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Thermodynamics Frontier Award 2025

Nominated papers:

1. Rai, I., & Kumar, R. (2025). Heat transfer analysis of a longitudinal fin attached to a beta-type Stirling engine. *Archives of Thermodynamics*, 46(3), 51–60. doi: 10.24425/ather.2025.156578
2. Uche, J., Usón, S., & Gómez, J. A. (2025). Integrated model of a biomass boiler coupled with a Stirling engine. *Archives of Thermodynamics*, 46(2), 133–141. doi: 10.24425/ather.2025.154912
3. Li, L., Li, R., & Zhang, L. (2025). Numerical Study on Nozzle Group Atomization Cooling: Effects of Pressure, Tilt Angle and Spacing on Enhanced Heat Transfer. *Archives of Thermodynamics*, 46(2), 143–152. doi: 10.24425/ather.2025.154913
4. Goodarzi, M.R., & Ghassemi, H. (2025). Numerical investigation on vapour-liquid equilibrium and gas solubility in hydrocarbons for binary and ternary systems. *Archives of Thermodynamics*, 46(1), 37–48. doi: 10.24425/ather.2025.154179
5. Shang, A., Song, H., & Ma, Z. (2025). Exergetic performance analysis of a direct ammonia-fed solid oxide fuel cell. *Archives of Thermodynamics*, 46(1), 193–200. doi: 10.24425/ather.2025.154193
6. Banaszekiewicz, M. (2025). Online monitoring of thermal loads of steam turbine components. *Archives of Thermodynamics*, 46(3), 5–15. doi: 10.24425/ather.2025.154920
7. Kumar, A., Yadav, S. K., & Kumar, V. (2025). Numerical Investigation of a Two-Stage Ejector Based on a Constant Rate of Momentum Change: Performance Analysis and Optimisation. *Archives of Thermodynamics*, 46(4), 7–17. doi: 10.24425/ather.2025.156597
8. Ryfa, A., Tokarski, M., Adamczyk, W., Klimanek, A., Bargiel, P., Bialecki, R., Kocot, M., Niesler, M., Kania, H., Stecko, J., & Czaplicka, M. (2025). CFD based design of blast furnace gas cleaning cyclone separator. *Archives of Thermodynamics*, 46(3), 163–174, doi: 10.24425/ather.2025.156585
9. Janus, J., Skotniczny, P., Richert, M., & Długopolski, J. (2025). Experimental and numerical research on the impact of design solutions on the internal heat exchanger operating parameters. *Archives of Thermodynamics*, 46(4), 127–133 doi: 10.24425/ather.2025.156843
10. Pudleiner, B., Szentannai, P., Désesquelles, L., Matter, C., & Fekete, T. (2025). Optimisation of the control curves of load-changing nuclear power units taking into account thermal stress. *Archives of Thermodynamics*, 46(4), 41–48 doi: 10.24425/ather.2025.156835
11. Laskowski, R.M., Smyk, A., Wolowicz, M., & Szymczyk, J. (2025). The influence of flow resistance in the main pipelines of secondary circuit on the power of EPR and AP1000 nuclear units. *Archives of Thermodynamics*, 46(4), 49–57. doi: 10.24425/ather.2025.156836
12. Pelińska-Olko, E., & Zagórska, E. (2025). Linear method for the determination of Newton's heat transfer coefficient in the gap under conditions of limited convection. *Archives of Thermodynamics*, 46(2), 153–165. doi: 10.24425/ather.2025.154914