

## **Публикации оппонентов по теме диссертации**

*Публикации первого оппонента В.А. Ильина по теме диссертации*

1. Sobolev, E., et. al. Megahertz single-particle imaging at the European XFEL // Communications Physics, 3 (1), статья № 97, 2020. DOI: 10.1038/s42005-020-0362-y
2. Bobkov, S.A., Teslyuk, A.B., Baymukhametov, T.N., Pichkur, E.B., Chesnokov, Y.M., Assalauova, D., Poyda, A.A., Novikov, A.M., Zolotarev, S.I., Ikonnikova, K.A., Velikhov, V.E., Vartanyants, I.A., Vasiliev, A.L., Ilyin, V.A. Advances in Modern Information Technologies for Data Analysis in CRYO-EM and XFEL Experiments // Crystallography Reports, 65 (6), pp. 1081-1092. 2020. DOI: 10.1134/S1063774520060085
3. Assalauova, D., et.al. An advanced workflow for single-particle imaging with the limited data at an X-ray free-electron laser // IUCrJ, 7, pp. 1102-1113. 2020. DOI: 10.1107/S2052252520012798
4. Teslyuk, A., Bobkov, S., Poyda, A., Novikov, A., Velikhov, V., Ilyin, V. Development of Experimental Data Processing Workflows Based on Kubernetes Infrastructure and REANA Workflow Management System // Communications in Computer and Information Science, 1331, pp. 563-573. 2020. DOI: 10.1007/978-3-030-64616-5\_48
5. Tesliuk, A., Bobkov, S., Ilyin, V., Novikov, A., Poyda, A., Velikhov, V. Kubernetes container orchestration as a framework for flexible and effective scientific data analysis // Proceedings - 2019 Ivannikov Ispras Open Conference, ISPRAS 2019, pp. 67-71. 2019. DOI: 10.1109/ISPRAS47671.2019.00016
6. Ikonnikova, K.A., Teslyuk, A.B., Bobkov, S.A., Zolotarev, S.I., Ilyin, V.A. Reconstruction of 3D structure for nanoscale biological objects from experiments data on super-bright X-ray free electron lasers (XFELs): Dependence of the 3D resolution on the experiment parameters // Procedia Computer Science, 156, pp. 49-58. 2019. DOI: 10.1016/j.procs.2019.08.129
7. Bobkov, S.A., Teslyuk, A.B., Zolotarev, S.I., Rose, M., Ikonnikova, K.A., Velikhov, V.E., Vartanyants, I.A., Ilyin, V.A. Software Platform for European XFEL: Towards Online Experimental Data Analysis // Lobachevskii Journal of Mathematics, 39 (9), pp. 1170-1178. 2018. DOI: 10.1134/S1995080218090093
8. Pichkur, E., Baimukhametov, T., Teslyuk, A., Orekhov, A., Kamyshinsky, R., Chesnokov, Y., Ilyin, V., Vasiliev, A., Velikhov, V. Towards on-the-fly Cryo-Electron Microscopy Data Processing by High Performance Data Analysis // Journal of Physics: Conference Series, 955 (1), статья № 012005, 2018. DOI: 10.1088/1742-6596/955/1/012005
9. Boos, E.E., Bunichev, V.E., Dubinin, M.N., Ilyin, V.A., Savrin, V.I. CompHEP: Developments and applications // Journal of Physics: Conference Series, 920 (1), статья № 012007, 2017. DOI: 10.1088/1742-6596/920/1/012007
10. Polyakov, A., Kokovin, D., Poyda, A., Zhizhin, M., Andreev, A., Govorov, A., Ilyin, V. Toolkit for intensive work with metadata in specialized information systems // Procedia Computer Science, 119, pp. 59-64. 2017. DOI: 10.1016/j.procs.2017.11.160

*Публикации второго оппонента О.В. Сухорослова по теме диссертации*

1. Sukhoroslov, O. Toward efficient execution of data-intensive workflows // Journal of Supercomputing, 77 (8), pp. 7989-8012. 2021. DOI: 10.1007/s11227-020-03612-4
2. Afanasiev, A.P., Krivonozhko, V.E., Lychev, A.V., Sukhoroslov, O.V. Multidimensional frontier visualization based on optimization methods using parallel computations // Journal of Global Optimization, 76 (3), pp. 563-574. 2020. DOI: 10.1007/s10898-019-00812-y
3. Sukhoroslov, O., Nazarenko, A., Aleksandrov, R. An experimental study of scheduling algorithms for many-task applications // Journal of Supercomputing, 75 (12), pp. 7857-7871. 2019. DOI: 10.1007/s11227-018-2553-9
4. Rumyantsev, A., Sukhoroslov, O., Eparskaya, A., Blanzieri, E., Cavecchia, V. Parameter sweep experiments in hybrid computing systems with r language // International Journal of Innovative Technology and Exploring Engineering, 8 (7), pp. 590-596. 2019.
5. Sukhoroslov, O. Supporting Efficient Execution of Workflows on Everest Platform // Communications in Computer and Information Science, 1129 CCIS, pp. 713-724. 2019. DOI: 10.1007/978-3-030-36592-9\_58
6. Sukhoroslov, O. Building web-based services for practical exercises in parallel and distributed computing // Journal of Parallel and Distributed Computing, 118, pp. 177-188. 2018. DOI: 10.1016/j.jpdc.2018.02.024
7. Volkov, S., Sukhoroslov, O. Simplifying the Use of Clouds for Scientific Computing with Everest // Procedia Computer Science, 119, pp. 112-120. 2018. DOI: 10.1016/j.procs.2017.11.167
8. Nazarenko, A., Sukhoroslov, O. Using simulation to improve workflow scheduling in heterogeneous computing systems // Communications in Computer and Information Science, 793, pp. 407-417. 2017. DOI: 10.1007/978-3-319-71255-0\_33
9. Sukhoroslov, O. Integration of everest platform with BOINC-based desktop grids // CEUR Workshop Proceedings, 1973, pp. 102-107. 2017.
10. Nazarenko, A., Sukhoroslov, O. An experimental study of workflow scheduling algorithms for heterogeneous systems // Lecture Notes in Computer Science (including sub-series Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10421 LNCS, pp. 327-341. 2017. DOI: 10.1007/978-3-319-62932-2\_32