

# Sebastian Fraune

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

4,504  
citations

159585

30  
h-index

223800

46  
g-index

59  
all docs

59  
docs citations

59  
times ranked

4803  
citing authors

#	ARTICLE	IF	CITATIONS
1	The dynamic genome of Hydra. <i>Nature</i> , 2010, 464, 592-596.	27.8	743
2	More than just orphans: are taxonomically-restricted genes important in evolution?. <i>Trends in Genetics</i> , 2009, 25, 404-413.	6.7	399
3	Long-term maintenance of species-specific bacterial microbiota in the basal metazoan <i>Hydra</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 13146-13151.	7.1	320
4	Distinct antimicrobial peptide expression determines host species-specific bacterial associations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E3730-8.	7.1	312
5	Why bacteria matter in animal development and evolution. <i>BioEssays</i> , 2010, 32, 571-580.	2.5	257
6	Bacteria-bacteria interactions within the microbiota of the ancestral metazoan Hydra contribute to fungal resistance. <i>ISME Journal</i> , 2015, 9, 1543-1556.	9.8	196
7	Uncovering the evolutionary history of innate immunity: The simple metazoan Hydra uses epithelial cells for host defence. <i>Developmental and Comparative Immunology</i> , 2009, 33, 559-569.	2.3	195
8	Metaorganisms in extreme environments: do microbes play a role in organismal adaptation?. <i>Zoology</i> , 2018, 127, 1-19.	1.2	194
9	MyD88-deficient <i>Hydra</i> reveal an ancient function of TLR signaling in sensing bacterial colonizers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19374-19379.	7.1	154
10	In an early branching metazoan, bacterial colonization of the embryo is controlled by maternal antimicrobial peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 18067-18072.	7.1	143
11	Comparative analysis of amplicon and metagenomic sequencing methods reveals key features in the evolution of animal metaorganisms. <i>Microbiome</i> , 2019, 7, 133.	11.1	141
12	Response of bacterial colonization in <i>Nematostella vectensis</i> to development, environment and biogeography. <i>Environmental Microbiology</i> , 2016, 18, 1764-1781.	3.8	109
13	Host-specificity of environmentally transmitted <i>Mycoplasma</i> -like isopod symbionts. <i>Environmental Microbiology</i> , 2008, 10, 2497-2504.	3.8	103
14	A secreted antibacterial neuropeptide shapes the microbiome of Hydra. <i>Nature Communications</i> , 2017, 8, 698.	12.8	101
15	Bacterial colonization of <i>Hydra</i> hatchlings follows a robust temporal pattern. <i>ISME Journal</i> , 2013, 7, 781-790.	9.8	96
16	Host modification of a bacterial quorum-sensing signal induces a phenotypic switch in bacterial symbionts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8488-E8497.	7.1	69
17	Disturbing epithelial homeostasis in the metazoan <i>Hydra</i> leads to drastic changes in associated microbiota. <i>Environmental Microbiology</i> , 2009, 11, 2361-2369.	3.8	64
18	How Hydra senses and destroys microbes. <i>Seminars in Immunology</i> , 2010, 22, 54-58.	5.6	62

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19	Neutrality in the Metaorganism. PLoS Biology, 2019, 17, e3000298.	5.6	61
20	Species-Specific Viromes in the Ancestral Holobiont Hydra. PLoS ONE, 2014, 9, e109952.	2.5	53
21	Resolving structure and function of metaorganisms through a holistic framework combining reductionist and integrative approaches. Zoology, 2019, 133, 81-87.	1.2	53
22	Which games are growing bacterial populations playing?. Journal of the Royal Society Interface, 2015, 12, 20150121.	3.4	51
23	Emerging Sponge Models of Animal-Microbe Symbioses. Frontiers in Microbiology, 2016, 7, 2102.	3.5	47
24	Metabolic co-dependence drives the evolutionarily ancient Hydra-Chlorella symbiosis. ELife, 2018, 7, .	6.0	47
25	<i>Hydra</i> meiosis reveals unexpected conservation of structural synaptonemal complex proteins across metazoans. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16588-16593.	7.1	45
26	Is activated hemocyanin instead of phenoloxidase involved in immune response in woodlice?. Developmental and Comparative Immunology, 2009, 33, 1055-1063.	2.3	39
27	Temperate phages as self-replicating weapons in bacterial competition. Journal of the Royal Society Interface, 2017, 14, 20170563.	3.4	39
28	Carrying Capacity and Colonization Dynamics of Curvibacter in the Hydra Host Habitat. Frontiers in Microbiology, 2018, 9, 443.	3.5	39
29	How do environmental factors influence life cycles and development? An experimental framework for early-diverging metazoans. BioEssays, 2014, 36, 1185-1194.	2.5	38
30	Predicted Bacterial Interactions Affect in Vivo Microbial Colonization Dynamics in Nematostella. Frontiers in Microbiology, 2018, 9, 728.	3.5	36
31	Bdellovibrio and Like Organisms Are Predictors of Microbiome Diversity in Distinct Host Groups. Microbial Ecology, 2020, 79, 252-257.	2.8	35
32	Temperature and insulin signaling regulate body size in Hydra by the Wnt and TGF-beta pathways. Nature Communications, 2019, 10, 3257.	12.8	27
33	Plasticity of epithelial cell shape in response to upstream signals: A whole-organism study using transgenic Hydra. Zoology, 2009, 112, 185-194.	1.2	26
34	Stem Cell Transcription Factor FoxO Controls Microbiome Resilience in Hydra. Frontiers in Microbiology, 2018, 9, 629.	3.5	24
35	Microbiota mediated plasticity promotes thermal adaptation in the sea anemone Nematostella vectensis. Nature Communications, 2022, 13, .	12.8	23
36	Where Simplicity Meets Complexity: Hydra, a Model for Host-Microbe Interactions. Advances in Experimental Medicine and Biology, 2012, 710, 71-81.	1.6	22

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37	Using <i>Nematostella vectensis</i> to Study the Interactions between Genome, Epigenome, and Bacteria in a Changing Environment. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	21
38	Embryo protection in contemporary immunology. <i>Communicative and Integrative Biology</i> , 2011, 4, 369-372.	1.4	19
39	Bacteria- and temperature-regulated peptides modulate $\beta$ -catenin signaling in <i>Hydra</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 21459-21468.	7.1	17
40	Function and Evolution of Nuclear Receptors in Environmental-Dependent Postembryonic Development. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 653792.	3.7	13
41	Contribution of Maternal and Paternal Transmission to Bacterial Colonization in <i>Nematostella vectensis</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 726795.	3.5	11
42	Exploring Host-Microbe Interactions in <i>Hydra</i> . <i>Microbe Magazine</i> , 2009, 4, 457-462.	0.4	10
43	The Role of DNA Methylation in Genome Defense in Cnidaria and Other Invertebrates. <i>Molecular Biology and Evolution</i> , 2022, 39, .	8.9	10
44	Embryo protection in contemporary immunology: Why bacteria matter. <i>Communicative and Integrative Biology</i> , 2011, 4, 369-72.	1.4	7
45	Population Differences and Host Species Predict Variation in the Diversity of Host-Associated Microbes in <i>Hydra</i> . <i>Frontiers in Microbiology</i> , 2022, 13, 799333.	3.5	5
46	Symbiotic Algae of <i>Hydra viridissima</i> Play a Key Role in Maintaining Homeostatic Bacterial Colonization. <i>Frontiers in Microbiology</i> , 0, 13, .	3.5	5
47	<i>Hydra</i> and <i>Curvibacter</i> . , 2020, , 79-89.		0