

Adeel Waqas Ahmad

Professor

US-Pakistan Center for Advanced Studies in Energy

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About

Dr. Adeel Waqas Ahmad is working as Professor in the US-Pakistan Center for Advanced Studies in Energy. Dr. Adeel Waqas Ahmad has a PhD in Energy. Dr. Adeel Waqas Ahmad has published 105 research articles & conference papers having a citation count of 2917, carried out 17 projects and filed 0 intellectual property.

Qualifications

PhD in Energy Asian University of Science and Technology , Thailand	2007 - 2011
MS in Energy Fachhochschule Offenburg, Hochschule für Technik und Wirtschaft , Germany	2002 - 2005
BS in Mechanical UET Lahore , Pakistan	1997 - 2001

Experience

Professor US-Pakistan Center for Advanced Studies in Energy	2024- Present
Professor US-Pakistan Center for Advanced Studies in Energy	2022 - 2022
Professor US-Pakistan Center for Advanced Studies in Energy	2021 - 2012
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2019 - 2022
Associate Professor US-Pakistan Center for Advanced Studies in Energy	2018 - 2019
Assistant Professor US-Pakistan Center for Advanced Studies in Energy	2014 - 2018
Assistant Professor Centre for Energy System	2012 - 2014
Assistant Professor School of Mechanical & Manufacturing Engineering	2012 - 2021
Post Doctorate Researcher University of Science and Technology of China , China	2016 - 2018
Assistant Professor NUST , H12 Campus	2011 - 2012
Assistant director PCRET , H-9	2005 - 2007
Research engineer German Aerospace Center , Pfaffenwaldring 38-40, 70569 Stuttgart, Germany	2004 - 2005

Awards

Postdoct Scholarship

2016

Awarded Post doc scholarship for 2016-17 under Chinese academy of sciences

Professional Memberships

PEC

Research Projects

National Projects

Developing Climate Resilience Environment through Energy Transition and Knowledge Development

2024

Funding Agency: TARA Climate Foundation

Amount: PKR 22,401,960.00

Status: Approved_inprocess

Integration of Flexible Solar PV Devices for Solar Fabric Application

2024

Funding Agency: NUST Projects Sectt

Amount: PKR 520,000.00

Status: Approved_inprocess

Creating Climate Resilience through Energy Transition: Fostering Innovation and Awareness in Pakistan

2023

Funding Agency: Tara Climate Ltd

Amount: PKR 18,900,120.00

Status: Approved_inprocess

Hybrid Concentrated Solar Power for Industrial and Domestic Applications

2024

Funding Agency: Pakistan Science Foundation

Amount: PKR 3,590,000.00

Status: Approved_inprocess

To combat climate calamity by promoting energy transition In Pakistan through Knowledge creation, networking, and advocacy for enabling society.

2022

Funding Agency: Tara Climate Ltd

Amount: PKR 11,312,840.00

Status: Completed

Indigenous Design, Manufacturing & Testing of Electric Vehicle Components for Sustainable Market Development

2022

Funding Agency: HEC

Amount: PKR 113,159,267.00

Status: Completed

Indoor Thermal Comfort, Air Quality and Energy Management of Selected Hospitals in Islamabad Capital Territory

2022

Funding Agency: NUST

Amount: PKR 940,000.00

Status: Approved_inprocess

Solar Driven Building Integrated Heating, Cooling and Electricity Generation System

2022

Funding Agency: HEC

Amount: PKR 8,590,000.00

Status: Completed

Solar Assisted Desiccant Dehumidification System for Industrial Applications in Pakistan

2021

Funding Agency: NUST

Amount: PKR 300,000.00

Status: Completed

Introducing an Automatic and Economic Surface-Cleaning Set-up to Optimize the Electricity Production of PV Panels Based on the Study of Dusty / Polluted Atomsphere Impact on the Electricity Production

2019

Funding Agency: PSF

Amount: PKR 701,046.00

Status: Completed

A Novel Solar Powered CCHP system Based on Evacuated Flat plate PV/T Collectors and Organic Rankine Cycle Funding Agency: PSF Amount: PKR 9,935,000.00 Status: Completed	2018
Solar Space Heating Systems Integrated with Thermal Energy Storage Funding Agency: USAID Amount: PKR N/A Status: Completed	2018
Solar Space Heating of the SMME Building Funding Agency: HEC Amount: PKR 500,000.00 Status: Completed	2012
International Projects	

Industry Projects

National Projects	
Establishment of Solar Energy Training Lab- Advancing Solar PV Technology and Skills Client: ATLAS Group of Companies, Pvt. Ltd. Amount: PKR 1,660,000.00 Status: Completed	2024
External, mid-term evaluation of SoLAR Project - Pakistan Client: Swiss Agency for Development and Cooperation (SDC) Amount: PKR 575,750.00 Status: Completed	2023
Overview of Pakistan’s Power Sector and its Future Outlook Client: China Three Gorges Corporation (CTC) Amount: PKR 1,000,000.00 Status: Completed	2022
Sustainable Energy Initiative for Industries in Pakistan: Provision of services for the Implementation of Energy Management System within organizations in the Food/Dairy and the Steel/Foundry/Auto sectors in the Punjab region, aiming at energy optimization interventions and ISO 50001:2018 certification Client: UNIDO / GEF Amount: PKR 3,500,000.00 Status: Approved_inprocess	2019

International Projects

Research Articles

Experimental study of solar-powered atmospheric water generator for extracting potable water from air <i>Syed Shabir Ahmed Ranjeet Kumar Nadia Shahzad Adeel Waqas Ahmad Naveed Hussain Roha Shahzad Naseem Iqbal Muhammad Imran Shahzad</i> <i>Chemical Engineering Research and Design</i> , Volume:219, Page:388-396 Impact Factor: 3.900 Quartile: 2 DOI: https://doi.org/10.1016/j.cherd.2025.06.015	2025
Dynamic performance evaluation of PCM-based PVT systems: combined impact of design modifications and Nanofluids <i>Adeel Waqas Ahmad Majid Ali Nusrat Jabeen</i> <i>Journal of Energy Storage</i> , Volume 121, Article Number 116645 Impact Factor: 8.900 Quartile: 1 Citations: 1 DOI: https://doi.org/10.1016/j.est.2025.116645	2025
Condition Monitoring of Photovoltaic Panels Through Electrical Impedance Spectroscopy and Machine Learning Focusing on Temperature, Dust, and Microcracks <i>Saeed Iqbal Syed Maaz Hasan Yasar Ayaz Emad Ud Din Adeel Waqas Ahmad Muhammad Sajid</i> <i>IEEE Access</i> , Volume:13, Pages 53039-53052 Impact Factor: 3.400 Quartile: 2 DOI: https://doi.org/10.1109/access.2025.3550738	2025

Repeatability of instantaneous position in rotational motion of a submerged Savonius turbine driven by water surface waves using image processing: an experimental investigation <i>Majid Khan Dr Ali Abbas Kazmi Dr Shafiq ur Rehman Adeel Waqas</i> <i>Journal of Ocean Engineering and Marine Energy</i> , Pages:19 Impact Factor: 1.6 Quartile: 3 Citations: 2 DOI: doi.org/10.1007/s40722-024-00353-x	2024
Data analysis and review of the research landscape in performance-enhancing thermal management strategies of photovoltaic technology <i>Sheher Yar Khan Shuli Liu Mahesh Kumar Abdur Rehman Mazhar Yongliang Shen Tingsen Chen Adeel Waqas Shaoliang Zhang Jasur Rashidov</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 70, October 2024 Impact Factor: 7.100 Quartile: 1 Citations: 7 DOI: 10.1016/j.seta.2024.103938	2024
Thermal management of lithium-ion batteries using Kraft paper honeycomb wall based novel cooling system for electric vehicles- An experimental investigation <i>Kashif Mushtaq Hassan Abdullah Khalid Hassan Nazir Naseem Iqbal Majid Ali Aamir Khan Adeel Waqas</i> <i>Journal of Energy Storage</i> , Volume 97, Part A , Article Number 112677 Impact Factor: 8.900 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1016/j.est.2024.112677	2024
An effective parametric sensitivity analysis to improve electrical and thermal energy/exergy efficiency of PVT system using nanofluid <i>Nusrat Jabeen Hafiz Ali Haider Adeel Waqas Majid Ali</i> <i>Process Safety and Environmental Protection</i> , Volume 189, Pages 1037-1051 Impact Factor: 6.900 Quartile: 1 Citations: 9 DOI: https://doi.org/10.1016/j.psep.2024.06.132	2024
Experimental investigation of eutectic PCM incorporated clay brick for thermal management of building envelope <i>Samad Ali Taj Waqas Khalid Hassan Nazir Aamir Khan Muhammad Sajid Adeel Waqas Arsalan Hussain Majid Ali Sheikh Ahmad Zaki</i> <i>Journal of Energy Storage</i> , Volume 84, Part A, Article Number 110838 Impact Factor: 8.900 Quartile: 1 Citations: 16 DOI: https://doi.org/10.1016/j.est.2024.110838	2024
Experimental, numerical, and 4E assessment of photovoltaic module using macro-encapsulation of pure and nano phase change material: A comparative analysis <i>Sheher Yar Khan Adeel Waqas Mahesh Kumar Shuli Liu Yongliang Shen Tingsen Chen Muhammad Shoaib Muhammad Omair Khan</i> <i>Energy</i> , Volume:290, Article Number: 130162 Impact Factor: 8.9 Quartile: 1 Citations: 21 DOI: 10.1016/j.energy.2023.130162	2024
Unlocking the potential of passive cooling: A comprehensive experimental study of PV/PCM/TEC hybrid system for enhanced photovoltaic performance <i>Ayesha Khan Nadia Shahzad Adeel Waqas Mariam Mahmood Majid Ali Shayan Umar</i> <i>Journal of Energy Storage</i> , Volume 80, Article Number: 110277 Impact Factor: 9.4 Quartile: 1 Citations: 28 DOI: 10.1016/j.est.2023.110277	2024
Sustainable urban energy solutions: Forecasting energy production for hybrid solar-wind systems <i>Ali Javaid Muhammad Sajid Emad Uddin Adeel Waqas Yasar Ayaz</i> <i>Energy Conversion and Management</i> , Volume 302, Article Number 118120 Impact Factor: 10.4 Quartile: 1 Citations: 40 DOI: https://doi.org/10.1016/j.enconman.2024.118120	2024
Pn@MF@SiO₂ Double-Shelled Phase Change Microcapsules with High Latent Heat and Low Leakage Rate <i>Yujiao Li Tianyu Cai Zhuoni Jiang Fangfang He Zhengguo Chen Hafiz Muhammad Ali Nadia Shahzad Adeel Waqas Ahmad Yongsheng Li Wenbin Yang</i> <i>ChemistrySelect</i> , Volume 9, Issue 5, Article Number 113666 Impact Factor: 1.900 Quartile: 2 Citations: 1 DOI: https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/slct.202303322	2024
Self-cleaning study of SiO₂ modified TiO₂ nanofibrous thin films prepared via electrospinning for application in solar cells <i>Izzah Batool Nadia Shahzad Roha Shehzad Aamir Naseem Satti Rabia Liaquat Adeel Waqas Muhammad Imran Shahzad</i>	2024

Solar Energy , Volume 268, Article Number 112271

Impact Factor: 6.700 | **Quartile:** 2 | **Citations:** 20

DOI: 10.1016/j.solener.2023.112271

Thermodynamic analysis of different modes of a multigeneration SOFC-CCHP system with freshwater production and LNG cold energy utilization

2023

Muhammad Uzair Azhar Mustafa Anwar Uneeb Masood Khan Muhammad Hassan Muhammed Ali S.A. Adeel Waqas Mahendra Rao Somalu Dr. Faisal Alreshedi

Energy Conversion and Management , Volume 297, Article Number 117730

Impact Factor: 10.4 | **Quartile:** 1 | **Citations:** 25

DOI: <https://doi.org/10.1016/j.enconman.2023.117730>

Techno-economic assessment of wind farm for sustainable power generation in Northern coastal region of Arabian sea

2023

Muhammad Zaid Masood Khan Hafiz Muhammad Abdur Rehman Abdul Kashif Janjua Adeel Waqas Sehar Shakir Majid Ali

Energy Reports , Volume 9, Pages 1278-1290

Impact Factor: 4.937 | **Quartile:** 2 | **Citations:** 5

DOI: <https://doi.org/10.1016/j.egy.2022.12.057>

TC@MF phase change microcapsules with reversibly thermochromic property for temperature response and thermoregulation

2023

Yujiao Li Aoshuang Yang Yongsheng Li Zhuoni Jiang Fangfang He Zhengguo Chen Xiaolan Li Zafar Said Nadia Shahzad Adeel Waqas Wenbin Yang

Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 677, Part A, Article Number 132333

Impact Factor: 5.2 | **Quartile:** 2 | **Citations:** 24

DOI: <https://doi.org/10.1016/j.colsurfa.2023.132333>

A building integrated solar PV surface-cleaning setup to optimize the electricity output of PV modules in a polluted atmosphere

2023

Shayan Umar Adeel Waqas Waqas Tanveer Nadia Shahzad Abdul Kashif Janjua Maziar Dehgan Muhammad Salik Qureshi Sehar Shakir

Renewable Energy , Volume 216, Article Number 119122

Impact Factor: 8.7 | **Quartile:** 1 | **Citations:** 19

DOI: <https://doi.org/10.1016/j.renene.2023.119122>

Comparison of Techno-Economic Models for Upgrading PV System without Net-Metering Option and Long-Term Impact on Energy Bills

2023

Arslan Ahmed Syed Ali Abbas Kazmi Mustafa Anwar Adeel Waqas

Pakistan Journal of Engineering and Technology (PAKJET), Volume 6, No. 3, Pages 16-24

Impact Factor: 0

DOI: <https://doi.org/10.51846/vol6iss3pp16-24>

Experimental study to optimize the thermal performance of Li-ion cell using active and passive cooling techniques

2023

Umer Iqbal Majid Ali Hassan Abdullah Khalid Adeel Waqas Mariam Mahmood Naveed Ahmed Nadia Shahzad Naseem Iqbal Khurram Mehboob

Journal of Energy Storage, Volume 70, Article Number 108013

Impact Factor: 9.4 | **Quartile:** 1 | **Citations:** 9

DOI: <https://doi.org/10.1016/j.est.2023.108013>

Performance Evaluation of an Evacuated Flat-Plate Collector System for Domestic Hot Water Applications

2023

Hamza Saeed Mariam Mahmood Hassan Nazir Adeel Waqas Naveed Ahmed Majid Ali Abdul Haseeb Muhammad Bilal Sajid

Journal of Solar Energy Engineering, Transactions of the ASME, Volume 145, Issue 5, Article Number:051006, Pages:12

Impact Factor: 2.3 | **Quartile:** 3 | **Citations:** 3

DOI: 10.1115/1.4056790

Nanotechnology-integrated phase change material and nanofluids for solar applications as a potential approach for clean energy strategies: Progress, challenges, and opportunities

2023

Zafar Said Maham Aslam Sohail Adarsh Kumar Pandey Prabhakar Sharma Adeel Waqas Wei-Hsin Chen Phuoc Quy Phong Nguyen Van Nhanh Nguyen

Nguyen Dang Khoa Pham Xuan Phuong Nguyen

Journal of Cleaner Production, Volume 416, Article Number 137736

Impact Factor: 11.1 | **Quartile:** 1 | **Citations:** 71

DOI: <https://doi.org/10.1016/j.jclepro.2023.137736>

Numerical analysis of a novel solar air heater design with V-ribs and jet cooling

2023

Muhammad haroon Iqbal Naveed Ahmed Majid Ali Mumtaz A Qaisrani Mariam Mahmood Adeel Waqas Wasif Iqbal Muhammad Bilal Sajid

Sustainable Energy Technologies and Assessments, Volume 57, Article Number 103252

Impact Factor: 7.632 Quartile: 2 Citations: 23 DOI: doi.org/10.1016/j.seta.2023.103252	
Techno-economic appraisal of electric vehicle charging stations integrated with on-grid photovoltaics on existing fuel stations: A multicity study framework <i>Talha Hussain Shah Altamash Shabbir Adeel Waqas Abdul Kashif Janjua Nadia Shahzad Hina Pervaiz Sehar Shakir</i> <i>Renewable Energy</i> , Volume 209, Pages 133-144 Impact Factor: 8.634 Quartile: 1 Citations: 40 DOI: https://doi.org/10.1016/j.renene.2023.03.128	2023
Performance assessment of Trombe wall and south façade as applications of building integrated photovoltaic systems <i>Muhammad Siddique Nadia Shahzad Shayan Umar Adeel Waqas Sehar Shakir Abdul Kashif Janjua</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 57, Article Number 103141 Impact Factor: 7.632 Quartile: 2 Citations: 19 DOI: https://doi.org/10.1016/j.seta.2023.103141	2023
Accelerated UV stress testing and characterization of PV-modules: Reliability analysis using different encapsulants and glass sheets <i>Muhammad Farooq Azam Nadia Shahzad Arslan Rafique Mudassar Ayub Hassan Abdullah Khalid Adeel Waqas Ahmad</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 56, Article Number 103119 Impact Factor: 7.632 Quartile: 2 Citations: 5 DOI: https://doi.org/10.1016/j.seta.2023.103119	2023
A techno-economic and socio-environmental planning of wind farms for sustainable development and transition to a decarbonized scenario: Pakistan as a case study <i>Saeeda Khanum Mohammad Uzair Shah Adeel Waqas Ahmad Abdul Kashif Janjua Sehar Shakir</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 55, Article Number 102969 Impact Factor: 7.1 Quartile: 1 Citations: 8 DOI: https://doi.org/10.1016/j.seta.2022.102969	2023
Development and validation of Nusselt number correlations for a helical coil based energy storage integrated with solar water heating system <i>Saqib Ayuob Mariam Mahmood Naveed Ahmed Adeel Waqas Hamza Saeed Muhammad Bilal Sajid</i> <i>Journal of Energy Storage</i> , Volume 55, Part D, Article Number 105777 Impact Factor: 8.907 Quartile: 1 Citations: 17 DOI: https://doi.org/10.1016/j.est.2022.105777	2022
Charging and discharging characterization of a novel combined sensible-latent heat thermal energy storage system by experimental investigations for medium temperature applications <i>Malik sarmad Zahid Naveed Ahmed Mumtaz A.Qaisrani Mariam Mahmood Majid Ali Adeel Waqas Mohsen Assadi</i> <i>Journal of Energy Storage</i> , Volume 55, Part C, Article Number 105612 Impact Factor: 8.907 Quartile: 1 Citations: 22 DOI: https://doi.org/10.1016/j.est.2022.105612	2022
Forecasting Hydrogen Production from Wind Energy in a Suburban Environment Using Machine Learning <i>Ali Javaid Umer Javaid Muhammad Sajid Muhammad Rashid Emad Uddin Yasar Ayaz Adeel Waqas</i> <i>Energies</i> , Volume 15, Issue 23, Article Number 8901 Impact Factor: 3.252 Quartile: 3 Citations: 40 DOI: https://doi.org/10.3390/en15238901	2022
Techno-economic analysis of a hybrid district heating with borehole thermal storage for various solar collectors and climate zones in Pakistan <i>Hafiz muhammad Ushamah Naveed Ahmed K.E.Elfekey Mariam Mahmood Mumtaz A.Qaisrani Adeel Waqas Qian Zhang</i> <i>Renewable Energy</i> , Volume 199, Pages 1639-1656 Impact Factor: 8.634 Quartile: 1 Citations: 23 DOI: https://doi.org/10.1016/j.renene.2022.09.059	2022
Modeling of soiling losses in solar energy systems <i>Maziar Dehghan Saman Rashidi Adeel Waqas</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 53, Part A, Article Number 102435 Impact Factor: 7.632 Quartile: 2 Citations: 28 DOI: https://doi.org/10.1016/j.seta.2022.102435	2022
Technical and Economic Evaluation of a 50 MW Solar Power Plant in Quetta †	2022

Gohram Khan Dr. Muhammad Hassan Dr. Mustafa Anwar Dr. Adeel Waqas Dr. Sehar Shakir Jamsheed Sajid
Engineering Proceedings , Volume:20, Issue:1, Article Number: 46

Impact Factor: N/A | **Citations:** 2

DOI: 10.3390/engproc2022020046

Hierarchical control of hybrid direct current microgrid with variable structure based sliding mode control and fuzzy energy management system

2022

Maria Badar Iftikhar Ahmad Sana Rehman Muhammad Saqib Nazir Adeel Waqas Ahmad

Journal of the Franklin Institute , Volume 359, Issue 13, Pages 6856-6892

Impact Factor: 4.100 | **Quartile:** 1 | **Citations:** 17

DOI: <https://doi.org/10.1016/j.jfranklin.2022.06.044>

Techno-economic and GHG mitigation analyses based on regional and seasonal variations of non-concentrating solar thermal collectors in textile sector of Pakistan

2022

Rabia Liaquat Elia Nauroz Ali Majid Ali Adeel Waqas Nadia Shahzad

Renewable Energy Focus , Volume:42, Page:165-177

Impact Factor: 4.8 (ESCI) | **Citations:** 10

DOI: 10.1016/j.ref.2022.06.005

Thermal management of solar photovoltaic module by using drilled cylindrical rods integrated with phase change materials

2022

Muhammad Shoaib Sheher Yar Khan Naveed Ahmed Mariam Mahmood Adeel Waqas Mumtaz A.Qaisrani Nadia Shehzad

Journal of Energy Storage , Volume 52, Part B, Article Number 104956

Impact Factor: 8.907 | **Quartile:** 1 | **Citations:** 21

DOI: <https://doi.org/10.1016/j.est.2022.104956>

Study of soiling on PV module performance under different environmental parameters using an indoor soiling station

2022

Naveed Hussain Nadia Shahzad Tanzeela Yousaf Adeel Waqas Ahmad Ahad Hussain Javed M. Abdullah Khan Muhammad Imran Shahzad

Sustainable Energy Technologies and Assessments , Volume:52, Article Number 102260

Impact Factor: 5.353 | **Quartile:** 2 | **Citations:** 14

DOI: <https://doi.org/10.1016/j.seta.2022.102260>

Experimental investigation of potential induced degradation of poly-crystalline photovoltaic modules: Influence of superstrate and encapsulant types

2022

Quratulain Jamil Nadia Shahzad Hassan Abdullah Khalid Saeed Iqbal Adeel Waqas Ahmad Afzal H. Kamboh

Sustainable Energy Technologies and Assessments , Volume 52, Part B, Article Number 102162

Impact Factor: 5.353 | **Quartile:** 2 | **Citations:** 10

DOI: <https://doi.org/10.1016/j.seta.2022.102162>

Thermal and electrical performance of solar floating PV system compared to on-ground PV system-an experimental investigation

2022

Hamza Nisar Abdul Kashif Janjua Hamza Hafeez Sehar Shakir Nadia Shahzad Adeel Waqas Ahmad

Solar Energy , Volume 241, Pages 231-247

Impact Factor: 6.7 | **Quartile:** 2 | **Citations:** 72

DOI: <https://doi.org/10.1016/j.solener.2022.05.062>

Designing, Modelling and Experimental Investigation of Direct Evaporative Cooling System Coupled With Commercial Desiccant Dehumidifier

2022

Abdul Basit Mariam Mahmood Adeel Waqas Majid Ali Waqas Khalid

Journal of Thermal Science and Engineering Applications , Volume 14(7), Article Number 071006

Impact Factor: 1.470 | **Quartile:** 4 | **Citations:** 2

DOI: <https://doi.org/10.1115/1.4052378>

Techno-economic assessment of solar water heating systems for sustainable tourism in northern Pakistan

2022

Muhammad Naveed Arif Adeel Waqas Faaz Ahmed Butt Mariam Mahmood Asif Hussain Khoja Majid Ali Kafait Ullah M. A Mujtaba M.A Kalam

Alexandria Engineering Journal , Volume 61, Issue 7, Pages 5485-5499

Impact Factor: 6.8 | **Quartile:** 1 | **Citations:** 18

DOI: 10.1016/j.aej.2021.11.006

Impact and performance efficiency analysis of grid-tied solar photovoltaic system based on installation site environmental factors

2022

Shahid Nawaz Khan Muhammad Sajid Saeed Iqbal Muhammad Jawad Khan Yasar Ayaz Adeel Waqas Ahmad

An autonomous hybrid DC microgrid with ANN-fuzzy and adaptive terminal sliding mode multi-level control structure

2022

Maria Badar Iftikhar Ahmad Aneeqe Ahmed Mir Shahzad Ahmed Adeel Waqas

Control Engineering Practice, Volume 121, Article Number 105036

Impact Factor: 4.057 | Quartile: 2 | Citations: 30

DOI: [10.1016/j.conengprac.2021.105036](https://doi.org/10.1016/j.conengprac.2021.105036)

Multiparametric optimization of a reheated organic Rankine cycle for waste heat recovery based repowering of a degraded combined cycle gas turbine power plant

2022

Muhammad Reshaeel Adeel Javed Ahmad Jamil Majid Ali Mariam Mahmood Adeel Waqas Ahmad

Energy Conversion and Management, Volume 254, Article Number 115237

Impact Factor: 10.4 | Quartile: 1 | Citations: 30

DOI: <https://doi.org/10.1016/j.enconman.2022.115237>

The Effects of Using Pretreated Cotton Gin Trash on the Production of Biogas from Anaerobic Co-Digestion with Cow Manure and Sludge

2022

Muhammad Usman Hanif Mohammed Zwawi Mohammed Algarni Ali Bahadar Hamid Iqbal Sergio C. Capareda Muhammad Adnan Hanif Adeel Waqas Nazia

Hossain Muhammad Tahir Hussain Siddiqui Sabzoi Nizamuddin Asma Jamil

Energies, Volume 15(2), Article Number 490

Impact Factor: 3.004 | Quartile: 3 | Citations: 9

DOI: <https://doi.org/10.3390/en15020490>

Techno-economic perspective of a floating solar PV deployment over urban lakes: A case study of NUST lake Islamabad

2022

Hamza Hafeez Abdul Kashif Janjua Hamza Nisar Sehar Shakir Nadia Shahzad Adeel Waqas

Solar Energy, Volume 231, Pages 355-364

Impact Factor: 6.7 | Quartile: 2 | Citations: 41

DOI: <https://doi.org/10.1016/j.solener.2021.11.071>

Performance evaluation of ORC system using evacuated flat plate Photovoltaic-Thermal collector as an evaporator

2021

Izaz Ahmed Qureshi Dr. Adeel Waqas Majid Ali Aamir Mehmood Adeel Javed

Solar Energy, Volume 230, Pages 859-873

Impact Factor: 7.188 | Quartile: 2 | Citations: 12

DOI: doi.org/10.1016/j.solener.2021.10.087

Thermal analysis of macro-encapsulated phase change material coupled with domestic gas heater for building heating

2021

Fawad Ahmed Mariam Mahmood Naveed Ahmad Majid Ali Adeel Waqas

Sustainable Energy Technologies and Assessments, Volume 47, Article Number 101533

Impact Factor: 7.632 | Quartile: 2 | Citations: 11

DOI: <https://doi.org/10.1016/j.seta.2021.101533>

Designing of homemade soiling station to explore soiling loss effects on PV modules

2021

Naveed Hussain Nadia Shahzad Tanzeela Yousaf Adeel Waqas Ahad Hussain Javed Sheheryar Khan Majid Ali Rabia Liaquat

Solar Energy, Vol. 225, PP. 624–633

Impact Factor: 7.188 | Quartile: 2 | Citations: 12

DOI: <https://doi.org/10.1016/j.solener.2021.07.036>

Algae as an attractive source for cosmetics to counter environmental stress

2021

Ayesha Aslam Ali Bahadur Rabia Liaquat Adeel Waqas Muhammad Saleem Mohammed Zwawi

Science of the Total Environment, Volume 772, Article Number 144905

Impact Factor: 10.754 | Quartile: 1 | Citations: 72

DOI: <https://doi.org/10.1016/j.scitotenv.2020.144905>

Techno-economic potential assessment of mega scale grid-connected PV power plant in five climate zones of Pakistan

2021

Adeel Waqas Naseer Ahmed Atif Naveed Khan Naveed Ahmed Adnan Aslam Kashif Imran Muhammad Bilal Sajid

Energy Conversion and Management, Volume 237, Article Number 114097

Impact Factor: 11.533 | Quartile: 1 | Citations: 60

DOI: <https://doi.org/10.1016/j.enconman.2021.114097>

Synthesis and characterization of biomass-derived surface-modified activated carbon for enhance CO2 adsorption <i>Azeem Sarwar Majid Ali Asif Hussain Khoja Azra Nawar Adeel Waqas Rabia Liaquat Salman Raza Naqvi Muhammad Asjid</i> <i>Journal of CO2 Utilization</i> , Volume 46, Article Number 101476 Impact Factor: 7.132 Quartile: 1 Citations: 153 DOI: https://doi.org/10.1016/j.jcou.2021.101476	2021
Thermal Performance Evaluation of Circular-Stadium Double Pipe Thermal Energy Storage Systems <i>Muhammad Asjid Majid Ali Adeel Waqas Adeel Javed Nadia Shahzad Ali Abdullah Muhammad Umar Iqtidar</i> <i>Journal of Energy Storage</i> , Volume 36, Article Number 102403 Impact Factor: 8.907 Quartile: 1 Citations: 7 DOI: https://doi.org/10.1016/j.est.2021.102403	2021
Techno-economic evaluation of a solar PV integrated refrigeration system for a cold storage facility <i>Hamid Ikram Adeel Javed Mariam Mahmood Musannif Shah Majid Ali Adeel Waqas</i> <i>Sustainable Energy Technologies and Assessments</i> , Volume 44, Article Number 101063 Impact Factor: 7.632 Quartile: 2 Citations: 41 DOI: https://doi.org/10.1016/j.seta.2021.101063	2021
Enhanced CO2 capture using organic acid structure modified waste eggshell derived CaO sorbent <i>Azra Nawar Asif Hussain Khoja Mustafa Anwar Mariam Mahmood Adeel waqas Majid Ali</i> <i>Journal of Environmental Chemical Engineering</i> , Volume 9, Issue 1, Article Number 104871 Impact Factor: 7.968 Quartile: 1 Citations: 68 DOI: 10.1016/j.jece.2020.104871	2021
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