## Johannes Söding

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2223474/publications.pdf

Version: 2024-02-01

98 papers

34,898 citations

56 h-index 97 g-index

118 all docs

118 docs citations

118 times ranked

48385 citing authors

| #  | Article  | IF   | Citations |
|----|--|------|-----------|
| 1  | Largeâ€scale analysis of <i>Drosophila</i> core promoter function using synthetic promoters.<br>Molecular Systems Biology, 2022, 18, e9816.                                  | 7.2  | 15        |
| 2  | Cln5 represents a new type of cysteine-based $\langle i \rangle S \langle i \rangle$ -depalmitoylase linked to neurodegeneration. Science Advances, 2022, 8, eabj8633.       | 10.3 | 12        |
| 3  | DescribePROT: database of amino acid-level protein structure and function predictions. Nucleic Acids Research, 2021, 49, D298-D308.  | 14.5 | 46        |
| 4  | Evidence for additive and synergistic action of mammalian enhancers during cell fate determination. ELife, 2021, 10, .   | 6.0  | 64        |
| 5  | Fast and sensitive taxonomic assignment to metagenomic contigs. Bioinformatics, 2021, 37, 3029-3031.   | 4.1  | 110       |
| 6  | Bayesian Markov models improve the prediction of binding motifs beyond first order. NAR Genomics and Bioinformatics, 2021, 3, lqab026.                                       | 3.2  | 3         |
| 7  | SpacePHARER: sensitive identification of phages from CRISPR spacers in prokaryotic hosts.<br>Bioinformatics, 2021, 37, 3364-3366.  | 4.1  | 36        |
| 8  | Tejaas: reverse regression increases power for detecting trans-eQTLs. Genome Biology, 2021, 22, 142.   | 8.8  | 4         |
| 9  | Going to extremes – a metagenomic journey into the dark matter of life. FEMS Microbiology Letters, 2021, 368, .  | 1.8  | 16        |
| 10 | Thermodynamic modeling reveals widespread multivalent binding by RNA-binding proteins.<br>Bioinformatics, 2021, 37, i308-i316.   | 4.1  | 4         |
| 11 | Mechanisms for Active Regulation of Biomolecular Condensates. Trends in Cell Biology, 2020, 30, 4-14.  | 7.9  | 127       |
| 12 | A High-Throughput Screen for Transcription Activation Domains Reveals Their Sequence Features and Permits Prediction by Deep Learning. Molecular Cell, 2020, 78, 890-902.e6. | 9.7  | 70        |
| 13 | MetaEukâ€"sensitive, high-throughput gene discovery, and annotation for large-scale eukaryotic metagenomics. Microbiome, 2020, 8, 48.  | 11.1 | 119       |
| 14 | Protein Sequence Analysis Using the MPI Bioinformatics Toolkit. Current Protocols in Bioinformatics, 2020, 72, e108.   | 25.8 | 458       |
| 15 | Lysine/RNA-interactions drive and regulate biomolecular condensation. Nature Communications, 2019, 10, 2909.   | 12.8 | 164       |
| 16 | HH-suite3 for fast remote homology detection and deep protein annotation. BMC Bioinformatics, 2019, 20, 473.   | 2.6  | 706       |
| 17 | Protein-level assembly increases protein sequence recovery from metagenomic samples manyfold.<br>Nature Methods, 2019, 16, 603-606.  | 19.0 | 262       |
| 18 | PROSSTT: probabilistic simulation of single-cell RNA-seq data for complex differentiation processes. Bioinformatics, 2019, 35, 3517-3519.                                    | 4.1  | 42        |

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|----|--|------|-----------|
| 19 | MMseqs2 desktop and local web server app for fast, interactive sequence searches. Bioinformatics, 2019, 35, 2856-2858.   | 4.1  | 321       |
| 20 | A Completely Reimplemented MPI Bioinformatics Toolkit with a New HHpred Server at its Core. Journal of Molecular Biology, 2018, 430, 2237-2243.  | 4.2  | 1,956     |
| 21 | Bayesian multiple logistic regression for case-control GWAS. PLoS Genetics, 2018, 14, e1007856.  | 3.5  | 28        |
| 22 | Synthetic protein alignments by CCMgen quantify noise in residue-residue contact prediction. PLoS Computational Biology, 2018, 14, e1006526.   | 3.2  | 25        |
| 23 | Clustering huge protein sequence sets in linear time. Nature Communications, 2018, 9, 2542.  | 12.8 | 497       |
| 24 | An analysis and evaluation of the WeFold collaborative for protein structure prediction and its pipelines in CASP11 and CASP12. Scientific Reports, 2018, 8, 9939.                       | 3.3  | 19        |
| 25 | The BaMM web server for de-novo motif discovery and regulatory sequence analysis. Nucleic Acids<br>Research, 2018, 46, W215-W220.  | 14.5 | 49        |
| 26 | Big-data approaches to protein structure prediction. Science, 2017, 355, 248-249.  | 12.6 | 31        |
| 27 | Uniclust databases of clustered and deeply annotated protein sequences and alignments. Nucleic Acids Research, 2017, 45, D170-D176.  | 14.5 | 520       |
| 28 | Genome-wide Analysis of RNA Polymerase II Termination at Protein-Coding Genes. Molecular Cell, 2017, 66, 38-49.e6.   | 9.7  | 100       |
| 29 | MMseqs2 enables sensitive protein sequence searching for the analysis of massive data sets. Nature Biotechnology, 2017, 35, 1026-1028.   | 17.5 | 1,879     |
| 30 | WIsH: who is the host? Predicting prokaryotic hosts from metagenomic phage contigs. Bioinformatics, 2017, 33, 3113-3114.   | 4.1  | 197       |
| 31 | Bayesian Markov models consistently outperform PWMs at predicting motifs in nucleotide sequences.<br>Nucleic Acids Research, 2016, 44, 6055-6069.  | 14.5 | 72        |
| 32 | The MPI bioinformatics Toolkit as an integrative platform for advanced protein sequence and structure analysis. Nucleic Acids Research, 2016, 44, W410-W415.                             | 14.5 | 369       |
| 33 | Modulations of DNA Contacts by Linker Histones and Post-translational Modifications Determine the Mobility and Modifiability of Nucleosomal H3 Tails. Molecular Cell, 2016, 61, 247-259. | 9.7  | 120       |
| 34 | MMseqs software suite for fast and deep clustering and searching of large protein sequence sets. Bioinformatics, 2016, 32, 1323-1330.  | 4.1  | 131       |
| 35 | Automatic Prediction of Protein 3D Structures by Probabilistic Multi-template Homology Modeling. PLoS Computational Biology, 2015, 11, e1004343.   | 3.2  | 122       |
| 36 | bbcontacts: prediction of $\langle i \rangle \hat{l}^2 \langle  i \rangle$ -strand pairing from direct coupling patterns. Bioinformatics, 2015, 31, 1729-1737.                           | 4.1  | 34        |

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| 37 | Context similarity scoring improves protein sequence alignments in the midnight zone. Bioinformatics, 2015, 31, 674-681.   | 4.1         | 12        |
| 38 | A vocabulary of ancient peptides at the origin of folded proteins. ELife, 2015, 4, e09410.   | 6.0         | 199       |
| 39 | In Vivo Ligands of MDA5 and RIG-I in Measles Virus-Infected Cells. PLoS Pathogens, 2014, 10, e1004081.   | 4.7         | 111       |
| 40 | CCMpredâ€"fast and precise prediction of protein residueâ€"residue contacts from correlated mutations. Bioinformatics, 2014, 30, 3128-3130.                          | 4.1         | 387       |
| 41 | Universality of core promoter elements?. Nature, 2014, 511, E11-E12.   | 27.8        | 7         |
| 42 | Transcriptome Maps of mRNP Biogenesis Factors Define Pre-mRNA Recognition. Molecular Cell, 2014, 55, 745-757.  | 9.7         | 99        |
| 43 | RECQL5 Controls Transcript Elongation and Suppresses Genome Instability Associated with Transcription Stress. Cell, 2014, 157, 1037-1049.                            | 28.9        | 162       |
| 44 | kClust: fast and sensitive clustering of large protein sequence databases. BMC Bioinformatics, 2013, 14, 248.  | 2.6         | 83        |
| 45 | <i>P</i> -value-based regulatory motif discovery using positional weight matrices. Genome Research, 2013, 23, 181-194.   | 5.5         | 64        |
| 46 | Recruitment of TREX to the Transcription Machinery by Its Direct Binding to the Phospho-CTD of RNA Polymerase II. PLoS Genetics, 2013, 9, e1003914.                  | 3.5         | 58        |
| 47 | Eph receptors and ephrin class B ligands are expressed at tissue boundaries in Hydra vulgaris.<br>International Journal of Developmental Biology, 2013, 57, 759-765. | 0.6         | 13        |
| 48 | The MOF-containing NSL complex associates globally with housekeeping genes, but activates only a defined subset. Nucleic Acids Research, 2012, 40, 1509-1522.        | 14.5        | 64        |
| 49 | The XXmotif web server for eXhaustive, weight matriX-based motif discovery in nucleotide sequences. Nucleic Acids Research, 2012, 40, W104-W109.                     | 14.5        | 40        |
| 50 | Discriminative modelling of context-specific amino acid substitution probabilities. Bioinformatics, 2012, 28, 3240-3247.   | 4.1         | 47        |
| 51 | HHblits: lightning-fast iterative protein sequence searching by HMM-HMM alignment. Nature Methods, 2012, 9, 173-175.   | 19.0        | 1,878     |
| 52 | DBIRD complex integrates alternative mRNA splicing with RNA polymerase II transcript elongation. Nature, 2012, 484, 386-389.   | 27.8        | 99        |
| 53 | Fast, scalable generation of highâ€quality protein multiple sequence alignments using Clustal Omega.<br>Molecular Systems Biology, 2011, 7, 539.                     | <b>7.</b> 2 | 12,778    |
| 54 | The Mre11:Rad50 Structure Shows an ATP-Dependent Molecular Clamp in DNA Double-Strand Break Repair. Cell, 2011, 145, 54-66.  | 28.9        | 182       |

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|----|--|------|-----------|
| 55 | Protein sequence comparison and fold recognition: progress and good-practice benchmarking. Current Opinion in Structural Biology, 2011, 21, 404-411.   | 5.7  | 73        |
| 56 | Different Binding Properties and Function of CXXC Zinc Finger Domains in Dnmt1 and Tet1. PLoS ONE, 2011, 6, e16627.  | 2.5  | 87        |
| 57 | A Conserved GA Element in TATA-Less RNA Polymerase II Promoters. PLoS ONE, 2011, 6, e27595.  | 2.5  | 32        |
| 58 | A galaxy of folds. Protein Science, 2010, 19, 124-130.   | 7.6  | 71        |
| 59 | Localization of eukaryote-specific ribosomal proteins in a 5.5-â,,« cryo-EM map of the 80S eukaryotic ribosome. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19754-19759. | 7.1  | 122       |
| 60 | Uniform transitions of the general RNA polymerase II transcription complex. Nature Structural and Molecular Biology, 2010, 17, 1272-1278.  | 8.2  | 399       |
| 61 | Of Bits and Bugs â€" On the Use of Bioinformatics and a Bacterial Crystal Structure to Solve a Eukaryotic Repeat-Protein Structure. PLoS ONE, 2010, 5, e13402.   | 2.5  | 21        |
| 62 | Evolution of Outer Membrane $\hat{l}^2$ -Barrels from an Ancestral $\hat{l}^2\hat{l}^2$ Hairpin. Molecular Biology and Evolution, 2010, 27, 1348-1358.   | 8.9  | 95        |
| 63 | Cryo-EM structure and rRNA model of a translating eukaryotic 80S ribosome at 5.5-â,,« resolution. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19748-19753.               | 7.1  | 196       |
| 64 | The molecular cell death machinery in the simple cnidarian Hydra includes an expanded caspase family and pro- and anti-apoptotic Bcl-2 proteins. Cell Research, 2010, 20, 812-825.                                       | 12.0 | 62        |
| 65 | Sequence context-specific profiles for homology searching. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3770-3775.  | 7.1  | 155       |
| 66 | Phospholipid scramblases and Tubby-like proteins belong to a new superfamily of membrane tethered transcription factors. Bioinformatics, 2009, 25, 159-162.  | 4.1  | 59        |
| 67 | Fast and accurate automatic structure prediction with HHpred. Proteins: Structure, Function and Bioinformatics, 2009, 77, 128-132.   | 2.6  | 418       |
| 68 | HHompâ€"prediction and classification of outer membrane proteins. Nucleic Acids Research, 2009, 37, W446-W451.   | 14.5 | 86        |
| 69 | PDBalert: automatic, recurrent remote homology tracking and protein structure prediction. BMC Structural Biology, 2008, 8, 51.   | 2.3  | 7         |
| 70 | Evolution of the βâ€propeller fold. Proteins: Structure, Function and Bioinformatics, 2008, 71, 795-803.   | 2.6  | 128       |
| 71 | Prediction of protein functional residues from sequence by probability density estimation. Bioinformatics, 2008, 24, 613-620.  | 4.1  | 121       |
| 72 | <i>De novo</i> identification of highly diverged protein repeats by probabilistic consistency.<br>Bioinformatics, 2008, 24, 807-814.   | 4.1  | 137       |

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| 73 | Genome-associated RNA Polymerase II Includes the Dissociable Rpb4/7 Subcomplex. Journal of Biological Chemistry, 2008, 283, 26423-26427.  | 3.4  | 40        |
| 74 | ScbA from Streptomyces coelicolor A3(2) has homology to fatty acid synthases and is able to synthesize $\hat{I}^3$ -butyrolactones. Microbiology (United Kingdom), 2007, 153, 1394-1404.  | 1.8  | 61        |
| 75 | On the origin of the histone fold. BMC Structural Biology, 2007, 7, 17.   | 2.3  | 45        |
| 76 | TPRpred: a tool for prediction of TPR-, PPR- and SEL1-like repeats from protein sequences. BMC Bioinformatics, 2007, 8, 2.  | 2.6  | 194       |
| 77 | Comparative analysis of coiled-coil prediction methods. Journal of Structural Biology, 2006, 155, 140-145.  | 2.8  | 150       |
| 78 | Expression, crystallization and preliminary X-ray crystallographic studies of the outer membrane protein OmpW fromEscherichia coli. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 415-418.             | 0.7  | 33        |
| 79 | HHrep: de novo protein repeat detection and the origin of TIM barrels. Nucleic Acids Research, 2006, 34, W137-W142.   | 14.5 | 63        |
| 80 | HHsenser: exhaustive transitive profile search using HMM-HMM comparison. Nucleic Acids Research, 2006, 34, W374-W378.   | 14.5 | 72        |
| 81 | The MPI Bioinformatics Toolkit for protein sequence analysis. Nucleic Acids Research, 2006, 34, W335-W339.  | 14.5 | 247       |
| 82 | AbrB-like Transcription Factors Assume a Swapped Hairpin Fold that Is Evolutionarily Related to Double-Psi $\hat{l}^2$ Barrels. Structure, 2005, 13, 919-928.   | 3.3  | 78        |
| 83 | Retroactive, a membrane-anchored extracellular protein related to vertebrate snake neurotoxin-like proteins, is required for cuticle organization in the larva ofDrosophila melanogaster. Developmental Dynamics, 2005, 233, 1056-1063. | 1.8  | 43        |
| 84 | The HHpred interactive server for protein homology detection and structure prediction. Nucleic Acids Research, 2005, 33, W244-W248.   | 14.5 | 3,246     |
| 85 | Protein homology detection by HMM–HMM comparison. Bioinformatics, 2005, 21, 951-960.  | 4.1  | 2,193     |
| 86 | REPPER-repeats and their periodicities in fibrous proteins. Nucleic Acids Research, 2005, 33, W239-W243.  | 14.5 | 118       |
| 87 | More than the sum of their parts: On the evolution of proteins from peptides. BioEssays, 2003, 25, 837-846.   | 2.5  | 229       |
| 88 | Three-body decay of a rubidium Bose–Einstein condensate. Applied Physics B: Lasers and Optics, 1999, 69, 257-261.   | 2.2  | 147       |
| 89 | Strong evaporative cooling of a trapped cesium gas. Optics Express, 1998, 2, 323.   | 3.4  | 42        |
| 90 | Giant Spin Relaxation of an Ultracold Cesium Gas. Physical Review Letters, 1998, 80, 1869-1872.   | 7.8  | 94        |

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| 91 | Is Bose-Einstein condensation of atomic cesium possible?. Europhysics Letters, 1998, 44, 25-30.                      | 2.0 | 42        |
| 92 | Short-Distance Atomic Beam Deceleration with a Stimulated Light Force. Physical Review Letters, 1997, 78, 1420-1423. | 7.8 | 96        |
| 93 | <title>Cooling atoms in dark gravitational laser traps</title> ., 1996,,.  |     | 0         |
| 94 | Gravitational laser trap for atoms with evanescent-wave cooling. Optics Communications, 1995, 119, 652-662.          | 2.1 | 103       |
| 95 | Stimulated magneto-optical force in the dressed-atom picture. Physical Review A, 1994, 50, 2517-2527.                | 2.5 | 6         |
| 96 | Coherent beam splitter for atoms based on a bichromatic standing light wave. Optics Letters, 1994, 19, 658.          | 3.3 | 52        |
| 97 | Sub-Doppler manifestation of the magneto-optical radiation force. Optics Communications, 1993, 98, 54-60.            | 2.1 | 5         |
| 98 | Observation of the Magneto-Optical Radiation Force by Laser Spectroscopy. Europhysics Letters, 1992, 20, 101-106.    | 2.0 | 12        |