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List of Publications:

Journals Publications [Cumulative IF: **51.091**]

1. **Umair Sultan***, Yangjun Zhang, Muhammad Farooq, Muhammad Imran, Alamgir Akhtar Khan, Weilin Zhuge, Tariq Amin Khan, Muhammad Hummayun Yousaf, Qasim Ali “Qualitative assessment and global mapping of supercritical CO₂ power cycle technology” Sustainable Energy Technologies and Assessments. 2021, 43, 100978, doi: 10.1016/j.seta.2020.100978. [IF:3.427]
<https://www.sciencedirect.com/science/article/pii/S2213138820314065>
2. Muhammad Arslan, Muhammad Farooq, Muhamamd Naqvi, **Umair Sultan**, Zia-ur-Rehman Tahir, Saad Nawaz, Nazim Waheed, Salman Raza Naqvi, Qasim Ali, M. Suleman Tariq, Ijaz Ahmad Chaudhry, John M. Anderson, Anthony Anukam, Impact of Varying Load Conditions and Cooling Energy Comparison of a Double-Inlet Pulse Tube Refrigerator. Processes. 2020, 8 (3), 352; doi:10.3390/pr8030352. [IF:2.753]
<https://www.mdpi.com/2227-9717/8/3/352>
3. Xihui Wang, Houtao Chen, **Umair Sultan**, Xiaoxing Zhu, Zhijie Wang, Gang Xiao X, A Brief Review of the Combustion Diagnosing Techniques for Coal-Fired Boilers of Power Plants in China, IEEE Access 7 (2019) 126127-126136. [IF:3.745]
<https://ieeexplore.ieee.org/document/8824130>
4. Mingjiang Ni, Hao Peng, **Umair Sultan**, Kun Luo, Gang Xiao, A quantitative method to describe the flow characteristics of an oscillating flow including porous media, International Journal of Heat and Mass Transfer 119 (2018) 860-866. [IF:4.947]
<https://www.sciencedirect.com/science/article/pii/S0017931017323098>
5. Gang Xiao¹, **Umair Sultan**¹, Mingjiang Ni, Hao Peng, Xin Zhou, Shulin Wang, Zhongyang Luo*, Design optimization with computational fluid dynamic analysis of β -type Stirling engine, Applied Thermal Engineering 113 (2017) 87-102. [IF:4.725]
<https://www.sciencedirect.com/science/article/pii/S1359431116323249>
6. Zhongyang Luo¹, **Umair Sultan**¹, Mingjiang Ni, Hao Peng, Bingwei Shi, Gang Xiao*, Multi-objective optimization for GPU3 Stirling engine by combining multi-objective algorithms. Renewable Energy 94 (2016) 114-125. [IF:6.274]
<https://www.sciencedirect.com/science/article/pii/S0960148116301926>
7. Mingjiang Ni, Tianfeng Yang, Gang Xiao, Dong Ni, Xin Zhou, Huanlei Liu, **Umair Sultan**, Jinli Chen, Zhongyang Luo, Kefa Cen, Thermodynamic Analysis of a Gas Turbine Cycle Combined with Fuel Reforming for Solar Thermal Power Generation. Energy 137 (2017) 20-30. [IF:6.082]
<https://www.sciencedirect.com/science/article/abs/pii/S0360544217311672>
8. Mingjiang Ni, Bingwei Shi, Gang Xiao, Hao Peng, **Umair Sultan**, Shurong Wang, Zhongyang Luo, Kefa Cen, Improved Simple Analytical Model and experimental study of a 100 W β -type Stirling engine. Applied Energy 169 (2016) 768-787. [IF: 8.848]
<https://www.sciencedirect.com/science/article/pii/S0306261916302069>
9. Gang Xiao, Hao Peng, Haoting Fan, **Umair Sultan**, Mingjiang Ni, Characteristics of steady and oscillating flows through regenerator. International Journal of Heat and Mass Transfer. 108 (2017) 309-321. [IF:4.947]
<https://www.sciencedirect.com/science/article/pii/S0017931016315289>
10. Lijun Wang, YiJun Jia, Sunel Kumar, Rundong Li, Rasool Bux Mahar, Mujahid Ali, Imran Nazir Unar, **Umair Sultan**, Kaleemullah Memon, Numerical Analysis on the Influential Factors of Coal Gasification Performance in Two-Stage Entrained Flow Gasifier, Applied Thermal Engineering 112 (2017) 1601-1611. [IF:4.725]
<https://www.sciencedirect.com/science/article/pii/S1359431116325972>
11. Anjum Munir*, **Umair Sultan** and Muhammad Iqbal. Development and performance evaluation of a

locally fabricated portable solar tunnel dryer for drying of fruits, vegetables and medicinal plants. Pak. J. Agri. Sci., Vol. 50(3), 493-498; 2013, ISSN (Print) 0552-9034, ISSN (Online) 2076-0906. [IF: 0.618]
<https://www.pakjas.com.pk/papers/2183.pdf>

International Conference Proceedings

1. **Umair Sultan***, Shazia Hanif, Farrukh Ehsan and Muhammad Kashif. Design Analysis and Optimization of Stirling Engine by Enhanced Metaheuristic Approches, International Conference on Energy, Water and Environment – ICEWE-2021, New Campus, University of Engineering and Technology Lahore, 31st March 2021, Lahore, Pakistan.
<https://conferences.uet.edu.pk/icewe/2021/final-proceedings/>
2. **Umair Sultan**, Farrukh Ehsan, Alamgir A. Khan, Muhammad Kashif and Nazar Farid, CFD Analysis of evaporative cooling system in soilless cultivation, 1st International Conference on Agricultural Engineering and Technologies (ICAET-2019), Sindh Agriculture University, Tandojam, Pakistan.
<https://sau.edu.pk/icaet-2019/>
3. Farrukh Ehsan, Munir Ahmad, Asif Ali Mirani, Waqar Akhtar, **Umair Sultan** and Muhammad Kashif, Prospectus and comparative analysis of solar drying behavior in Dates, 1st International Conference on Agricultural Engineering and Technologies (ICAET-2019), Sindh Agriculture University, Tandojam, Pakistan.
<https://sau.edu.pk/icaet-2019/>
4. Muhammad Kashif, Muhammad Sultan, Farrukh Ehsan, Alamgir A. Khan, **Umair Sultan** and Sarfraz Hashim. Study of Low-cost Air-conditioning Options for Livestock Thermal Neutral Zones. 6th International Conference on Sustainable Agriculture in Changing Climate: Strategies and Management, June, 2019 Rawla Kot, Pakistan.
<https://www.upr.edu.pk/uploads/1550044827UPR%20Conference%202019.pdf>
5. **Umair Sultan***, Hao Peng, Bingwei Shi, Gang Xiao and Zhongyang Luo. Technological investigation of losses in Solar Stirling engine, International Conference on Concentrating Solar Power and Chemical Energy Systems, Beijing, China. 2014. DOI: 10.13140/RG.2.1.3085.9282
<http://www.solarpaces2014.solarpaces.org/cms/proceedings.html>
6. Hao Peng, Gang Xiao, **Umair Sultan**, Bingwei Shi, Zhongyang Luo, Kefa Cen and Mingjiang Ni*. Research results of the characteristics in the Stirling engine regenerator.16th International Stirling engine conference, Bilbao, Spain.2014. DOI: 10.13140/RG.2.1.4159.0800
<https://www.tib.eu/en/search/id/TIBKAT%3A797490264/Proceedings-of-the-16th-International-Stirling/>