

The GOLEM tokamak bibliography (IAEA CRP final report)

The tokamak GOLEM team

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Journal articles

- [Svi+18] Peter Svihra et al. “Runaway electrons diagnostics using segmented semiconductor detectors”. In: *Fusion Engineering and Design* (2018). ISSN: 0920-3796. DOI: <https://doi.org/10.1016/j.fusengdes.2018.12.054>.
- [P. 19] P. Dhyani and V. Svoboda and V. Istokskaia and J. Mlynar and J. Cerovsky and O. Ficker and V. Linhart. “Study of Runaway Electrons in GOLEM Tokamak”. In: *Journal of Instrumentation* 14.09 (2019), pp. C09029–C09029. DOI: 10.1088/1748-0221/14/09/c09029. URL: <https://doi.org/10.1088/1748-0221/14/09/c09029>.
- [Svo+19] Vojtech Svoboda et al. “Operational Domain in Hydrogen Plasmas on the GOLEM Tokamak”. In: *Journal of Fusion Energy* (2019). ISSN: 1572-9591. DOI: <https://doi.org/10.1007/s10894-019-00215-7>.
- [Gry+20] M Gryaznevich et al. “Contribution of joint experiments on small tokamaks in the framework of IAEA coordinated research projects to mainstream fusion research”. In: *Plasma Science and Technology* 22.5 (2020), p. 055102. DOI: 10.1088/2058-6272/ab6d4d. URL: <https://doi.org/10.1088/2058-6272/ab6d4d>.
- [Nov+20] L. Novotny et al. “Runaway electron diagnostics using silicon strip detector”. In: *Journal of Instrumentation* 15.07 (2020), pp. C07015–C07015. DOI: 10.1088/1748-0221/15/07/c07015. URL: <https://doi.org/10.1088/1748-0221/15/07/c07015>.
- [Sar+21a] G Sarancha et al. “Magnetic turbulence and long-range correlation studies in the GOLEM tokamak”. In: *Journal of Physics: Conference Series* 2055.1 (2021), p. 012003. DOI: 10.1088/1742-6596/2055/1/012003. URL: <https://doi.org/10.1088/1742-6596/2055/1/012003>.
- [Sar+21b] G.A. Sarancha et al. “Hydrogen And Helium Discharges In The Golem Tokamak”. In: *Problems Of Atomic Science And Technology, Ser. Thermonuclear Fusion* 4 (2021), pp. 92–110. DOI: 10.21517/0202-3822-2021-44-4-92-110. URL: <https://doi.org/10.21517/0202-3822-2021-44-4-92-110>.
- [Siu+21] Y. Siusko et al. “Breakdown phase in the golem tokamak and its impact on plasma performance”. English. In: *Ukrainian Journal of Physics* 66.3 (2021), pp. 231–239. URL: <https://ujp.bitp.kiev.ua/index.php/ujp/article/view/2020180>.
- [Cer+22] J. Cerovsky et al. “Progress in HXR diagnostics at GOLEM and COMPASS tokamaks”. In: *Journal of Instrumentation* 17.01 (2022), p. C01033. DOI: 10.1088/1748-0221/17/01/c01033. URL: <https://doi.org/10.1088/1748-0221/17/01/c01033>.
- [CJ22] Jayakumar Chandrasekaran and Sangeetha Jayaraman. “Magnetohydrodynamic Mode Identification for Golem Mirnov Coil Signals Using Singular Value Decomposition and Multichannel Variational Mode Decomposition Method for Analyzing Time-Frequency”. English. In: *JOURNAL OF FUSION ENERGY* 41.2 (2022). ISSN: 0164-0313. DOI: 10.1007/s10894-022-00329-5.
- [Kul+22] S. Kulkov et al. “Detection of runaway electrons at the COMPASS tokamak using a Timepix3-based semiconductor detector”. In: *Journal of Instrumentation* 17.02 (2022), P02030. DOI: 10.1088/1748-0221/17/02/p02030. URL: <https://doi.org/10.1088/1748-0221/17/02/p02030>.

Conference proceedings

- [Ist+18] V. Istokskaia et al. “Tokamak GOLEM for fusion education - Chapter 9”. In: vol. 2018-July. cited By 0. 2018, pp. 261–264.
- [Lin+18] V. Linhart et al. “First Measurement of X-rays Generated by Runaway Electrons in Tokamaks Using a TimePix3 Device with 1 mm thick Silicon Sensor”. In: *2018 IEEE Nuclear Science Symposium and Medical Imaging Conference Proceedings (NSS/MIC)*. 2018, pp. 1–9. DOI: 10.1109/NSSMIC.2018.8824534.
- [Dhy19] Dhyani, P., Svoboda, V., Istokskaia, V., Mlynář, J., Cerovský, J., Ficker, O., Linhart, V. “Design and development of probe for the measurements of runaway electrons inside the golem tokamak plasma edge”. In: vol. 2019-July. Europhysics conference abstracts. 2019, P1.1016. ISBN: 979-10-96389-11-7. URL: <http://ocs.ciemat.es/EPS2019PAP/pdf/P1.1016.pdf>.

- [GSS19a] O. Grover, V. Svoboda, and J. Stockel. “Online experimentation at the GOLEM tokamak”. In: *2019 5th Experiment International Conference (exp.at'19)*. 2019, pp. 220–225. DOI: 10.1109/EXPAT.2019.8876482. URL: <https://ieeexplore.ieee.org/document/8876482>.
- [GSS19b] O. Grover, V. Svoboda, and J. Stockel. “Remote demonstration of the GOLEM tokamak”. In: *2019 5th Experiment International Conference (exp.at'19)*. 2019, pp. 239–240. DOI: 10.1109/EXPAT.2019.8876584. URL: <https://ieeexplore.ieee.org/document/8876584>.
- [Kul19] Kulkov, S., Mácha, P., Istokskkaia, V., Kropáčková, D., Papoušek, F., Adámek, J., Cerovský, J., Ficker, O., Grover, O., Jiráková, K., Stöckel, J., Svoboda, V. “Tokamak GOLEM for fusion education - chapter 10”. In: vol. 2019-July. Europhysics conference abstracts. 2019, P1.1068. ISBN: 979-10-96389-11-7. URL: <http://ocs.ciemat.es/EPS2019PAP/pdf/P1.1068.pdf>.
- [Mac21] Macha,P.,Hromasova, K., Kropackova,D., Lauerova, M., Socha, A., Malinak, J., Cipciar, D., Ceerdle, J., Svoboda, V., Stockel, J., Adamek, J., Papousek, F., Lobko, L. “Tokamak GOLEM for fusion education - chapter 12”. In: vol. 2021-July. Europhysics conference abstracts. 2021, P4.1028. ISBN: 979-10-96389-13-1. URL: <http://ocs.ciemat.es/EPS2021PAP/pdf/P4.1028.pdf>.
- [Mac22a] Macha, P., M. Pokorny, D. Kropackova, M.Humpolec, J. Chlum, K. Wen, M. Tunkl, M. Lauerova, J. Brotankova, J. Stockel, V. Svoboda, S. Kulkov, A. PodolnikJ. Caloud, S. Malec. “Tokamak GOLEM for fusion education - chapter 13”. In: vol. 2022-July. Europhysics conference abstracts. 2022. URL: https://indico.fusenet.eu/event/28/contributions/164/attachments/178/1152/EPS_2022_golem_article.pdf.
- [Mac22b] Macha,P., Svoboda, V., Stockel, J., Adamek, J., Seidl, J. “Self-induced transport barrier in the helium plasma on the tokamak GOLEM”. In: vol. 2022-July. Europhysics conference abstracts. 2022. URL: https://indico.fusenet.eu/event/28/contributions/64/attachments/78/1153/EPS_2022_article.pdf.

Master thesis

- [Macst] MachaPetr. “Studium okrajového plazmatu v tokamacích pomocí pokročilých elektrických sond.” Master thesis 2020. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/MasterThesis/20MachaPetr.pdf>.
- [Darst] Dario Cipciar. “Ion and electron temperature study in the edge plasma of the tokamak device”. Master thesis 2021. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/MasterThesis/21DarioCipciar.pdf>.
- [Marsta] Marek Tunkl. “Development of a new runaway electron diagnostics method based on strip semiconductor detectors”. Master thesis 2022. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/MasterThesis/22TunklMarek.pdf>.

Bachelor projects

- [Macch] MachaPetr. “Měření parametrů plazmatu pomocí kombinované ball-pen a langmuirovy sondy na tokamaku GOLEM.” Bachelor project 2018. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/BachelorProjects/18MachaPetr.pdf>.
- [Filch] Filip Papousek. “Impact of swept edge plasma potential biasing on turbulence in tokamaks.” Bachelor project 2020. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/BachelorProjects/20PapousekFilip.pdf>.
- [Jirch] Jiri Malinak. “Electron temperature measurements using rail probe on the tokamak GOLEM.” Bachelor project 2021. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/BachelorProjects/21MalinakJiri.pdf>.
- [Jakch] Jakub Chlum. “Implementation of tomographic inversion on the GOLEM tokamak.” Bachelor project 2022. URL: <http://golem.fjfi.cvut.cz/wiki/Presentations/Students/BachelorProjects/22ChlumJakub.pdf>.