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Papers in Journals

1. Z. Rahimi ,& Ahar, M.S. Hatamipour,Performance evaluation of hybrid humidification-dehumidification desalination systems: State of the art,Applied Thermal Engineering,2024.
2. Z. Rahimi ,& Ahar, M.S. Hatamipour,Theoretical study of multi-stage and multi-feeding variable pressure humidification-dehumidification (VP-HD) desalination systems,Iranian Journal of Chemical Engineering,2024.
3. Z. Rahimi ,& Ahar, M. Khiadani, L. Rahimi Ahar, A. Shafieian,Performance evaluation of single stand and hybrid solar water heaters: a comprehensive review.,Clean Technologies and Environmental Policy,pp. 2157-2184,2023.
4. S. Pourroostam, Z. Rahimi ,& Ahar, A. Babapoor,A. Nematollahzadeh,I. Salahshoori. A. Seyfaee,Melamine functionalized mesoporous silica SBA-15 for separation of chromium (VI) from wastewater,Materials Chemistry and Physics,pp. 128240,2023.
5. R. Ezzatkah, Z. Rahimi ,& Ahar, A. Babapoor, M. Nemati Tasandeh, S. Yaghoubi, F. Valizadeh Harzand,Urea-Functionalized mesoporous silica SBA-15 for heavy metal Adsorption: Synthesis, Characterization, and optimization,Materials Science and Engineering: B,pp. 116799,2023.
6. A. Gharegashi, A. Sohrabi, Z. Rahimi ,& Ahar,Enhancing gasoline hydro-desulfurization in a fixed bed reactor: A computational fluid dynamics (CFD) study,Gas Processing,2023.
7. F. Pourghorban, Z. Rahimi ,& Ahar, M.S. Hatamipour,Performance evaluation of bubble column humidifier using various air distributors in a humidificationdehumidification desalination plant,Applied Thermal Engineering,pp. 120392,2023.
8. AK. Khanzada, HE. Al , Hazmi, B. ĩniataĳa, TM. Joseph, J. Majtac, SAM. Abdulrahman, SS. Albaseer, TA. Kurniawan, Z. arhimi , Ahar, S. Habibzadeh, J. Mĳkinia,,Hydrochar-nanoparticle integration for arsenic removal from wastewater: Challenges, possible solutions, and future horizon,Environmental Research,2023.
9. Z. Rahimi ,& Ahar, M.S. Hatamipour,Performance evaluation of a solar and vacuum assisted multi-stage humidification-dehumidification desalination system,Process Safety and Environmental Protection,2021.
10. Z. Rahimi ,& Ahar, M.S. Hatamipour, L. Rahimi Ahar,Air humidification-dehumidification process for desalination: A review,Progress in Energy and Combustion Science,2020.
11. L. Rahimi Ahar, Z. Rahimi ę Ahar.olvent effects: density functional theory studies of Trans-Cinnamaldehyde.Applied Chemistry Today.ĳĳĳĳ.
12. L. Rahimi Ahar, Z. Rahimi ę Ahar.IR spectroscopic study, HOMO-LUMO, NBO analysis, and some calculations on HĳO, HĳS, HĳSe and HĳTe by density functional method.Applied Chemistry Today.ĳĳĳĳ.
13. B. Al Maqbali, Z. Rahimi , Ahar, H. Mousa, GR. Vakili , Nezhaad,Proposing an ultrapure water unit

coupled to an existing reverse osmosis desalination plant and its exergy analysis, *International Journal of Thermodynamics*, 2022.

14. E. Ayati, Z. Rahimi, & Ahar, MS. Hatamipour, Y. Ghalavand, Performance evaluation of a heat pump-driven vacuum humidification-dehumidification desalination system, *Applied Thermal Engineering*, 2020.
15. Z. Rahimi, & Ahar, MS. Hatamipour, Y. Ghalavand, A. Palizvan, Comprehensive study on vacuum humidification-dehumidification (VHDH) desalination, *Applied Thermal Engineering*, 2020.
16. PM. Gholy Nejad, AR. Solaimany Nazar, Z. Rahimi Ahar, H. Rajati, Investigation on turbulent nanofluid flow in helical tube in tube heat exchangers, *Journal of Heat and Mass Transfer Research*, 2019.
17. E. Ayati, Z. Rahimi, & Ahar, MS. Hatamipour, Y. Ghalavand, Water productivity enhancement in variable pressure humidification dehumidification (HDH) desalination systems using heat pump, *Applied Thermal Engineering*, 2019.
18. Z. Rahimi, & Ahar, MS. Hatamipour, Y. Ghalavand, Experimental investigation of a solar vacuum humidification-dehumidification (VHDH) desalination system, *Desalination*, 2018.
19. Z. Rahimi, & Ahar, MS. Hatamipour, Y. Ghalavand, Solar assisted modified variable pressure humidification-dehumidification desalination system, *Energy Conversion and Management*, 2018.
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21. PM. Gholy Nejad, AR. Solaimany Nazar, Z. Rahimi Ahar, Z. Karami, Numerical study on the performance prediction of a proton exchange membrane (PEM) fuel cell, *Iranian Journal of Hydrogen & Fuel Cell*, 2017.
22. R. Zadghaffari, JS. Moghaddas, Z. Rahimiahhar, Numerical investigation of a burner configuration to minimize pollutant emissions, *APCBEE Procedia*, 2012.