

List of scientific papers in international peer reviewed
scientific journals, included in Scopus and Web of Science databases
Toleukhanov Amankeldy

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| № | Publication title | Publication type | Journal name, year of publication, DOI | Journal Impact Factor, Quartile and Field of Science according to Journal Citation Reports for year of publication | Index in the Web of Science Core Collection | Journal CiteScore, percentile and field of science according to Scopus for year of publication | NAME of the authors (co-applicant to underline) | Role of the Challenger |
|---|--|------------------|--|--|---|--|--|------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | Thermal Response Measurement and Performance Evaluation of Borehole Heat | Article | Energies, T. 15, B. 22, C. 8490, 2022 https://doi.org/10.3390/en15228490 | JIF 3.2 Energy & Fuels – Q3 | SCIE | Cite Score 5.5, Energy (miscellaneous) – 67% percentile | T. Amanzholov, A. Seitov, A. Aliuly, Y. Yerdesh, M. Murugesan, | Corresponding author |

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KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K. I. SATBAYEV

| | | | | | | | | |
|---|--|---------|--|---------------------------------|------|--|--|----------------------|
| | Exchangers: A Case Study in Kazakhstan | | | | | | O. Botella, M. Feidt, H.Sh. Wang, Y. Belyayev, A. Toleukhanov | |
| 2 | Three-Dimensional CFD Analysis of a Hot Water Storage Tank with Various Inlet/Outlet Configurations | Article | Energies, T. 17, B. 22, C. 5716, 2024 https://doi.org/10.3390/en17225716 | JIF 3.2, Energy & Fuels – Q3 | SCIE | Cite Score 7.3, Energy (miscellaneous) – 68% percentile | A. Abdidin, A. Seitov, A. Toleukhanov , Y. Belyayev O. Botella, A. Kheiri, M. Khalij | Corresponding author |
| 3 | Experimental and Theoretical Investigations of a Ground Source Heat Pump System for Water and Space Heating Applications in Kazakhstan | Article | Energies, T. 15, B. 22, C. 8336, 2022 https://doi.org/10.3390/en15228336 | JIF 3.2, Energy & Fuels – Q3 | SCIE | Cite Score 5.5, Energy (miscellaneous) – 67% percentile | Y. Yerdesh, T. Amanzholov, A. Aliuly, A. Seitov, A. Toleukhanov M. Murugesan, O. Botella, M. Feidt, H.Sh. Wang, Y. Belyayev, | Co-author |
| 4 | Numerical Simulation Study of Thermal Performance in Hot Water Storage Tanks with | Article | Energies, T. 17, B. 22, C. 5623, 2024 | JIF 3.2, Energy & Fuels – Q3 | SCIE | Cite Score 7.3, | Y. Karlina, Y. Yerdesh, A. Toleukhanov , Y. Belyayev, | Co-author |

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|---|---|---------|---|---|---|--|--|-----------|
| | | | doi:10.3934/math.2025606 | | | General Mathematics–85% percentile | | |
| 8 | Impact of Inlet Configuration and Flow Rates on Thermal Storage Stratification and Efficiency | Article | Thermo, T. 6, B. 1, C. 16, https://doi.org/10.3390/thermo6010016 | - | - | (2024) Cite Score 3.9, Energy (miscellaneous) – 51% percentile | A. Kereikulova, Y. Yerdesh, Y. Belyayev, A. Toleukhanov O. Botella A. Kheiri, M. Khalij | Co-author |

List of scientific works
Toleukhanov Amankeldy

| № | Title | Nature of the edition | Output data | N of pages | Co-authors |
|---|---|-----------------------|--|------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Articles in publications recommended by the Committee for Quality Assurance in Education and Science of the Ministry of Science and Higher Education of the Republic of Kazakhstan | | | | | |
| 1 | Geothermal heat storage device: thermal conductivity coefficient test | Printed | Vestnik KazNRTU, 2019, №5 (135). С. 337-347, Almaty. | 11 | T. Amanzholov, M. Tungatarova, B. Akhmetov |

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|---|--|---------|--|----|--|
| | | | ISSN 1680-9211 | | |
| 2 | Study of borehole heat exchanger heat transfer enhancement parameters | Printed | Journal of Mathematics, Mechanics and Computer Science, Vol. 115 No. 3 (2022), C. 65–77. Indexed in Web of Science and Scopus https://doi.org/10.26577/JMMCS.2022.v115.i3.07 | 13 | T. Amanzholov, E. Belyayev, M. Mohanraj, |
| 3 | Two-dimensional cfd analysis of a hot water storage tank with immersed obstacles | Printed | Journal of Mathematics, Mechanics and Computer Science, Vol. 123 No. 3 (2024), C. 57–80. Indexed in Web of Science and Scopus https://doi.org/10.26577/JMMCS2024-v123-i3-7 | 24 | A. Abdidin, A. Kerekulova, O. Botella, A. Kheiri, Ye. Belyayev |
| 4 | Solar-assisted auto-cascade heat pump for water heating in the continental climates | Printed | International Journal of Mathematics and Physics, Vol. 16 No. 2 (2025), C. 54–63. Indexed in Web of Science. https://doi.org/10.26577/ijmph.20251627 | 10 | Z. Abdulina, Y. Yerdesh, M. Mohanraj, A. Rattner, Y. Belyayev |
| Articles published in other scientific journals and publications | | | | | |
| 5 | Simulation-based mathematical modeling of borehole heat exchanger thermal performance for ground source heat pumps | Printed | Journal of Mathematical Sciences, Vol. 291, No. 2, June, 2025, pages 323–335, Springer. (Indexed in Scopus) https://doi.org/10.1007/s10958-025-07811-3 | 13 | Y. Belyayev O. Botella, Y. Yerdesh, T. Amanzholov |
| 6 | Air-to-Water Cascade Heat Pump Thermal Performance Modelling for Continental Climate Regions | Printed | Entropie thermodynamique, Vol. 3, Issue 1, PP. 1-16, | 16 | Ye. Yerdesh, M. Mohanraj, H.S. Wang, |

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|---|---|---------|---|---|--|
| | | | 2022, ISTE OpenScience – Published by ISTE Ltd. London, UK – openscience.fr DOI: 10.21494/ISTE.OP.2022.0836 | | O. Botella, M. Feidt, Ye. Belyayev |
| International scientific and practical conferences | | | | | |
| 7 | Numerical Simulation of Cascade Latent Heat Thermal Energy Storage Device Thermal Performance Using Multiple PCMs | Printed | 28th International meeting of thermophysics 2023 3–5 October 2023, Dalešice, Czech Republic. Volume 3126, Issue 1, AIP Conf. Proc. 3126, 020001 (2024), (Indexed in Scopus). https://doi.org/10.1063/5.0200365 | 7 | Y. Belyayev, Y. Yerdesh, A. Seitov, A. Aliuly, O. Botella |
| 8 | Energy and Exergy Performance Study of Ground Source Heat Pump in Continental Climate Conditions | Printed | 28th International meeting of thermophysics 2023 3–5 October 2023, Dalešice, Czech Republic. Volume 3126, Issue 1, AIP Conf. Proc. 3126, 020002 (2024), (Indexed in Scopus). https://doi.org/10.1063/5.0200363 | 8 | Y. Belyayev, Y. Yerdesh, A. Seitov, T. Amanzholov, H.S. Wang |

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