



Mahmoud Sh Mahmoud

محمود شاكر محمود حسين الخفاجي

Assistant Professor

ACADEMIC TITLES

2020-12-31

Assistant Professor

PUBLICATIONS (25)

- A Review of Organic, Inorganic, and Eutectics Phase Change Materials for Cooling Photovoltaic Solar Panels**
Revue des Composites et des Matériaux Avancés-Journal of Composite and..., 2026 | 2026
- Review of the impact of cooling techniques on photovoltaic panel efficiency: Developments, effects, and challenges**
SAMARRA JOURNAL OF ENGINEERING SCIENCE AND RESEARCH 3 (4), 20-50, 2026 | 2026 | Cited: 4
- The Role of Perforated Pin Fins in Forced Convection for Heat Dissipation Systems**
Heat transfer 55 (4), 2490-2505, 2026 | 2026 | Cited: 3
- Enhancing Thermal Performance: A Comparative Study of Perforated and Solid Triangular Pin Fin Geometries in Heat Sinks**
Journal of Enhanced Heat Transfer, 2026 | 2026
- Study of prototypes for biofuel production Extraction from biodegradation in oxygen-free environments Processing Wastewater**
Solar Energy and Sustainable Development Journal 14 (1), 522-539, 2025 | 2025 | Cited: 7
- Exploring the Efficiency and Applications of Solar Central Receiver Systems: A Review**
Journal of Information Systems Engineering and Management 10 (56s), 609-614, 2025 | 2025
- Numerical Investigation for Y-Shaped Twisted Inserts With Trapezoidal Perforations in Heat Exchangers**
Heat Transfer | 2025 | Cited: 6
- Numerical Investigation of Thermal Performance for Turbulent Water Flow through Dimpled Pipe**
CFD Letters | 2024 | Cited: 11
- Investigate Air Well Turbines Performance for Power Generation by Tidal Waves in River.**
Al Nahrain Journal for Engineering Sciences | 2023 | Cited: 1
- Investigate air turbines performance for power generation by tidal waves in the river: A review**
Al-Salam Journal for Engineering and Technology | 2023 | Cited: 2
- Investigation of the thermal performance for a square duct with screwtape and twisted tape numerically**
International Journal of Mechanical Engineering 7 (No. 1), 685-688, 2022 | 2022 | Cited: 12
- Absorber with Triangular Cavity for a Linear Fresnel Collector investigated numerically**
International Journal of Mechanical Engineering 7 (1), 616-619, 2022 | 2022 | Cited: 3
- Concentrated solar central receiver thermal power plants: A review**
International Journal of Latest Engineering and Management Research (IJLEMR ...), 2021 | 2021
- Design and manufacturing solar receiver for central tower system**
2021
- Improving Solar Central Tower Receiver's Thermal Performance by a New Low Cost Coating Method.**
International Journal of Latest Engineering and Management Research (IJLEMR ...), 2021 | 2021
- Numerical investigation of conjugate combined convective heat transfer for internal laminar flow of Al₂O₃/water nanofluid through tube - Flat plate solar collector**
Journal of Engineering Science and Technology | 2021 | Cited: 11

CONTACT

Phone: 07712845553
Email: mahmoud.s.mahmoud@nahrainuniv.edu.iq
mahmoud.s.mahmoud@nahrainuniv.edu.iq

EDUCATION

بكلوريوس (09-01-1997)
Mechanical
Al Nahrain

ماجستير (09-01-2001)
Thermal Power
Al Nahrain

دكتوراه (09-01-2021)
Thermal Power
Al Nahrain

RESEARCH METRICS

h-index (Scopus)	8
h-index (GS)	8
Citations (Scopus)	233
Citations (GS)	291
Documents (Scopus)	15
Documents (GS)	23



17. **Optimizing the size for Solar Parabolic Trough Concentrator numerically**
Solar Energy 228, 1, 2021 | 2021 | Cited: 11
18. **Improvement of heat transfer for airflow through a solar air heater channel with cutoff desecrate baffles**
Journal of Green Engineering | 2020
19. **Solar Parabolic Trough Collector Tube Heat Transfer Analysis with Internal Conical Pin Fins**
Journal of Green Engineering 10 (10), 7422-7436., 2020 | 2020 | Cited: 23
20. **A Novel design of the solar central receiver to improve the performance of the central solar power tower plant**
IOP Conference Series: Materials Science and Engineering 928 (2), 022003, 2020 | 2020 | Cited: 8
21. **Improvement of Heat Transfer for Airflow through a Solar Air Heater Channel with Cut-Off Desecrate Baffles**
Journal of Green Engineering 10 (7), 4292–4308, 2020 | 2020 | Cited: 5
22. **Minimizing the Cosine Loss in a Solar Tower Power Plant by a Change in the Heliostat Position and Number**
Int. J. Eng. Adv. Technol.(IJEAT) 9, 2302-2304, 2020 | 2020 | Cited: 1
23. **Experimental Study to Evaluate Mist System Performance**
International Journal of Innovative Research in Advanced Engineering (IJIRAE ...), 2015 | 2015 | Cited: 11
24. **A storage domestic solar hot water system with a back layer of phase change material**
Experimental Thermal and Fluid Science 44, 174-181, 2013 | 2013 | Cited: 172
25. **Numerical analysis of fin-tube plate heat exchanger by using CFD technique**
Journal of Engineering and Applied Sciences | 2011