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Publications

Books

Voges, J. *Compression of DNA Sequencing Data*. VDI Verlag, 2022. DOI: 10.51202/9783186878106-I.

Journal Articles

Maier, H. B., Neyazi, A., Bundies, G. L., Meyer-Bockenkamp, F., Bleich, S., Pathak, H., Ziert, Y., Neuhaus, B., Müller, F.-J., Pollmann, I., Illig, T., Mücke, S., Müller, M., Möller, B. K., Oeltze-Jafra, S., Kacprowski, T., **Voges, J.**, Müntefering, F., Scheiber, J., Reif, A., Aichholzer, M., Reif-Leonhard, C., Schmidt-Kassow, M., Hegerl, U., Reich, H., Unterecker, S., Weber, H., Deckert, J., Bössel-Debbert, N., Grabe, H. J., Lucht, M., and Frieling, H. "Validation of the predictive value of BDNF -87 methylation for antidepressant treatment success in severely depressed patients—a randomized rater-blinded trial". In: *Trials* 25.1 (Apr. 2024), p. 247. DOI: 10.1186/s13063-024-08061-5.

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Numanagić, I., Bonfield, J. K., Hach, F., **Voges, J.**, Ostermann, J., Alberti, C., Mattavelli, M., and Sahinalp, S. C. "Comparison of high-throughput sequencing data compression tools". In: *Nature Methods* 13.12 (Dec. 2016), pp. 1005–1008. DOI: 10.1038/nmeth.4037.

Patents

Voges, J. and Ostermann, J. "Method for encoding and decoding of quality values of a data structure". Mar. 19, 2024. CN110915140B.

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Conference Papers

Rohlfing, C., Meyer, T., Schneider, J., and **Voges, J.** "Python Wrapper for Context-based Adaptive Binary Arithmetic Coding". In: *2023 IEEE International Conference on Visual Communications and Image Processing (VCIP)*. Dec. 2023. Resources: link, main paper (PDF).

Ochoa, I., Li, H., Baumgarte, F., Hergenrother, C., **Voges, J.**, and Hernaez, M. "AliCo: A New Efficient Representation for SAM Files". In: *2019 Data Compression Conference (DCC)*. Mar. 2019, pp. 93–102. DOI: 10.1109/DCC.2019.00017.

Hernandez-Lopez, A. A., **Voges, J.**, Alberti, C., Mattavelli, M., and Ostermann, J. "Lossy Compression of Quality Scores in Differential Gene Expression: A First Assessment and Impact Analysis". In: *2018 Data Compression Conference (DCC)*. Mar. 2018, pp. 167–176. DOI: 10.1109/DCC.2018.00025.

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Schröder, S. K., Adhisantoso, Y. G., Stare, T., Colotte, M., Glökler, J., Frohme, M., Balestra, G., **Voges, J.**, and Karčnik, T. *PEARL-DNA — Revolutionizing Sustainable DNA-Based Data Storage*. July 2024. Poster presented at the ISIT 2024 satellite workshop "Coding Theory and Algorithms for DNA-based Data Storage". Forthcoming.

Adhisantoso, Y. G., Ostermann, J., and **Voges, J.** *PEKORA: High-Performance 3D Genome Reconstruction Using K-th Order Spearman's Rank Correlation Approximation*. July 2023. Presentation by YGA at ISMB/ECCB 2023 (HiTSeq track). Resources: abstract (PDF).

Müntefering, F., Ostermann, J., and **Voges, J.** *BACON: Bacterial Clone Recognition from Metagenomic Sequencing Data*. Sept. 2023. Oral presentation by FM at AICPM 2023. *Best Presentation Award*. Resources: abstract (PDF).

Paridaens, T., **Voges, J.**, Hernaez, M., Fostier, J., and Ostermann, J. *GABAC: an arithmetic coding solution for genomic data*. Aug. 2019. DOI: `10.7490/f1000research.1117346.1`. Poster presented at ISMB/ECCB 2019.

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