

# Christian von Mering

## List of Publications by Citations

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133  
papers

49,194  
citations

64  
h-index

151  
g-index

151  
ext. papers

66,457  
ext. citations

14.6  
avg, IF

7.53  
L-index

#	Paper	IF	Citations
133	STRING v10: protein-protein interaction networks, integrated over the tree of life. <i>Nucleic Acids Research</i> , <b>2015</b> , 43, D447-52	20.1	6276
132	STRING v11: protein-protein association networks with increased coverage, supporting functional discovery in genome-wide experimental datasets. <i>Nucleic Acids Research</i> , <b>2019</b> , 47, D607-D613	20.1	5966
131	The STRING database in 2017: quality-controlled protein-protein association networks, made broadly accessible. <i>Nucleic Acids Research</i> , <b>2017</b> , 45, D362-D368	20.1	4068
130	STRING v9.1: protein-protein interaction networks, with increased coverage and integration. <i>Nucleic Acids Research</i> , <b>2013</b> , 41, D808-15	20.1	3033
129	The STRING database in 2011: functional interaction networks of proteins, globally integrated and scored. <i>Nucleic Acids Research</i> , <b>2011</b> , 39, D561-8	20.1	2514
128	Comparative assessment of large-scale data sets of protein-protein interactions. <i>Nature</i> , <b>2002</b> , 417, 399-403	40.1	1856
127	STRING 8—a global view on proteins and their functional interactions in 630 organisms. <i>Nucleic Acids Research</i> , <b>2009</b> , 37, D412-6	20.1	1799
126	eggNOG 4.5: a hierarchical orthology framework with improved functional annotations for eukaryotic, prokaryotic and viral sequences. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, D286-93	20.1	1211
125	Comparative metagenomics of microbial communities. <i>Science</i> , <b>2005</b> , 308, 554-7	33.3	1211
124	Toward automatic reconstruction of a highly resolved tree of life. <i>Science</i> , <b>2006</b> , 311, 1283-7	33.3	1197
123	STRING: a database of predicted functional associations between proteins. <i>Nucleic Acids Research</i> , <b>2003</b> , 31, 258-61	20.1	1182
122	Fast Genome-Wide Functional Annotation through Orthology Assignment by eggNOG-Mapper. <i>Molecular Biology and Evolution</i> , <b>2017</b> , 34, 2115-2122	8.3	966
121	STRING: known and predicted protein-protein associations, integrated and transferred across organisms. <i>Nucleic Acids Research</i> , <b>2005</b> , 33, D433-7	20.1	953
120	eggNOG 5.0: a hierarchical, functionally and phylogenetically annotated orthology resource based on 5090 organisms and 2502 viruses. <i>Nucleic Acids Research</i> , <b>2019</b> , 47, D309-D314	20.1	850
119	Immunity-related genes and gene families in <i>Anopheles gambiae</i> . <i>Science</i> , <b>2002</b> , 298, 159-65	33.3	743
118	<i>Salmonella enterica</i> serovar typhimurium exploits inflammation to compete with the intestinal microbiota. <i>PLoS Biology</i> , <b>2007</b> , 5, 2177-89	9.7	736
117	The STRING database in 2021: customizable protein-protein networks, and functional characterization of user-uploaded gene/measurement sets. <i>Nucleic Acids Research</i> , <b>2021</b> , 49, D605-D612	20.1	661

116	STITCH 5: augmenting protein-chemical interaction networks with tissue and affinity data. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, D380-4	20.1	641
115	Community proteogenomics reveals insights into the physiology of phyllosphere bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 16428-33	11.5	595
114	The harmonizome: a collection of processed datasets gathered to serve and mine knowledge about genes and proteins. <i>Database: the Journal of Biological Databases and Curation</i> , <b>2016</b> , 2016,	5	504
113	The HUPO PSIs molecular interaction format--a community standard for the representation of protein interaction data. <i>Nature Biotechnology</i> , <b>2004</b> , 22, 177-83	44.5	504
112	STRING 7--recent developments in the integration and prediction of protein interactions. <i>Nucleic Acids Research</i> , <b>2007</b> , 35, D358-62	20.1	503
111	STITCH: interaction networks of chemicals and proteins. <i>Nucleic Acids Research</i> , <b>2008</b> , 36, D684-8	20.1	471
110	Metaproteogenomic analysis of microbial communities in the phyllosphere and rhizosphere of rice. <i>ISME Journal</i> , <b>2012</b> , 6, 1378-90	11.9	458
109	Comparative genome and proteome analysis of <i>Anopheles gambiae</i> and <i>Drosophila melanogaster</i> . <i>Science</i> , <b>2002</b> , 298, 149-59	33.3	455
108	Expression of amino-terminally truncated PrP in the mouse leading to ataxia and specific cerebellar lesions. <i>Cell</i> , <b>1998</b> , 93, 203-14	56.2	454
107	eggNOG v4.0: nested orthology inference across 3686 organisms. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, D23129-1	20.1	387
106	eggNOG v3.0: orthologous groups covering 1133 organisms at 41 different taxonomic ranges. <i>Nucleic Acids Research</i> , <b>2012</b> , 40, D284-9	20.1	387
105	Pathogens and host immunity in the ancient human oral cavity. <i>Nature Genetics</i> , <b>2014</b> , 46, 336-44	36.3	353
104	PaxDb, a database of protein abundance averages across all three domains of life. <i>Molecular and Cellular Proteomics</i> , <b>2012</b> , 11, 492-500	7.6	351
103	eggNOG: automated construction and annotation of orthologous groups of genes. <i>Nucleic Acids Research</i> , <b>2008</b> , 36, D250-4	20.1	313
102	A global network of coexisting microbes from environmental and whole-genome sequence data. <i>Genome Research</i> , <b>2010</b> , 20, 947-59	9.7	305
101	Like will to like: abundances of closely related species can predict susceptibility to intestinal colonization by pathogenic and commensal bacteria. <i>PLoS Pathogens</i> , <b>2010</b> , 6, e1000711	7.6	304
100	STITCH 4: integration of protein-chemical interactions with user data. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, D401-7	20.1	290
99	Version 4.0 of PaxDb: Protein abundance data, integrated across model organisms, tissues, and cell-lines. <i>Proteomics</i> , <b>2015</b> , 15, 3163-8	4.8	283

98	Protein interaction networks from yeast to human. <i>Current Opinion in Structural Biology</i> , <b>2004</b> , 14, 292-98.1	278
97	Quantitative phylogenetic assessment of microbial communities in diverse environments. <i>Science</i> , <b>2007</b> , 315, 1126-30	33.3 259
96	Arabidopsis female gametophyte gene expression map reveals similarities between plant and animal gametes. <i>Current Biology</i> , <b>2010</b> , 20, 506-12	6.3 255
95	The microbiota mediates pathogen clearance from the gut lumen after non-typhoidal Salmonella diarrhea. <i>PLoS Pathogens</i> , <b>2010</b> , 6, e1001097	7.6 252
94	Phosphoproteomic analysis reveals interconnected system-wide responses to perturbations of kinases and phosphatases in yeast. <i>Science Signaling</i> , <b>2010</b> , 3, rs4	8.8 229
93	Prion protein devoid of the octapeptide repeat region restores susceptibility to scrapie in PrP knockout mice. <i>Neuron</i> , <b>2000</b> , 27, 399-408	13.9 221
92	Analyses of non-coding somatic drivers in 2,658 cancer whole genomes. <i>Nature</i> , <b>2020</b> , 578, 102-111	50.4 220
91	STITCH 3: zooming in on protein-chemical interactions. <i>Nucleic Acids Research</i> , <b>2012</b> , 40, D876-80	20.1 219
90	Prediction of effective genome size in metagenomic samples. <i>Genome Biology</i> , <b>2007</b> , 8, R10	18.3 219
89	Environments shape the nucleotide composition of genomes. <i>EMBO Reports</i> , <b>2005</b> , 6, 1208-13	6.5 200
88	Cell-wide analysis of protein thermal unfolding reveals determinants of thermostability. <i>Science</i> , <b>2017</b> , 355,	33.3 198
87	STITCH 2: an interaction network database for small molecules and proteins. <i>Nucleic Acids Research</i> , <b>2010</b> , 38, D552-6	20.1 183
86	eggNOG v2.0: extending the evolutionary genealogy of genes with enhanced non-supervised orthologous groups, species and functional annotations. <i>Nucleic Acids Research</i> , <b>2010</b> , 38, D190-5	20.1 179
85	Comparative functional analysis of the Caenorhabditis elegans and Drosophila melanogaster proteomes. <i>PLoS Biology</i> , <b>2009</b> , 7, e48	9.7 179
84	Unexplored therapeutic opportunities in the human genome. <i>Nature Reviews Drug Discovery</i> , <b>2018</b> , 17, 317-332	64.1 156
83	Analysis of genomic context: prediction of functional associations from conserved bidirectionally transcribed gene pairs. <i>Nature Biotechnology</i> , <b>2004</b> , 22, 911-7	44.5 142
82	Standardized benchmarking in the quest for orthologs. <i>Nature Methods</i> , <b>2016</b> , 13, 425-30	21.6 133
81	Genome evolution reveals biochemical networks and functional modules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 15428-33	11.5 123

80	Millimeter-scale genetic gradients and community-level molecular convergence in a hypersaline microbial mat. <i>Molecular Systems Biology</i> , <b>2008</b> , 4, 198	12.2	118
79	Function prediction and protein networks. <i>Current Opinion in Cell Biology</i> , <b>2003</b> , 15, 191-8	9	118
78	Microbiota-derived hydrogen fuels <i>Salmonella typhimurium</i> invasion of the gut ecosystem. <i>Cell Host and Microbe</i> , <b>2013</b> , 14, 641-51	23.4	105
77	MLTreeMap--accurate Maximum Likelihood placement of environmental DNA sequences into taxonomic and functional reference phylogenies. <i>BMC Genomics</i> , <b>2010</b> , 11, 461	4.5	93
76	Complex genomic rearrangements lead to novel primate gene function. <i>Genome Research</i> , <b>2005</b> , 15, 343-51	9.7	82
75	Chromothripsis-like patterns are recurring but heterogeneously distributed features in a survey of 22,347 cancer genome screens. <i>BMC Genomics</i> , <b>2014</b> , 15, 82	4.5	78
74	Limits to robustness and reproducibility in the demarcation of operational taxonomic units. <i>Environmental Microbiology</i> , <b>2015</b> , 17, 1689-706	5.2	76
73	Sputum DNA sequencing in cystic fibrosis: non-invasive access to the lung microbiome and to pathogen details. <i>Microbiome</i> , <b>2017</b> , 5, 20	16.6	74
72	RNAi screen of <i>Salmonella</i> invasion shows role of COPI in membrane targeting of cholesterol and Cdc42. <i>Molecular Systems Biology</i> , <b>2011</b> , 7, 474	12.2	68
71	Quantitative assessment of protein function prediction from metagenomics shotgun sequences. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 13913-8	11.5	66
70	Microbial rhodopsins on leaf surfaces of terrestrial plants. <i>Environmental Microbiology</i> , <b>2012</b> , 14, 140-6	5.2	64
69	Bacterial anoxygenic photosynthesis on plant leaf surfaces. <i>Environmental Microbiology Reports</i> , <b>2012</b> , 4, 209-16	3.7	63
68	Assessing systems properties of yeast mitochondria through an interaction map of the organelle. <i>PLoS Genetics</i> , <b>2006</b> , 2, e170	6	63
67	Ecological consistency of SSU rRNA-based operational taxonomic units at a global scale. <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003594	5	58
66	Viruses.STRING: A Virus-Host Protein-Protein Interaction Database. <i>Viruses</i> , <b>2018</b> , 10,	6.2	58
65	SVD-phy: improved prediction of protein functional associations through singular value decomposition of phylogenetic profiles. <i>Bioinformatics</i> , <b>2016</b> , 32, 1085-7	7.2	56
64	Identification and analysis of evolutionarily cohesive functional modules in protein networks. <i>Genome Research</i> , <b>2006</b> , 16, 374-82	9.7	54
63	Distinct and regulated activities of human Gli proteins in <i>Drosophila</i> . <i>Current Biology</i> , <b>1999</b> , 9, 1319-22	6.3	54

62	The hedgehog signaling pathway: where did it come from?. <i>PLoS Biology</i> , <b>2009</b> , 7, e1000146	9.7	53
61	A sentinel protein assay for simultaneously quantifying cellular processes. <i>Nature Methods</i> , <b>2014</b> , 11, 1045-8	21.6	52
60	Specific inhibition of diverse pathogens in human cells by synthetic microRNA-like oligonucleotides inferred from RNAi screens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 4548-53	11.5	52
59	Shotgun proteomics data from multiple organisms reveals remarkable quantitative conservation of the eukaryotic core proteome. <i>Proteomics</i> , <b>2010</b> , 10, 1297-306	4.8	51
58	High-Resolution RNA Maps Suggest Common Principles of Splicing and Polyadenylation Regulation by TDP-43. <i>Cell Reports</i> , <b>2017</b> , 19, 1056-1067	10.6	49
57	Functional clues for hypothetical proteins based on genomic context analysis in prokaryotes. <i>Nucleic Acids Research</i> , <b>2004</b> , 32, 6321-6	20.1	49
56	High confidence prediction of essential genes in <i>Burkholderia cenocepacia</i> . <i>PLoS ONE</i> , <b>2012</b> , 7, e40064	3.7	48
55	Cross-Regulation between TDP-43 and Paraspeckles Promotes Pluripotency-Differentiation Transition. <i>Molecular Cell</i> , <b>2019</b> , 74, 951-965.e13	17.6	45
54	MAPseq: highly efficient k-mer search with confidence estimates, for rRNA sequence analysis. <i>Bioinformatics</i> , <b>2017</b> , 33, 3808-3810	7.2	44
53	RAIN: RNA-protein Association and Interaction Networks. <i>Database: the Journal of Biological Databases and Curation</i> , <b>2017</b> , 2017,	5	42
52	The SIB Swiss Institute of Bioinformatics Resources: focus on curated databases. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, D27-37	20.1	41
51	Genome-wide small interfering RNA screens reveal VAMP3 as a novel host factor required for Uukuniemi virus late penetration. <i>Journal of Virology</i> , <b>2014</b> , 88, 8565-78	6.6	39
50	Pathway and network analysis of more than 2500 whole cancer genomes. <i>Nature Communications</i> , <b>2020</b> , 11, 729	17.4	38
49	Shared components of protein complexes--versatile building blocks or biochemical artefacts?. <i>BioEssays</i> , <b>2004</b> , 26, 1333-43	4.1	38
48	HPC-CLUST: distributed hierarchical clustering for large sets of nucleotide sequences. <i>Bioinformatics</i> , <b>2014</b> , 30, 287-8	7.2	35
47	A comprehensive set of protein complexes in yeast: mining large scale protein-protein interaction screens. <i>Bioinformatics</i> , <b>2003</b> , 19, 1901-8	7.2	34
46	Rapid Inference of Direct Interactions in Large-Scale Ecological Networks from Heterogeneous Microbial Sequencing Data. <i>Cell Systems</i> , <b>2019</b> , 9, 286-296.e8	10.6	33
45	ChromID identifies the protein interactome at chromatin marks. <i>Nature Biotechnology</i> , <b>2020</b> , 38, 728-736	4.5	31

44	The ELIXIR Core Data Resources: fundamental infrastructure for the life sciences. <i>Bioinformatics</i> , <b>2020</b> , 36, 2636-2642	7.2	29
43	Simultaneous analysis of large-scale RNAi screens for pathogen entry. <i>BMC Genomics</i> , <b>2014</b> , 15, 1162	4.5	28
42	IFN- $\gamma$ Hinders Recovery from Mucosal Inflammation during Antibiotic Therapy for Salmonella Gut Infection. <i>Cell Host and Microbe</i> , <b>2016</b> , 20, 238-49	23.4	26
41	Large-scale functional analysis of the roles of phosphorylation in yeast metabolic pathways. <i>Science Signaling</i> , <b>2014</b> , 7, rs6	8.8	26
40	Sequence-based factors influencing the expression of heterologous genes in the yeast <i>Pichia pastoris</i> --A comparative view on 79 human genes. <i>Journal of Biotechnology</i> , <b>2007</b> , 130, 1-10	3.7	26
39	In situ enzyme activity in the dissolved and particulate fraction of the fluid from four pitcher plant species of the genus <i>Nepenthes</i> . <i>PLoS ONE</i> , <b>2011</b> , 6, e25144	3.7	26
38	gesper: a statistical model for deconvoluting off-target-confounded RNA interference screens. <i>Genome Biology</i> , <b>2015</b> , 16, 220	18.3	25
37	Cell-sorting at the A/P boundary in the <i>Drosophila</i> wing primordium: a computational model to consolidate observed non-local effects of Hh signaling. <i>PLoS Computational Biology</i> , <b>2011</b> , 7, e1002025	5	25
36	A family of interaction-adjusted indices of community similarity. <i>ISME Journal</i> , <b>2017</b> , 11, 791-807	11.9	24
35	ArrayProspector: a web resource of functional associations inferred from microarray expression data. <i>Nucleic Acids Research</i> , <b>2004</b> , 32, W445-8	20.1	24
34	Disentangling the impact of environmental and phylogenetic constraints on prokaryotic within-species diversity. <i>ISME Journal</i> , <b>2020</b> , 14, 1247-1259	11.9	23
33	Bacterial diversity and composition in the fluid of pitcher plants of the genus <i>Nepenthes</i> . <i>Systematic and Applied Microbiology</i> , <b>2015</b> , 38, 330-9	4.2	22
32	Comparative analysis of environmental sequences: potential and challenges. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2006</b> , 361, 519-23	5.8	22
31	Consistency of genome-based methods in measuring Metazoan evolution. <i>FEBS Letters</i> , <b>2005</b> , 579, 3355-61	5.8	22
30	Effects of oral antibiotics and isotretinoin on the murine gut microbiota. <i>International Journal of Antimicrobial Agents</i> , <b>2017</b> , 50, 342-351	14.3	19
29	Analysis of the Human Kinome and Phosphatome by Mass Cytometry Reveals Overexpression-Induced Effects on Cancer-Related Signaling. <i>Molecular Cell</i> , <b>2019</b> , 74, 1086-1102.e5	17.6	18
28	Natural Genetic Variation Differentially Affects the Proteome and Transcriptome in <i>Caenorhabditis elegans</i> . <i>Molecular and Cellular Proteomics</i> , <b>2016</b> , 15, 1670-80	7.6	15
27	Ecologically informed microbial biomarkers and accurate classification of mixed and unmixed samples in an extensive cross-study of human body sites. <i>Microbiome</i> , <b>2018</b> , 6, 192	16.6	15

26	Termites in the woodwork. <i>Genome Biology</i> , <b>2007</b> , 8, 229	18.3	13
25	Fast genome-wide functional annotation through orthology assignment by eggNOG-mapper		13
24	A phylogeny-based benchmarking test for orthology inference reveals the limitations of function-based validation. <i>PLoS ONE</i> , <b>2014</b> , 9, e111122	3.7	12
23	Fifteen years SIB Swiss Institute of Bioinformatics: life science databases, tools and support. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, W436-41	20.1	12
22	Global analysis of bacterial transcription factors to predict cellular target processes. <i>Trends in Genetics</i> , <b>2004</b> , 20, 126-31	8.5	12
21	Preventive <i>Trichuris suis ova</i> (TSO) treatment protects immunocompetent rabbits from DSS colitis but may be detrimental under conditions of immunosuppression. <i>Scientific Reports</i> , <b>2017</b> , 7, 16500	4.9	10
20	Suppression of the <i>Escherichia coli</i> dnaA46 mutation by changes in the activities of the pyruvate-acetate node links DNA replication regulation to central carbon metabolism. <i>PLoS ONE</i> , <b>2017</b> , 12, e0176050	3.7	10
19	Open Community Challenge Reveals Molecular Network Modules with Key Roles in Diseases		10
18	The HUPO initiative on Model Organism Proteomes, iMOP. <i>Proteomics</i> , <b>2012</b> , 12, 340-5	4.8	8
17	Protein tyrosine phosphatase non-receptor type 22 modulates colitis in a microbiota-dependent manner. <i>Journal of Clinical Investigation</i> , <b>2019</b> , 129, 2527-2541	15.9	8
16	Rapid inference of direct interactions in large-scale ecological networks from heterogeneous microbial sequencing data		7
15	treeclimbR pinpoints the data-dependent resolution of hierarchical hypotheses		6
14	Pathogenic impact of transcript isoform switching in 1,209 cancer samples covering 27 cancer types using an isoform-specific interaction network. <i>Scientific Reports</i> , <b>2020</b> , 10, 14453	4.9	6
13	Strain-Resolved Dynamics of the Lung Microbiome in Patients with Cystic Fibrosis. <i>MBio</i> , <b>2021</b> , 12,	7.8	6
12	Growth-restricting effects of siRNA transfections: a largely deterministic combination of off-target binding and hybridization-independent competition. <i>Nucleic Acids Research</i> , <b>2018</b> , 46, 9309-9320	20.1	6
11	The Evolution of Ecological Diversity in .. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 715637	5.7	4
10	Pathway and network analysis of more than 2,500 whole cancer genomes		4
9	Specific genomic regions are differentially affected by copy number alterations across distinct cancer types, in aggregated cytogenetic data. <i>PLoS ONE</i> , <b>2012</b> , 7, e43689	3.7	3



8	Fermentation Ability of Gut Microbiota of Wild Japanese Macaques in the Highland and Lowland Yakushima: In Vitro Fermentation Assay and Genetic Analyses. <i>Microbial Ecology</i> , <b>2020</b> , 80, 459-474	4.4	2
7	Pathogenic impact of transcript isoform switching in 1209 cancer samples covering 27 cancer types using an isoform-specific interaction network		2
6	treeclimbR pinpoints the data-dependent resolution of hierarchical hypotheses. <i>Genome Biology</i> , <b>2021</b> , 22, 157	18.3	2
5	Inferring Protein Function from Genomic Context1179-1210		1
4	CanIsoNet: A Database to Study the Functional Impact of Isoform Switching Events in Cancer		1
3	Reproducible Propagation of Species-Rich Soil Bacterial Communities Suggests Robust Underlying Deterministic Principles of Community Formation.. <i>MSystems</i> , <b>2022</b> , e0016022	7.6	1
2	Tree reconciliation combined with subsampling improves large scale inference of orthologous group hierarchies. <i>BMC Bioinformatics</i> , <b>2019</b> , 20, 228	3.6	0
1	Probing Isoform Switching Events in Various Cancer Types: Lessons From Pan-Cancer Studies. <i>Frontiers in Molecular Biosciences</i> , <b>2021</b> , 8, 726902	5.6	