

# Tahir Abdul Hussain Ratlamwala

Professor

Pakistan Navy Engineering College

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## About

Dr. Tahir Abdul Hussain Ratlamwala is working as Professor in the Pakistan Navy Engineering College. Dr. Tahir Abdul Hussain Ratlamwala has a PhD in Renewable Energy. Dr. Tahir Abdul Hussain Ratlamwala has published 121 research articles & conference papers having a citation count of 1912, carried out 1 projects and filed 3 intellectual property.

## Qualifications

<b>PhD in Renewable Energy</b> University of Ontario Institute of Technology , Canada	2011 - 2013
<b>MS in Renewable Energy</b> American University of Sharjah , United Arab Emirates	2009 - 2011
<b>BS in Hydrogen Fuel Cells</b> American University of Sharjah , United Arab Emirates	2005 - 2009

## Experience

<b>Professor</b> Pakistan Navy Engineering College	2024- Present
<b>Associate Professor</b> Pakistan Navy Engineering College	2019 - 2024
<b>Assistant Professor</b> Pakistan Navy Engineering College	2017 - 2019
<b>Head Of Research Committee</b> Shaheed Zulfiqar Ali Bhutto Institute Of Science And Technolgy , 90 and 100 Clifton Campus	2016 - 2017
<b>Assistant Professor</b> Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology , 90 and 100 Clifton Campus	2016 - 2017
<b>Researcher</b> UOIT , 2000 Simcoe Street North Oshawa, Ontario L1H 7K4	2015 - 2015
<b>Assistant Professor</b> Eastern Mediterranean University , Department of Mechanical Engineeirng, Eastern Mediterranean University	2014 - 2015
<b>Assistant Professor</b> Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology , 90 and 100 Clifton Campus	2014 - 2014

## Awards

<b>School/College Best Researcher Awards-2021</b>	2022
<b>Academic Gold Medal</b> Governor General of Canada Gold Medal in Academics. This is the most prestigious Canadian Academic Award.	2014

## Professional Memberships

<b>PEC</b>	Since 2018
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Research Projects

National Projects

Hydrogen-Electric Energy Storage Mechanisms and Robustness Enhancement Research in Standalone Renewable Energy Systems with Wind and Solar2024

Funding Agency: PAKISTAN SCIENCE FOUNDATION AND NATIONAL NATURAL SCIENCE FOUNDATION CHINA

Amount: PKR 9,942,000.00

Status: Approved\_inprocess

International Projects

Research Articles

Mathematical modelling of a sustainable energy system for restaurant communities: Waste-to-H2 conversion, CO2 sequestration, clean fuel production, and power generation2025

Syed Muhammad Aun Rizvi Khurram Kamal Tahir Abdul Hussain Ratlamwala

Computers and Chemical Engineering , Volume 199, Article Number 109038

Impact Factor: 3.900 | Quartile: 2 | Citations: 1

DOI: <https://doi.org/10.1016/j.compchemeng.2025.109038>

Integrated energy, exergy, and environment (3E) analysis, and life cycle assessment of renewable sourced multigeneration system for optimized performance and environmental impact assessment2025

Sheikh Muhammad Ali Haider Tahir Abdul Hussain Ratlamwala Khurram Kamal Mohammed Alkahtani Muhammad Abid Haifeng Liu

Sustainable Energy Technologies and Assessments , Volume:80, Article Number 104368

Impact Factor: 7.00 | Quartile: 2

DOI: <https://doi.org/10.1016/j.seta.2025.104368>

Decarbonization pathways for Gas Turbines: A thermodynamic and lifecycle evaluation of hydrogen and biogas blends2025

Abdul Rafay Khokhar Tahir Abdul Hussain Ratlamwala Khurram Kamal Mohammed Alkahtani Sayem Zafar

International Journal of Hydrogen Energy , Volume:143, Pages561-581

Impact Factor: 8.300 | Quartile: 1

DOI: <https://doi.org/10.1016/j.ijhydene.2025.03.320>

Numerical prediction of ureter stone size using an integrated CFD-ML approach2025

Muhammad Mubashar Ashraf Khurram Kamal Muhammad Fahad N. F. M. Noor Tahir Abdul Hussain Ratlamwala

Neural Computing and Applications , Volume:37, Issue:7, Pages 5325-5341

Impact Factor: 4.500 | Quartile: 2

DOI: <https://doi.org/10.1007/s00521-024-10880-1>

Sustainable Hydrogen Storage and Methanol Synthesis Through Solar-Powered Co-Electrolysis Using SOEC2024

Muhammad Sajid Khan Muhammad Abid Chen Chen Juliana Hj Zaini Tahir Abdul Hussain Ratlamwala Ali Ahmed Alqahtani

Energy Storage , Volume:6, Issue:8, Article Number e70095

Impact Factor: 4.000 | Quartile: 3

DOI: <https://doi.org/10.1002/est2.70095>

An innovative renewable energy–based tri-generation system for electricity, LNG regasification and hydrogen production2024

Muhammad Sajid Khan Mao Zijian Muhammad Abid Mi Yan Tahir Abdul Hussain Ratlamwala Saadia Yousuf Chen Chen Muhammad Umer

International Journal of Hydrogen Energy , Volume: 52, Part A, Pages 13-21

Impact Factor: 7.2 | Quartile: 1 | Citations: 10

DOI: [10.1016/j.ijhydene.2023.10.187](https://doi.org/10.1016/j.ijhydene.2023.10.187)

Comparative analysis of a multi-generation system using different conventional & nano based working fuels2024

Tahir Abdul Hussain Ratlamwala Hafsa Javed Sana Naseem Khurram Kamal

International Journal of Hydrogen Energy , Volume:52, Part A Page:1-12

Impact Factor: 7.2 | Quartile: 1 | Citations: 2

DOI: [10.1016/j.ijhydene.2023.07.170](https://doi.org/10.1016/j.ijhydene.2023.07.170)

Thermal modelling and analysis of a novel solar integrated waste-to-energy plant for sustainable society2023

Muhammad Sajid Khan Tahir Abdul Hussain Ratlamwala Mi Yan Saadia Yousuf Muhammad Abid

International Journal of Hydrogen Energy , Volume 48, Issue 99, Pages 39286-39297

<b>Impact Factor: 7.2   Quartile: 1   Citations: 8</b> <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2023.07.188">https://doi.org/10.1016/j.ijhydene.2023.07.188</a>	
<b>Tool Health Classification in Metallic Milling Process Using Acoustic Emission and Long Short-Term Memory Networks: A Deep Learning Approach</b> <i>Fawad Khan Khurram Kamal Tahir Abdul Hussain Ratlamwala Mohammed Alkahtani Mohammed Almatani Senthana Mathavan</i> <i>IEEE Access</i> , Volume 11, Pages 126611-126633 <b>Impact Factor: 3.9   Quartile: 2   Citations: 6</b> <b>DOI:</b> <a href="https://doi.org/10.1109/ACCESS.2023.3328582">10.1109/ACCESS.2023.3328582</a>	2023
<b>Sustainable operations of a combined cycle power plant using artificial intelligence based power prediction</b> <i>Adeel Asghar Tahir Abdul Hussain Ratlamwala Khurram Kamal Mohammed Alkahtani Emad Mohammad Senthana Mathavan</i> <i>Heliyon</i> , Volume 9, Issue 9, Article Number e19562 <b>Impact Factor: 4.0   Quartile: 2   Citations: 7</b> <b>DOI:</b> <a href="https://doi.org/10.1016/j.heliyon.2023.e19562">https://doi.org/10.1016/j.heliyon.2023.e19562</a>	2023
<b>Stirnot Engine: A combination of Nitinol (shape memory alloy) and Gamma Stirling Engine</b> <i>Humayun Arif Syed Aqueel shah Tahir Abdul Hussain Ratlamwala Khurram Kamal Maqsood Ahmed</i> <i>Revista Mexicana de Fisica</i> , Volume 69, Issue 3, Pages 1-8 <b>Impact Factor: 1.702   Quartile: 3</b> <b>DOI:</b> <a href="https://doi.org/10.31349/RevMexFis.69.030601">10.31349/RevMexFis.69.030601</a>	2023
<b>Effect of Material Change on Stirnot Engine: A Combination of NiTiNOL (Shape Memory Alloy) and Gamma Stirling Engine</b> <i>Syed Aqueel shah Tahir Abdul Hussain Ratlamwala Khurram Kamal Maqsood Ahmed Khan Humayun Arif</i> <i>Materials</i> , Volume 16, Issue 8, Article Number 3257 <b>Impact Factor: 3.748   Quartile: 1   Citations: 3</b> <b>DOI:</b> <a href="https://doi.org/10.3390/ma16083257">10.3390/ma16083257</a>	2023
<b>Clean Energy Based Multigeneration System for Sustainable Cities: Thermodynamic, and Stability Analyses</b> <i>Uzair Bhatti Hamza Aamir Khurram Kamal Tahir Abdul Hussain Ratlamwala Fahad Alqahtani Mohammed Alkahtani Emad Mohammad Moath Alatefi</i> <i>Membranes</i> , Volume 13(3), Article Number 358 <b>Impact Factor: 4.562   Quartile: 1   Citations: 4</b> <b>DOI:</b> <a href="https://doi.org/10.3390/membranes13030358">https://doi.org/10.3390/membranes13030358</a>	2023
<b>Tool Health Monitoring of a Milling Process Using Acoustic Emissions and a ResNet Deep Learning Model</b> <i>Mustajab Ahmed Khurram Kamal Tahir Abdul Hussain Ratlamwala Ghulam Hussain Mejdal Alqahtani Mohammed Alkahtani Moath Alatefi Ayoub Alzabidi</i> <i>Sensors</i> , Volume 23(6), Article Number 3084 <b>Impact Factor: 3.847   Quartile: 2   Citations: 15</b> <b>DOI:</b> <a href="https://doi.org/10.3390/s23063084">https://doi.org/10.3390/s23063084</a>	2023
<b>Energy and Exergy Analysis of a Geothermal Sourced Multigeneration System for Sustainable City</b> <i>Sheikh Muhammad Ali Haider Tahir Abdul Hussain Ratlamwala Khurram Kamal Fahad Alqahtani Mohammed Alkahtani Emad Mohammad Moath Alatefi</i> <i>Energies</i> , Volume 16, Issue 4, Article Number 1616 <b>Impact Factor: 3.252   Quartile: 3   Citations: 6</b> <b>DOI:</b> <a href="https://doi.org/10.3390/en16041616">https://doi.org/10.3390/en16041616</a>	2023
<b>Simulation and modeling of copper-chlorine cycle, molten carbonate fuel cell alongside a heat recovery system named regenerative steam cycle and electric heater with the incorporation of PID controller in MATLAB/SIMULINK</b> <i>Haseeb Kamran Uzair Mudassir Abdul Moiz Ali Khurram Kamal Tahir Abdul Hussain Ratlamwala M Abbas Raza Karam Khan</i> <i>International Journal of Hydrogen Energy</i> , Article in Press <b>Impact Factor: 7.139   Quartile: 2   Citations: 5</b> <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2022.04.178">https://doi.org/10.1016/j.ijhydene.2022.04.178</a>	2022
<b>Modeling and Simulation of Solid Oxide Fuel Cell Integrated with Anaerobic Digester, Thermal Storage Unit and Solar Collector: A Net Zero Emission System</b> <i>Muhammad Nihal Naseer Khurram Kamal Muhammad Abid Asif Iqbal Hamdullah Khan Ch. Muhammad Zubair Sagar Kumar Tahir Abdul Hussain Ratlamwala Malik Muhammad Nauman</i> <i>International Journal of Photoenergy</i> , Volume 2022, Article ID 8790631, 17 pages <b>Impact Factor: 2.535   Quartile: 3   Citations: 1</b> <b>DOI:</b> <a href="https://doi.org/10.1155/2022/8790631">https://doi.org/10.1155/2022/8790631</a>	2022

<b>Thermo-environmental analysis and performance comparison of solar assisted single to multi-generation systems</b> <i>Muhammad Sajid Khan Muhammad Abid Mi Yan Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Exergy</i> , Volume 36, Issue 2-4, Pages 243-263 <b>Impact Factor:</b> 1.467   <b>Quartile:</b> 4   <b>Citations:</b> 3 <b>DOI:</b> 10.1504/IJEX.2021.118719	2022
<b>Fault classification of power plants using artificial neural network</b> <i>Muhammad Sabbar Hassan Khurram Kamal Tahir Abdul Hussain Ratlamwala</i> <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , Volume 44, No. 3, Pages 7665-7680 <b>Impact Factor:</b> 2.902   <b>Quartile:</b> 3   <b>Citations:</b> 4 <b>DOI:</b> 10.1080/15567036.2022.2113936	2022
<b>Machining of Carbon Steel under Aqueous Environment: Investigations into Some Performance Measures</b> <i>Mushtaq Ali Tahir Abdul Hussain Ratlamwala Ghulam Hussain Tauheed Shehbaz Riaz Muhammad Muhammad Aamir Khaled Giasin Danil Yurievich Pimenov</i> <i>Coatings</i> , Volume 12(8), Article Number 1203 <b>Impact Factor:</b> 3.236   <b>Quartile:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.3390/coatings12081203">https://doi.org/10.3390/coatings12081203</a>	2022
<b>Thermal and hydraulic analysis of slotted plate fins heat sinks using numerical and experimental techniques</b> <i>Khurram Altaf Adeel Tariq Syed Waqar Ahmad Ghulam Hussain Tahir Abdul Hussain Ratlamwala Hafiz Muhammad Ali</i> <i>Case Studies in Thermal Engineering</i> , Volume 35, Article Number 102109 <b>Impact Factor:</b> 4.724   <b>Quartile:</b> 1   <b>Citations:</b> 25 <b>DOI:</b> <a href="https://doi.org/10.1016/j.csite.2022.102109">https://doi.org/10.1016/j.csite.2022.102109</a>	2022
<b>Aerodynamic Analyses of Airfoils Using Machine Learning as an Alternative to RANS Simulation</b> <i>Shakeel Ahmed Khurram Kamal Tahir Abdul Hussain Ratlamwala Senthana Mathavan Ghulam Hussain Mohammed Alkahtani Marwan Bin Muhammad Alsultan</i> <i>Applied Sciences</i> , Volume 12(10), Article Number 5194 <b>Impact Factor:</b> 2.9   <b>Quartile:</b> 2   <b>Citations:</b> 21 <b>DOI:</b> <a href="https://doi.org/10.3390/app12105194">https://doi.org/10.3390/app12105194</a>	2022
<b>Energy, exergy and exergo-environmental impact assessment of a solid oxide fuel cell coupled with absorption chiller &amp; cascaded closed loop ORC for multi-generation</b> <i>Victor Adebayo Muhammad Abid Michael Adedeji Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Hydrogen Energy</i> , Volume 47, Issue 5, Pages 3248-3265 <b>Impact Factor:</b> 5.816   <b>Quartile:</b> 2   <b>Citations:</b> 55 <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2021.02.222">https://doi.org/10.1016/j.ijhydene.2021.02.222</a>	2022
<b>Failure classification in natural gas pipe-lines using artificial intelligence: A case study</b> <i>Abdul Manan Khurram Kamal Tahir Abdul Hussain Ratlamwala Muhammad Fahad Sheikh Abdul Ghani Abro Tayyab Zafar</i> <i>Energy Reports</i> , Volume 7, Pages 7640-7647 <b>Impact Factor:</b> 6.870   <b>Quartile:</b> 1   <b>Citations:</b> 20 <b>DOI:</b> <a href="https://doi.org/10.1016/j.egyr.2021.10.093">https://doi.org/10.1016/j.egyr.2021.10.093</a>	2021
<b>Thermodynamic analysis and comparison of different absorption cycles driven by evacuated tube solar collector utilizing hybrid nanofluids</b> <i>Muhammad Abid Muhammad Sajid Khan Tahir Abdul Hussain Ratlamwala Muhammad Nauman Malik Hafiz Muhammad Ali Quentin Cheok</i> <i>Energy Conversion and Management</i> , Volume 246, Article Number 114673 <b>Impact Factor:</b> 11.533   <b>Quartile:</b> 1   <b>Citations:</b> 67 <b>DOI:</b> <a href="https://doi.org/10.1016/j.enconman.2021.114673">https://doi.org/10.1016/j.enconman.2021.114673</a>	2021
<b>Life Cycle Assessment and Feasibility Study of Solar Based Multi- Generation System</b> <i>Eliezer Zahid Gill Tahir Abdul Hussain Ratlamwala Sheharyar Waseem Ghulam Hussain Mohammed Alkahtani Khurram Altaf</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 47, Article Number 101321 <b>Impact Factor:</b> 7.632   <b>Quartile:</b> 2   <b>Citations:</b> 6 <b>DOI:</b> <a href="https://doi.org/10.1016/j.seta.2021.101321">https://doi.org/10.1016/j.seta.2021.101321</a>	2021
<b>Performance assessment of a solar tower assisted combined cycle power plant using supercritical carbon dioxide as a heat transfer fluid</b> <i>Muhammad Sajid Khan Muhammad Abid Mi Yan Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Exergy</i> , Volume 36, Issue 1, Pages 30-55	2021

<b>Impact Factor:</b> 1.467   <b>Quartile:</b> 4   <b>Citations:</b> 4 <b>DOI:</b> doi/abs/10.1504/IJEX.2021.117603	
<b>Energy, exergy, exergo-economic and exergo-environmental analyses of solar based hydrogen generation system</b> <i>Eliezer Zahid Gill Ghulam Hussain Mohammed Alkahtani Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Hydrogen Energy</i> , Volume 46, Issue 57, Pages 29049-29064 <b>Impact Factor:</b> 5.816   <b>Quartile:</b> 2   <b>Citations:</b> 35 <b>DOI:</b> https://doi.org/10.1016/j.ijhydene.2020.07.100	2021
<b>Power prediction of waste heat recovery system for a cement plant using back propagation neural network and its thermodynamic modeling</b> <i>Ahmer Ali Khurram Kamal Tahir Abdul Hussain Ratlamwala Muhammad Fahad Sheikh Muhammad Arsalan</i> <i>International Journal of Energy Research</i> , Volume 45(6), Pages 9162-9178 <b>Impact Factor:</b> 4.672   <b>Quartile:</b> 1   <b>Citations:</b> 10 <b>DOI:</b> https://doi.org/10.1002/er.6444	2021
<b>Tool Health Monitoring Using Airborne Acoustic Emission and Convolutional Neural Networks: A Deep Learning Approach</b> <i>Khurram Kamal Tahir Abdul Hussain Ratlamwala Ghulam Hussain Muhammad Arslan Muhammad Fahad Sheikh Mahmood Anwar Khan Mohammed Alkahtani</i> <i>Applied Sciences</i> , Volume 11(6), Article Number 2734 <b>Impact Factor:</b> 2.838   <b>Quartile:</b> 2   <b>Citations:</b> 7 <b>DOI:</b> https://doi.org/10.3390/app11062734	2021
<b>Thermal and thermodynamic comparison of smooth and convergent-divergent parabolic trough absorber tubes with the application of mono and hybrid nanofluids</b> <i>Muhammad Sajid Khan Muhammad Abid Mi Yan Tahir Abdul Hussain Ratlamwala Ishrat Mubeen</i> <i>International Journal of Energy Research</i> , Pages 1-22 <b>Impact Factor:</b> 4.672   <b>Quartile:</b> 1   <b>Citations:</b> 31 <b>DOI:</b> https://doi.org/10.1002/er.6123	2021
<b>Modeling and Simulation of a Proton Exchange Membrane Fuel Cell Alongside a Waste Heat Recovery System Based on the Organic Rankine Cycle in MATLAB/SIMULINK Environment</b> <i>Sharjeel Ashraf Ansari Mustafa Khalid Khurram Kamal Tahir Abdul Hussain Ratlamwala Ghulam Hussain Mohammed Alkahtani</i> <i>Sustainability</i> , Volume 13(3), Article Number 1218 <b>Impact Factor:</b> 3.889   <b>Quartile:</b> 2   <b>Citations:</b> 40 <b>DOI:</b> https://doi.org/10.3390/su13031218	2021
<b>Thermal analysis of multigeneration system using geothermal energy as its main power source</b> <i>Sameer Adnan Ansari Mohammad Kazim Muhammad Areeb Khaliq Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Hydrogen Energy</i> , Volume 46, Issue 6, Pages 4724-4738 <b>Impact Factor:</b> 7.139   <b>Quartile:</b> 2   <b>Citations:</b> 52 <b>DOI:</b> https://doi.org/10.1016/j.ijhydene.2020.04.171	2021
<b>Comparative numerical and experimental analysis of thermal and hydraulic performance of improved plate fin heat sinks</b> <i>Adeel Tariq Khurram Altaf Syed Waqar Ahmad Ghulam Hussain Tahir Abdul Hussain Ratlamwala</i> <i>Applied Thermal Engineering</i> , Volume 182, Article Number 115949 <b>Impact Factor:</b> 6.465   <b>Quartile:</b> 1   <b>Citations:</b> 54 <b>DOI:</b> https://doi.org/10.1016/j.applthermaleng.2020.115949	2021
<b>Performance analysis of compressor-assisted two-stage triple effect absorption refrigeration cycle for power and cooling</b> <i>Chinedu Frank Okwose Muhammad Abid Tahir Abdul Hussain Ratlamwala</i> <i>Energy Conversion and Management</i> , Volume 227, Article Number 113547 <b>Impact Factor:</b> 11.533   <b>Quartile:</b> 1   <b>Citations:</b> 18 <b>DOI:</b> https://doi.org/10.1016/j.enconman.2020.113547	2021
<b>Thermo-environmental investigation of solar parabolic dish-assisted multi-generation plant using different working fluids</b> <i>Muhammad Abid Muhammad S. Khan Tahir Abdul Hussain Ratlamwala Khuram P. Amber</i> <i>International Journal of Energy Research</i> , Volume 44, Issue15, Pages 12376-12394 <b>Impact Factor:</b> 5.164   <b>Quartile:</b> 1   <b>Citations:</b> 19 <b>DOI:</b> https://doi.org/10.1002/er.5340	2020

<b>Techno-Economic Analysis of Glazed, Unglazed and Evacuated Tube Solar Water Heaters</b> <i>Syed Ali Raza Syed Sulman Ahmad Tahir Abdul Hussain Ratlamwala Ghulam Hussain Mohammed Alkhatani</i> <i>Energies</i> , Volume 13(23), Article Number 6261 <b>Impact Factor:</b> 3.004   <b>Quartile:</b> 3   <b>Citations:</b> 6 <b>DOI:</b> <a href="https://doi.org/10.3390/en13236261">https://doi.org/10.3390/en13236261</a>	2020
<b>Thermo-environ study of a concentrated photovoltaic thermal system integrated with Kalina cycle for multigeneration and hydrogen production</b> <i>Patrick Ayambire Tareq Al-Ansari Tahir Abdul Hussain Ratlamwala Olusola Bamisile Qi Huang Mustafa Dagbasi Victor Adebayo Eric C. Okonkwo</i> <i>International Journal of Hydrogen Energy</i> , Volume 45, Issue 51, Pages 26716-26732 <b>Impact Factor:</b> 5.816   <b>Quartile:</b> 2   <b>Citations:</b> 53 <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2020.07.029">https://doi.org/10.1016/j.ijhydene.2020.07.029</a>	2020
<b>Concentrated Solar Powered Novel Multi-Generation System: A Energy, Exergy, and Environmental Analysis</b> <i>Olusola Bamisile Qi Huang Mustafa Dagbasi Muhammad Abid Emmanuel C. Okafor Tahir Abdul Hussain Ratlamwala</i> <i>Journal of Solar Energy Engineering</i> , Volume 142 (5), Article Number 051005 <b>Impact Factor:</b> 2.384   <b>Quartile:</b> 3   <b>Citations:</b> 16 <b>DOI:</b> <a href="https://doi.org/10.1115/1.4046392">https://doi.org/10.1115/1.4046392</a>	2020
<b>Performance evaluation of compressor assisted multi-effect absorption refrigeration cycles for power and cooling using evacuated tube collectors</b> <i>Chinedu Frank Okwose Muhammad Abid Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Exergy</i> , Volume:32, Issue:3, Page:227-248 <b>Impact Factor:</b> 1.383   <b>Quartile:</b> 4   <b>Citations:</b> 2 <b>DOI:</b> 10.1504/IJEX.2020.108589	2020
<b>Performance evaluation of compressor assisted multi-effect absorption refrigeration cycles for power and cooling using evacuated tube collectors</b> <i>Chinedu Frank Okwose Muhammad Abid Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Exergy</i> , Volume 32 (3), Pages 227-248 <b>Impact Factor:</b> 1.383   <b>Quartile:</b> 4   <b>Citations:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1504/IJEX.2020.108589">https://doi.org/10.1504/IJEX.2020.108589</a>	2020
<b>Performance analysis of solar assisted multigenerational system using therminol VP1 based nanofluids: A comparative study</b> <i>Muhammad Sajid Khan Khuram Pervez Amber Hafiz Muhammad Ali Muhammad Abid Tahir Abdul Hussain Ratlamwala Samina Javed</i> <i>Thermal Science</i> , Volume 24, Issue 2, Pages 865-878 <b>Impact Factor:</b> 1.625   <b>Quartile:</b> 4   <b>Citations:</b> 17 <b>DOI:</b> <a href="https://doi.org/10.2298/TSCI180608062K">https://doi.org/10.2298/TSCI180608062K</a>	2020
<b>Impact of Sloshing on Fossil Fuel Loss during Transport</b> <i>Hafsa Mir Tahir Abdul Hussain Ratlamwala Ghulam Hussain Mohammed Alkhatani Mustufa Haider Abidi</i> <i>Energies</i> , Volume 13, Issue 10, Article Number 2625 <b>Impact Factor:</b> 3.004   <b>Quartile:</b> 3   <b>Citations:</b> 4 <b>DOI:</b> <a href="https://doi.org/10.3390/en13102625">https://doi.org/10.3390/en13102625</a>	2020
<b>Comparative energy, exergy and exergo-economic analysis of solar driven supercritical carbon dioxide power and hydrogen generation cycle</b> <i>Muhammad Abid Muhammad Sajid Khan Tahir Abdul Hussain Ratlamwala</i> <i>International Journal of Hydrogen Energy</i> , Volume 45, Issue 9, Pages 5653-5667 <b>Impact Factor:</b> 5.816   <b>Quartile:</b> 2   <b>Citations:</b> 52 <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2019.06.103">https://doi.org/10.1016/j.ijhydene.2019.06.103</a>	2020
<b>Geothermal and solar based mutligenerational system: A comparative analysis</b> <i>Sheharyar Waseem Tahir Abdul Hussain Ratlamwala Yawar Salman Abdallah Ayub Bham</i> <i>International Journal of Hydrogen Energy</i> , Volume 45, Issue 9, Pages 5636-5652 <b>Impact Factor:</b> 5.816   <b>Quartile:</b> 2   <b>Citations:</b> 37 <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2019.06.135">https://doi.org/10.1016/j.ijhydene.2019.06.135</a>	2020
<b>Energy and exergy analyses of the solar assisted multigeneration system with thermal energy storage system</b> <i>Tahir Abdul Hussain Ratlamwala Eliezer Z. Gill</i> <i>Energy Storage</i> , Volume 2 (1), Article Number e106, Pages 1-14 <b>Impact Factor:</b> -	2020

DOI: <https://doi.org/10.1002/est2.106>

**Entropy Generation Minimization in a Parabolic Trough Collector Operating With SiO<sub>2</sub>–Water Nanofluids Using the Genetic Algorithm and Artificial Neural Network**

2019

*Eric Chekwube Okonkwo Humphrey Adun Akinola A. Babatunde Muhammad Abid Tahir Abdul Hussain Ratlamwala*  
*Journal of Thermal Science and Engineering Applications*, Volume 12(3), Article No. 031007

**Impact Factor:** 1.544 | **Quartile:** 3 | **Citations:** 29

DOI: <https://doi.org/10.1115/1.4044755>

**Geothermal and solar energy-based multigeneration system for a district**

2019

*Tahir Abdul Hussain Ratlamwala Sheharyar Waseem Yawar Salman Abdallah Ayub Bham*  
*International Journal of Energy Research*, Volume 43, Issue 10, Pages 5230-5251

**Impact Factor:** 3.741 | **Quartile:** 1 | **Citations:** 27

DOI: 10.1002/er.4480

**Olive Leaf-Synthesized Nanofluids for Solar Parabolic Trough Collector-Thermal Performance Evaluation**

2019

*Eric Chekwube Okonkwo Edidiong A. Essien Doga Kavaz Muhammad Abid Tahir Abdul Hussain Ratlamwala*  
*Journal of Thermal Science and Engineering Applications*, Volume 11, Issue 4, Article Number 041009

**Impact Factor:** 1.544 | **Quartile:** 2 | **Citations:** 18

DOI: 10.1115/1.4043820

**Thermodynamic Performance Evaluation of a Solar Parabolic Dish Assisted Multigeneration System**

2019

*Muhammad Abid Muhammad Sajid Khan Tahir Abdul Hussain Ratlamwala*  
*American Society of Mechanical Engineers: Journal of Solar Energy Engineering*, Volume 141, Issue 6

**Impact Factor:** 1.641 | **Quartile:** 3 | **Citations:** 21

DOI: 10.1115/1.4044022

**Municipal solid waste based multigeneration system for different districts of Karachi**

2019

*Tahir Abdul Hussain Ratlamwala Syed Irtiza Ali Abdullah Riaz Syed Muhammad Hamza*  
*International Journal of Exergy*, Volume 29, Issue 2/3/4

**Impact Factor:** 0.958 | **Quartile:** 4 | **Citations:** 5

DOI: 10.1504/IJEX.2019.100368

**Geothermal and solar energy amalgamated multigeneration system escorting diverse needs of a district**

2019

*Tahir Abdul Hussain Ratlamwala Ammar Ahmed Raja Subhan Raza Jaffry Umair Zafar*  
*International Journal of Exergy*, Volume 29, Issue 2-4, Pages 318-349, Special Issue SI

**Impact Factor:** 0.958 | **Quartile:** 4 | **Citations:** 16

DOI: 10.1504/IJEX.2019.100369

**Energy, exergy, exergoeconomic, and exergoenvironmental study of a parabolic trough collector using a converging-diverging receiver tube**

2019

*Eric Chekwube Okonkwo Tahir Abdul Hussain Ratlamwala Muhammad Abid*  
*International Journal of Exergy*, Volume 29, Issue 2/3/4, Pages: 131-154, Special Issue SI

**Impact Factor:** 0.958 | **Quartile:** 4

**Comparative Study of Heat Transfer Enhancement in Parabolic Trough Collector Based on Modified Absorber Geometry**

2019

*Eric Chekwube Okonkwo Muhammad Abid Tahir Abdul Hussain Ratlamwala*  
*American Society of Civil Engineers- Journal of Energy Engineering*, Volume 145, Issue 3

**Impact Factor:** 1.341 | **Quartile:** 3 | **Citations:** 27

DOI: 10.1061/(ASCE)EY.1943-7897.0000602

**Optimal analysis of entropy generation and heat transfer in parabolic trough collector using green-synthesized TiO<sub>2</sub>/Water nanofluids**

2018

*Eric C. Okonkwo Muhammad Abid TAHIR ABDUL HUSSAIN RATLAMWALA Serkan Abbasoglu Mustafa Dagbasi*  
*JOURNAL OF SOLAR ENERGY*, NULL

**Impact Factor:** 1.190 | **Quartile:** 3 | **Citations:** 24

DOI: 10.1115/1.4041847

**Techno-environmental analysis of a parabolic dish assisted recompression with and without reheat s-CO<sub>2</sub> Brayton cycle**

2018

*Muhammad Abid Muhammad Sajid Khan Tahir Abdul Hussain Ratlamwala*  
*International Journal of Exergy*, Volume 27, Issue 4, Pages 527-552

**Impact Factor:** 1.13 | **Quartile:** 3 | **Citations:** 9

DOI: 10.1504/IJEX.2018.096014

<b>Effects of synthetic-oil nanofluids and absorber geometries on the exergetic performance of the parabolic trough collector</b> <i>Eric C. Okonkwo Muhammad Abid TAHIR ABDUL HUSSAIN RATLAMWALA</i> <i>International Journal of Energy Research</i> , NULL <b>Impact Factor:</b> 3.343   <b>Quartile:</b> 1   <b>Citations:</b> 31 <b>DOI:</b> 10.1002/er.4099	2018
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<b>Development of a new heliostat field based integrated solar energy system for cogeneration</b> <i>M. Rabbani Tahir Abdul Hussain Ratlamwala Ibrahim Dincer</i> <i>Arabian Journal for Science and Engineering</i> , Vol: 43, Pages:1267-1277 <b>Impact Factor:</b> 1.711   <b>Quartile:</b> 3   <b>Citations:</b> 14 <b>DOI:</b> 10.1007/s13369-017-2774-x	2018
<b>Energy and exergy analyses of hybrid photocatalytic hydrogen production reactor for Cu-Cl cycle</b> <i>Tahir Abdul Hussain Ratlamwala Ibrahim Dincer</i> <i>International Journal of Hydrogen Energy</i> , Volume 43, Issue 9, Pages 4167-4176 <b>Impact Factor:</b> 4.084   <b>Quartile:</b> 2   <b>Citations:</b> 5 <b>DOI:</b> 10.1016/j.ijhydene.2017.12.138	2018
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<b>An Experimental Study on the Deterioration of Paint Coatings in the Bilges of a Sea Vessel</b> <i>Tanzila Younus Syed Aqueel shah Tahir Abdul Hussain Ratlamwala</i> <i>Mehran University Research Journal of Engineering and Technology</i> , Volume 35, Issue 2, Pages 171-180 <b>Impact Factor:</b> N/A	2016
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<b>Mathematical Modeling of A Sustainable Energy System for Restaurant Communities: Waste-To-H2 Conversion, Co2 Mitigation, Clean Fuel Production, and Power Generation</b> <i>Syed Muhammad Aun Rizvi Khurram Kamal Tahir Abdul Hussain Ratlamwala Muhammad Fahad Sheikh</i> <i>14th International Conference on Hydrogen Production</i> , res.country(186,) <b>Citations:</b> N/A <b>DOI:</b> <a href="https://www.hbku.edu.qa/en/ICH2P23">https://www.hbku.edu.qa/en/ICH2P23</a>	2023
<b>A Net-Zero Emission System with Biogas-Fed Solid Oxide Fuel Cell for Hydrogen Production to Advance Sustainability in the Textile Industry</b> <i>Baraka Abbas Hooreen Ansari Kabsha Zain Wasifa Umer Abeeha Fatima Khurram Kamal Tahir Abdul Hussain Ratlamwala</i> <i>14th International Conference on Hydrogen Production</i> , res.country(186,) <b>Citations:</b> N/A <b>DOI:</b> <a href="https://www.hbku.edu.qa/en/ICH2P23">https://www.hbku.edu.qa/en/ICH2P23</a>	2023
<b>Design, Development and Investigation of Solar-Integrated Co-Electrolysis for Methanol Production</b>	2023

<p><i>Muhammad Sajid Khan Muhammad Abid Chen Chen Juliana Hj Zaini Tahir Abdul Hussain Ratlamwala</i>  14th International Conference on Hydrogen Production, res.country(186,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> <a href="https://www.hbku.edu.qa/en/ICH2P23">https://www.hbku.edu.qa/en/ICH2P23</a></p>	
<p><b>An Integrated Life Cycle Assessment and Supply Chain Analysis of A Multi-Generation System for Renewable Clean Power and Green Hydrogen Production</b></p> <p><i>Tahir Abdul Hussain Ratlamwala Sheikh Muhammad Ali Haider Khurram Kamal</i>  14th International Conference on Hydrogen Production, res.country(186,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> <a href="https://www.hbku.edu.qa/en/ICH2P23">https://www.hbku.edu.qa/en/ICH2P23</a></p>	2023
<p><b>Performance Analysis of A Solar Assisted Optimized Combined Heat Power Plant Utilizing A Heat Recovery Steam Generator (Hrsg) for Hydrogen Production and Multiple Outputs</b></p> <p><i>Yawar Salman Sheharyar Waseem Syed Sulman Ahmad Tahir Abdul Hussain Ratlamwala</i>  13th International Conference on Hydrogen Production, res.country(177,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> Nil</p>	2022
<p><b>Thermal, Exergy, and Economic Analysis of The Fuel Cell Based Multigeneration System Integrated with Iso-Butane Power Cycle</b></p> <p><i>Eliezer Zahid Gill Tahir Abdul Hussain Ratlamwala Sheharyar Waseem Yawar Salman</i>  13th International Conference on Hydrogen Production, res.country(177,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> Nil</p>	2022
<p><b>Thermodynamic Analysis of A Geothermal Based Integrated Multigeneration System and Prediction of Outputs Via Back Propagation Neural Network using Matlab</b></p> <p><i>Abdul Shakoor Tahir Abdul Hussain Ratlamwala Khurram Kamal Assad Anis</i>  13th International Conference on Hydrogen Production, res.country(177,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> Nil</p>	2022
<p><b>An Innovative Renewable Energy Based Trigeneration System for Electricity, Lng and Hydrogen Production</b></p> <p><i>Muhammad Khan Muhammad Abid Mi Yan Tahir Abdul Hussain Ratlamwala Saadia Yusuf</i>  13th International Conference on Hydrogen Production, res.country(177,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> Nil</p>	2022
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<p><b>Thermal analysis of multigeneration system using geothermal energy as its main power source</b></p> <p><i>Sameer Adnan Ansari Mohammad Kazim Muhammad Areeb Khaliq Tahir Abdul Hussain Ratlamwala</i>  <i>8th Global Conference on Global Warming , res.country(186,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> N/A</p>	2019
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<p><b>Geothermal and solar based multigeneration system- A comparative analysis</b></p> <p><i>Tahir A.H. Ratlamwala Sheharyar Waseem Abdullah Ayub Bham Yawar Salman</i>  <i>10th International Exergy, Energy, and Environment Symposium, res.country(178,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> <a href="http://www.ieees-10.gig.eu/">http://www.ieees-10.gig.eu/</a></p>	2018
<p><b>Geothermal and solar energy amalgamated multigeneration sysrtem escorting diverse needs of a district</b></p> <p><i>Tahir Abdul Hussain Ratlamwala Ammar Ahmed Raja Subhan Raza Jaffry Umair zafar</i>  <i>7th Global Conference on Global Warming (GCGW - 2018) , res.country(224,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> <a href="http://gcgw.org/gcgw18/">http://gcgw.org/gcgw18/</a></p>	2018
<p><b>Geothermal and solar energy based multigeneration system for a district</b></p> <p><i>Tahir Abdul Hussain Ratlamwala Sheharyar Waseem Abdallah Ayub Bham Yawar Salman</i>  <i>7th Global Conference on Global Warming (GCGW - 2018) , res.country(224,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> <a href="http://gcgw.org/gcgw18/">http://gcgw.org/gcgw18/</a></p>	2018
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Editorial Activities

<b>Comprehensive Energy Systems</b> Edited Journal Issue / Proceeding / Book	2025
<b>Renewable Energy</b> Reviewed Papers for Journals Impact Factor: 9.0	2025
<b>Energy Storage</b> Reviewed Papers for Journals Impact Factor: 3.6	2024
<b>Proceedings of the Institution of Mechanical Engineers, Part E</b> Reviewed Papers for Journals Impact Factor: 2.3	2024
<b>Science China Technological Sciences</b> Reviewed Papers for Journals Impact Factor: 4.4	2024
<b>Energy Storage</b> Reviewed Papers for Journals Impact Factor: 3.6	2024
<b>International journal of sustainable energy</b> Reviewed Papers for Journals Impact Factor: N/A	2024
<b>Energy Sources Part A-Recovery Utilization and Environmental Effects</b> Reviewed Papers for Journals Impact Factor: 2.9	2024
<b>Energy</b> Reviewed Papers for Journals Impact Factor: 9	2024
<b>IET Renewable Power Generation</b> Reviewed Papers for Journals Impact Factor: 2.6	2024
<b>Journal of mechanical engineering science</b> Reviewed Papers for Journals Impact Factor: 2	2024
<b>Energy Conversion and Management</b> Reviewed Papers for Journals Impact Factor: 10.4	2024
<b>Journal of Energy Storage</b> Reviewed Papers for Journals Impact Factor: 9.4	2024
<b>International Journal of Hydrogen Energy</b> Reviewed Papers for Journals Impact Factor: 7.2	2023
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<b>International Journal of Green Energy</b> Reviewed Papers for Journals Impact Factor: 3.3	2023
<b>Heliyon</b> Reviewed Papers for Journals Impact Factor: 4.0	2023
<b>Sensors</b> Reviewed Papers for Journals	2023

<b>Impact Factor: 3.9</b>	
<b>International Journal of Energy Research</b> Reviewed Papers for Journals <b>Impact Factor: 5.164</b>	2023
<b>Modelling and Simulation in Engineering</b> Reviewed Papers for Journals <b>Impact Factor: 3.2</b>	2023
<b>Sustainability</b> Reviewed Papers for Journals <b>Impact Factor: 3.9</b>	2023
<b>International Journal of Energy Research</b> Reviewed Papers for Journals <b>Impact Factor: 4.672</b>	2023
<b>Sustainability</b> Reviewed Papers for Journals <b>Impact Factor: 3.9</b>	2023
<b>IET Renewable Power Generation</b> Reviewed Papers for Journals <b>Impact Factor: 2.6</b>	2023
<b>Sustainability</b> Reviewed Papers for Journals <b>Impact Factor: 3.9</b>	2023
<b>Applied Sciences</b> Edited Journal Issue / Proceeding / Book <b>Impact Factor: 2.838</b>	2023
<b>Sustainable Energy Technologies and Assessments</b> Reviewed Papers for Journals <b>Impact Factor: 7.632</b>	2023
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<b>International Journal of Energy Research</b> Reviewed Papers for Journals <b>Impact Factor: 4.6</b>	2023
<b>Engineering Reports</b> Reviewed Papers for Journals <b>Impact Factor: 2.0</b>	2023
<b>International Journal of Hydrogen Energy</b> Reviewed Papers for Journals <b>Impact Factor: 7.200</b>	2023
<b>Processes</b> Reviewed Papers for Journals <b>Impact Factor: 3.5</b>	2023
<b>International Journal of Energy Research</b> Reviewed Papers for Journals <b>Impact Factor: 4.672</b>	2023
<b>Forests</b> Reviewed Papers for Journals <b>Impact Factor: 3.282</b>	2023
<b>International Journal of Thermofluids is a peer reviewed</b> Reviewed Papers for Journals <b>Impact Factor: N/A</b>	2023
<b>Energy Sources Part A-Recovery Utilization and Environmental Effects</b>	2023



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<b>Energy Reports</b> Reviewed Papers for Journals <b>Impact Factor:</b> 4.937	2022
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