# 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 | The genome of the model beetle and pest Tribolium castaneum. Nature, 2008, 452, 949-955. | 36.2 | 1,282 |
| 2 | Exploring systemic RNA interference in insects: a genome-wide survey for RNAi genes in Tribolium. Genome Biology, 2008, 9, R10. | 7.3 | 472 |
| 3 | Parental RNAi in Tribolium (Coleoptera). Current Biology, 2002, 12, R85-R86. | 4.0 | 463 |
| 4 | The house spider genome reveals an ancient whole-genome duplication during arachnid evolution. BMC Biology, 2017, 15, 62. | 3.9 | 301 |
| 5 | Six3 demarcates the anterior-most developing brain region in bilaterian animals. EvoDevo, 2010, 1, 14. | 3.3 | 152 |
| 6 | The iBeetle large-scale RNAi screen reveals gene functions for insect development and physiology. Nature Communications, 2015, 6, 7822. | 13.2 | 145 |
| 7 | Large scale RNAi screen in Tribolium reveals novel target genes for pest control and the proteasome as prime target. BMC Genomics, 2015, 16, 674. | 2.9 | 130 |
| 8 | The Red Flour Beetle, Tribolium castaneum (Coleoptera): A Model for Studies of Development and Pest Biology: Figure 1.. Cold Spring Harbor Protocols, 2009, 2009, pdb.emo126. | 0.3 | 126 |
| 9 | iBeetle-Base: a database for RNAi phenotypes in the red flour beetle Tribolium castaneum. Nucleic Acids Research, 2015, 43, D720-D725. | 14.0 | 126 |
| 10 | Divergent segmentation mechanism in the short germ insect Tribolium revealed by giant expression and function. Development (Cambridge), 2004, 131, 1729-1740. | 2.6 | 116 |
| 11 | Divergent functions of orthodenticle, empty spiracles and buttonhead in early head patterning of the beetle Tribolium castaneum (Coleoptera). Developmental Biology, 2008, 317, 600-613. | 2.1 | 98 |
| 12 | Large-scale insertional mutagenesis of a coleopteran stored grain pest, the red flour beetle Tribolium castaneum, identifies embryonic lethal mutations and enhancer traps. BMC Biology, 2009, 7, 73. | 3.9 | 98 |
| 13 | Enhanced genome assembly and a new official gene set for Tribolium castaneum. BMC Genomics, 2020, 21, 47. | 2.9 | 98 |
| 14 | Functionality of the GAL4/UAS system in Tribolium requires the use of endogenous core promoters. BMC Developmental Biology, 2010, 10, 53. | 2.1 | 95 |
| 15 | Breakdown of abdominal patterning in the Tribolium KruÌˆppel mutant jaws. Development (Cambridge), 2005, 132, 5353-5363. | 2.6 | 86 |
| 16 | Pair-rule and gap gene mutants in the flour beetle Tribolium castaneum. Development Genes and Evolution, 1998, 208, 558-568. | 0.9 | 81 |
| 17 | RNAi in the Red Flour Beetle (Tribolium). Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5256-pdb.prot5256. | 0.3 | 74 |
| 18 | Genetics, development and composition of the insect head â€“ A beetleâ€™s view. Arthropod Structure and Development, 2010, 39, 399-410. | 1.5 | 70 |

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|---|---|---|---|
| 19 | Candidate Gene Screen in the Red Flour Beetle Tribolium Reveals Six3 as Ancient Regulator of Anterior Median Head and Central Complex Development. PLoS Genetics, 2011, 7, e1002416. | 3.4 | 70 |
| 20 | Asymmetrically expressed axin required for anterior development in Tribolium. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7782-7786. | 7.6 | 68 |
| 21 | Probing the Drosophila retinal determination gene network in Tribolium (II): The Pax6 genes eyeless and twin of eyeless. Developmental Biology, 2009, 333, 215-227. | 2.1 | 58 |
| 22 | The insect upper lip (labrum) is a nonsegmental appendageâ€like structure. Evolution & Development, 2009, 11, 480-488. | 2.1 | 57 |
| 23 | Single and Double Whole-Mount In Situ Hybridization in Red Flour Beetle (Tribolium) Embryos. Cold Spring Harbor Protocols, 2009, 2009, pdb.prot5258-pdb.prot5258. | 0.3 | 55 |
| 24 | Anterior localization of maternal mRNAs in a short germ insect lacking bicoid. Evolution & Development, 2005, 7, 142-149. | 2.1 | 52 |
| 25 | The Tribolium ortholog of knirps and knirps-related is crucial for head segmentation but plays a minor role during abdominal patterning. Developmental Biology, 2008, 321, 284-294. | 2.1 | 50 |
| 26 | Wnt/Î²-catenin signaling integrates patterning and metabolism of the insect growth zone. Development (Cambridge), 2014, 141, 4740-4750. | 2.6 | 45 |
| 27 | EST based phylogenomics of Syndermata questions monophyly of Eurotatoria. BMC Evolutionary Biology, 2008, 8, 345. | 3.1 | 44 |
| 28 | Heat shock-mediated misexpression of genes in the beetle Tribolium castaneum. Development Genes and Evolution, 2012, 222, 287-298. | 0.9 | 44 |
| 29 | RNAi phenotypes are influenced by the genetic background of the injected strain. BMC Genomics, 2013, 14, 5. | 2.9 | 44 |
| 30 | Formation of the insect head involves lateral contribution of the intercalary segment, which depends on Tc-labial function. Developmental Biology, 2010, 338, 107-116. | 2.1 | 42 |
| 31 | Profiling of RNAi sensitivity after foliar dsRNA exposure in different European populations of Colorado potato beetle reveals a robust response with minor variability. Pesticide Biochemistry and Physiology, 2020, 166, 104569. | 3.6 | 39 |
| 32 | 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 |
| 33 | Expanded and updated data and a query pipeline for iBeetle-Base. Nucleic Acids Research, 2018, 46, D831-D835. | 14.0 | 37 |
| 34 | Changes in anterior head patterning underlie the evolution of long germ embryogenesis. Developmental Biology, 2013, 374, 174-184. | 2.1 | 34 |
| 35 | The insect central complex as model for heterochronic brain developmentâ€"background, concepts, and tools. Development Genes and Evolution, 2016, 226, 209-219. | 0.9 | 34 |
| 36 | Double abdomen in a short-germ insect: Zygotic control of axis formation revealed in the beetleTribolium castaneum. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1819-1824. | 7.6 | 34 |

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|---|---|---|---|
| 37 | Establishing RNAi for basic research and pest control and identification of the most efficient target genes for pest control: a brief guide. Frontiers in Zoology, 2021, 18, 60. | 2.1 | 34 |
| 38 | The Insect Ortholog of the Human Orphan Cytokine Receptor CRLF3 Is a Neuroprotective Erythropoietin Receptor. Frontiers in Molecular Neuroscience, 2017, 10, 223. | 2.9 | 31 |
| 39 | An ancestral apical brain region contributes to the central complex under the control of foxQ2 in the beetle Tribolium. ELife, 2019, 8, . | 5.9 | 26 |
| 40 | Notch signaling induces cell proliferation in the labrum in a regulatory network different from the thoracic legs. Developmental Biology, 2015, 408, 164-177. | 2.1 | 25 |
| 41 | Insect Tc-six4 marks a unit with similarity to vertebrate placodes. Developmental Biology, 2011, 350, 208-216. | 2.1 | 23 |
| 42 | A morphological novelty evolved by co-option of a reduced gene regulatory network and gene recruitment in a beetle. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181373. | 2.8 | 23 |
| 43 | The red flour beetle T. castaneum: elaborate genetic toolkit and unbiased large scale RNAi screening to study insect biology and evolution. EvoDevo, 2022, 13, . | 3.3 | 23 |
| 44 | Maintenance of segment and appendage primordia by the Tribolium gene knÃ¶del. Mechanisms of Development, 2006, 123, 430-439. | 1.7 | 22 |
| 45 | The mustard leaf beetle, Phaedon cochleariae, as a screening model for exogenous RNAi-based control of coleopteran pests. Pesticide Biochemistry and Physiology, 2021, 176, 104870. | 3.6 | 22 |
| 46 | six3 acts upstream of foxQ2 in labrum and neural development in the spider Parasteatoda tepidariorum. Development Genes and Evolution, 2020, 230, 95-104. | 0.9 | 20 |
| 47 | A key role for foxQ2 in anterior head and central brain patterning in insects. Development (Cambridge), 2017, 144, 2969-2981. | 2.6 | 19 |
| 48 | Sequence heterochrony led to a gain of functionality in an immature stage of the central complex: A flyâ€“beetle insight. PLoS Biology, 2020, 18, e3000881. | 5.4 | 19 |
| 49 | TrOn: An Anatomical Ontology for the Beetle Tribolium castaneum. PLoS ONE, 2013, 8, e70695. | 2.5 | 16 |
| 50 | A Large Scale Systemic RNAi Screen in the Red Flour BeetleTribolium castaneumIdentifies Novel Genes Involved in Insect Muscle Development. G3: Genes, Genomes, Genetics, 2019, 9, 1009-1026. | 1.9 | 15 |
| 51 | Screens in fly and beetle reveal vastly divergent gene sets required for developmental processes. BMC Biology, 2022, 20, 38. | 3.9 | 14 |
| 52 | Identifying essential genes across eukaryotes by machine learning. NAR Genomics and Bioinformatics, 2021, 3, lqab110. | 3.2 | 13 |
| 53 | Whole-mount in situ hybridization in the Rotifer Brachionus plicatilis representing a basal branch of lophotrochozoans. Development Genes and Evolution, 2008, 218, 445-451. | 0.9 | 12 |
| 54 | 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 Tribolium castaneum. BMC Developmental Biology, 2013, 13, 25. | 2.1 | 12 |

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| 55 | The Red Flour Beetle as Model for Comparative Neural Development: Genome Editing to Mark Neural Cells in Tribolium Brain Development. Methods in Molecular Biology, 2020, 2047, 191-217. | 0.0 | 10 |
| 56 | An atlas of the developing Tribolium castaneum brain reveals conservation in anatomy and divergence in timing to Drosophila melanogaster. Journal of Comparative Neurology, 2022, 530, 2335-2371. | 2.0 | 10 |
| 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. | 0.0 | 9 |
| 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. | 0.0 | 8 |
| 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. | 0.9 | 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. | 0.9 | 5 |
| 61 | Shaking hands is a homeodomain transcription factor that controls axon outgrowth of central complex neurons in the insect model Tribolium. Development (Cambridge), 2021, 148, . | 2.6 | 3 |
| 62 | Gene expression mapping of the neuroectoderm across phyla â€“ conservation and divergence of early brain anlagen between insects and vertebrates. ELife, 0, 12, . | 5.9 | 1 |
| 63 | Temporal control of RNAi reveals both robust and labile feedback loops in the segmentation clock of the red flour beetle. Proceedings of the National Academy of Sciences of the United States of America, 2024, 121, . | 7.6 | 0 |
| 64 | Effective target genes for <scp>RNA</scp> interferenceâ€based management of the cabbage stem flea beetle. Insect Molecular Biology, 0, , . | 1.9 | 0 |