

Projektskizze zur JTF RL Forschung – InfraProNet 2021 - 2027

Projektidee: Zittauer Forschungs-Windkanal (Akronym: ZiFoWik)

Windkanal Göttinger Bauart



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Anlage 3: zentrale wissenschaftliche Referenzen

1. Salem S., **Frana, K.** Harvesting energy of flow-induced vibrations using cylindrical piezoelectric transducers (**2023**) *Energy Reports*, 9, pp. 279 – 285, DOI: 10.1016/j.egyr.2022.12.113.
2. Korinek, T., **Frana, K.**, Hujer, J., Škarohlíd, J. Influence of local grid refinement on prediction of impinging jet heat transfer using Scale-Resolving-Simulation methods (**2022**) *Case Studies in Thermal Engineering*, 36, art. no. 102159. DOI: 10.1016/j.csite.2022.102159.
3. Salem, S., **Frana, K.** A Wind Tunnel Study of the Flow-Induced Vibrations of a Cylindrical Piezoelectric Transducer (**2022**) *Sensors*, 22 (9), art. no. 3463. DOI: 10.3390/s22093463
4. **Frana, K.**, Neubert, C., Simon, S., Mammadov, A., Amirov, F. A Flow Study in the Cyclone with Particle Separations (**2021**) *Mechanisms and Machine Science*, 97, pp. 52-59. DOI: 10.1007/978-3-030-64690-5_6.
5. Nová, I., **Frana, K.**, Lipiński, T. Monitoring of the Interaction of Aluminum Alloy and Sodium Chloride as the Basis for Ecological Production of Expanded Aluminum (**2021**) *Physics of Metals and Metallography*, 122 (13), pp. 1288-1300. DOI: 10.1134/S0031918X20140124.
6. Kořínek, T., Tisovský, T., **Frana, K.** Prediction of heat transfer from a circular cylinder in a cross-flow at a low sub-critical Reynolds number with the Partially-Averaged Navier-Stokes method (**2021**) *International Journal of Thermal Sciences*, 169, art. no. 106977. DOI: 10.1016/j.ijthermalsci.2021.106977
7. Salem, S., **Frana, K.**, Nová, I. The potential of cylindrical piezoelectric transducers for high-frequency acoustic energy harvesting (**2021**) *Energies*, 14 (18), art. no. 5845. DOI: 10.3390/en14185845
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9. Salem, S., **Frana, K.**, Nová, I. Design of acoustic energy harvesting unit using piezo-electric diaphragm (**2020**) *Materials Science Forum*, 986 MSF, pp. 109-115.
10. Ayisi, E.N., **Frana, K.** The design and test for degradation of energy density of a silica gel-based energy storage system using low grade heat for desorption phase (**2020**) *Energies*, 13 (17), art. no. en13174513. DOI: 10.3390/en13174513
11. **Frana, K.**, Attia, S., Stiller, J. A Bubble Formation in the Two-Phase System (**2019**) *Lecture Notes in Computer Science* (including subseries *Lecture Notes in Artificial Intelligence* and *Lecture Notes in Bioinformatics*), 11539 LNCS, pp. 580-586. DOI: 10.1007/978-3-030-22747-0_43
12. **Frana, K.**, Attia, S.H., Otremba, F. A numerical simulation of the filling process in the pressure bottle (**2018**) *International Journal of Mechanical Engineering and Robotics Research*, 7 (5), pp. 558-563. DOI: 10.18178/ijmerr.7.5.558-563
13. **Frana, K.**, Nová, I. A interface formation in two-phase flow problems (**2018**) *International Journal of Mechanics*, 12, pp. 102-108.
14. **Frana, K.**, Nová, I. An effect of the fluid viscosity on the gas deposition in the two-phase mixture (**2018**) *Proceedings International Conference on Applied Mathematics and Computer Science*, ICAMCS 2018, art. no. 8955309, pp. 65-70. DOI: 10.1109/ICAMCS46079.2018.00012
15. **Frana, K.**, Stiller, J. A numerical study of flows driven by a rotating magnetic field in a square container (**2008**) *European Journal of Mechanics, B/Fluids*, 27 (4), pp. 491-500. DOI: 10.1016/j.euromechflu.2007.10.001