9	130
27	The iBeetle large-scale RNAi screen reveals gene functions for insect development and physiology. <i>Nature Communications</i> , 2015, 6, 7822.	13.2	145
28	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.	14.0	126
29	Wnt/ $\beta$ -catenin signaling integrates patterning and metabolism of the insect growth zone. <i>Development (Cambridge)</i> , 2014, 141, 4740-4750.	2.6	45
30	Tc-knirps 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
31	RNAi phenotypes are influenced by the genetic background of the injected strain. <i>BMC Genomics</i> , 2013, 14, 5.	2.9	44
32	Changes in anterior head patterning underlie the evolution of long germ embryogenesis. <i>Developmental Biology</i> , 2013, 374, 174-184.	2.1	34
33	TrOn: An Anatomical Ontology for the Beetle <i>Tribolium castaneum</i> . <i>PLoS ONE</i> , 2013, 8, e70695.	2.5	16
34	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.	7.6	68
35	Heat shock-mediated misexpression of genes in the beetle <i>Tribolium castaneum</i> . <i>Development Genes and Evolution</i> , 2012, 222, 287-298.	0.9	44
36	Insect Tc-six4 marks a unit with similarity to vertebrate placodes. <i>Developmental Biology</i> , 2011, 350, 208-216.	2.1	23

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37	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.	3.4	70
38	Genetics, development and composition of the insect head – A beetle’s view. <i>Arthropod Structure and Development</i> , 2010, 39, 399-410.	1.5	70
39	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	95
40	Six3 demarcates the anterior-most developing brain region in bilaterian animals. <i>EvoDevo</i> , 2010, 1, 14.	3.3	152
41	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.	2.1	42
42	Insertional mutagenesis screening identifies the zinc finger homeodomain 2 ( <i>zfh2</i> ) gene as a novel factor required for embryonic leg development in <i>Tribolium castaneum</i> . <i>Development Genes and Evolution</i> , 2009, 219, 399-407.	0.9	6
43	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.	3.9	98
44	The insect upper lip (labrum) is a nonsegmental appendage-like structure. <i>Evolution &amp; Development</i> , 2009, 11, 480-488.	2.1	57
45	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.	2.1	58
46	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.	0.3	126
47	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.	0.3	55
48	RNAi in the Red Flour Beetle ( <i>Tribolium</i> ). <i>Cold Spring Harbor Protocols</i> , 2009, 2009, pdb.prot5256-pdb.prot5256.	0.3	74
49	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.	0.9	12
50	The genome of the model beetle and pest <i>Tribolium castaneum</i> . <i>Nature</i> , 2008, 452, 949-955.	36.2	1,282
51	EST based phylogenomics of Syndermata questions monophyly of Eurotatoria. <i>BMC Evolutionary Biology</i> , 2008, 8, 345.	3.1	44
52	Exploring systemic RNA interference in insects: a genome-wide survey for RNAi genes in <i>Tribolium</i> . <i>Genome Biology</i> , 2008, 9, R10.	7.3	472
53	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.	2.1	98
54	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.	2.1	50

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55	Maintenance of segment and appendage primordia by the Tribolium gene <i>knirp</i> . Mechanisms of Development, 2006, 123, 430-439.	1.7	22
56	Anterior localization of maternal mRNAs in a short germ insect lacking bicoid. Evolution & Development, 2005, 7, 142-149.	2.1	52
57	<i>Tribolium mae</i> expression suggests roles in terminal and midline patterning and in the specification of mesoderm. Development Genes and Evolution, 2005, 215, 478-481.	0.9	5
58	Breakdown of abdominal patterning in the Tribolium <i>Kruppel</i> mutant jaws. Development (Cambridge), 2005, 132, 5353-5363.	2.6	86
59	Divergent segmentation mechanism in the short germ insect Tribolium revealed by giant expression and function. Development (Cambridge), 2004, 131, 1729-1740.	2.6	116
60	Parental RNAi in Tribolium (Coleoptera). Current Biology, 2002, 12, R85-R86.	4.0	463
61	A system to efficiently maintain embryonic lethal mutations in the flour beetle Tribolium castaneum. Development Genes and Evolution, 1999, 209, 382-389.	0.9	38
62	Pair-rule and gap gene mutants in the flour beetle Tribolium castaneum. Development Genes and Evolution, 1998, 208, 558-568.	0.9	81
63	Gene expression mapping of the neuroectoderm across phyla – conservation and divergence of early brain anlagen between insects and vertebrates. ELife, 0, 12, .	5.9	1
64	Effective target genes for RNA interference-based management of the cabbage stem flea beetle. Insect Molecular Biology, 0, , .	1.9	0