

# Syed Waqar Hasan

Assistant Professor

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## About

Dr. Syed Waqar Hasan is working as Assistant Professor in the Pakistan Navy Engineering College. Dr. Syed Waqar Hasan has a PhD in Renewable Energy. Dr. Syed Waqar Hasan has published 25 research articles & conference papers having a citation count of 555, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Renewable Energy</b> Universiti Malaya , Malaysia	2014 - 2018
<b>MS in Thermoelectric Materials</b> Sung Kyun Kwan University , South Korea	2012 - 2014
<b>BE in Mechanical Engineering</b> NED UET Karachi , Pakistan	2007 - 2010

## Experience

<b>Assistant Professor</b> Pakistan Navy Engineering College	2023- Present
<b>Assistant Professor</b> University of Management and Technology , Daska Road, Sialkot	2021 - 2023
<b>Post doctoral researcher</b> Guangxi University , Nanning	2018 - 2020

## Research Articles

<b>Improved Thermal Gradients in Diffuser-/Nozzle-Shaped Thermally Driven Electrochemical Cells for Enhanced Output Power Density</b> <i>Syed Waqar Hasan Muhammad Mehdi Asad Ali Rana Abdul Qadir Abdul Mateen Faisal Shamshad</i> <i>Arabian Journal for Science and Engineering</i> , Pages 1-11 <b>Impact Factor:</b> 2.9   <b>Quartile:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1007/s13369-023-08409-0">https://doi.org/10.1007/s13369-023-08409-0</a>	2023
<b>Oxidation and wetting characteristics of lead-free Sn-0.7Cu solder alloys with the addition of Fe and Bi</b> <i>Syed Hassan Abbas Jaffery Mohd Faizul Mohd Sabri Shaifulazuar Rozali Syed Waqar Hasan Mohammad Hossein Mahdavi Farid Dhafer Abdul-ameer</i> <i>Shnawah AL-Zubiady Balaji Rao Ravuri</i> <i>Microelectronics Reliability</i> , Volume 139, Article Number 114802 <b>Impact Factor:</b> 1.600   <b>Quartile:</b> 4   <b>Citations:</b> 16 <b>DOI:</b> <a href="https://doi.org/10.1016/j.microrel.2022.114802">https://doi.org/10.1016/j.microrel.2022.114802</a>	2022
<b>Robust, Conductive, and High Loading Fiber-Shaped Electrodes Fabricated by 3D Active Coating for Flexible Energy Storage Devices</b> <i>Xingxian Lan Taijin Tang Huarui Xie Syed Waqar Hasan Lizhe Liang Zhi Qun Tian Pei Kang Shen</i> <i>Nano Letters</i> , Volume:22, Issue:14, Page:5795-5802 <b>Impact Factor:</b> 10.8   <b>Quartile:</b> 1   <b>Citations:</b> 15 <b>DOI:</b> <a href="https://doi.org/10.1021/acs.nanolett.2c01290">https://doi.org/10.1021/acs.nanolett.2c01290</a>	2022
<b>Electricity generation from ionic solution flowing through packed three-dimensional graphene powders</b> <i>Changzheng Li Dafeng Yang Syed Waqar Hasan Xiantao Zhang Zhi Qun Tian Pei Kang Shen</i> <i>Nanotechnology</i> , Volume 32, Issue 35, Article Number 355401 <b>Impact Factor:</b> 3.953   <b>Quartile:</b> 2   <b>Citations:</b> 14 <b>DOI:</b> <a href="https://doi.org/10.1088/1361-6528/ac04d4">10.1088/1361-6528/ac04d4</a>	2021

- Hierarchically skeletal multi-layered Pt-Ni nanocrystals for highly efficient oxygen reduction and methanol oxidation reactions** 2021
- Shibo Li Zhi Qun Tian Yang Liu Zheng Jang Syed Waqar Hasan Xingfa Chen Panagiotis Tsiakaras Pei Kang Shen*  
*Chinese Journal of Catalysis*, Volume 42, Issue 4, Pages 648-657
- Impact Factor:** 12.920 | **Quartile:** 1 | **Citations:** 61  
**DOI:** [https://doi.org/10.1016/S1872-2067\(20\)63680-4](https://doi.org/10.1016/S1872-2067(20)63680-4)
- Thermal transport measurement of three-dimensional graphene powders for application in energy devices** 2021
- C. Li Z. Liu X. Zhang Syed Waqar Hasan Z.Q. Tian J. Zhou Z. Yin*  
*Materials Today Energy*, Volume 19, Article Number 100582
- Impact Factor:** 9.257 | **Quartile:** 1 | **Citations:** 8  
**DOI:** <https://doi.org/10.1016/j.mtener.2020.100582>
- Ultrathin-shell IrCo hollow nanospheres as highly efficient electrocatalysts towards the oxygen evolution reaction in acidic media** 2020
- Jinhui Zhu Min Wei Qinghao Meng Zhenyu Chen Yepeng Fan Syed Waqar Hasan Xiaoran Zhang Dandan Lyu Zhi qun Tian Pei Kang Shen*  
*Nanoscale*, Volume:12, Issue:47, Pages 24070-24078
- Impact Factor:** 7.790 | **Quartile:** 1 | **Citations:** 39  
**DOI:** <https://doi.org/10.1039/D0NR06601J>
- In situ molecular-level synthesis of N, S co-doped carbon as efficient metal-free oxygen redox electrocatalysts for rechargeable Zn–Air batteries** 2020
- Dandan Lyu Sixian Yao Yaser Bahari Syed Waqar Hasan Chan Pan Xiaoran Zhang Feng Yu Zhi Qun Tian Pei Kang Shen*  
*Applied Materials Today*, Volume 20, Article Number 100737
- Impact Factor:** 10.041 | **Quartile:** 1 | **Citations:** 39  
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- Interstitial nanoclusters within graphene sheets for highly conductive, strong and electrochemically active fiber-shaped supercapacitors** 2020
- Syed Waqar Hasan Zain Taha Qinghao Meng Jianmin Shen Taiyu Lyu Jinhui Zhu Changzheng Li Zhi Qun Tian Pei Kang Shen*  
*Applied Materials Today*, Volume:20, Article Number 100768
- Impact Factor:** 10.041 | **Quartile:** 1 | **Citations:** 16  
**DOI:** <https://doi.org/10.1016/j.apmt.2020.100768>
- Hierarchical porous oviform carbon capsules with double-layer shells derived from mushroom spores for efficient sodium ion storage** 2020
- Taiyu Lyu Rui Wang Lizhe Liang Jinguang Chen Syed Waqar Hasan Dandan Lyu Zhi Qun Tian Pei Kang Shen*  
*Journal of Electroanalytical Chemistry*, Volume:871, Article Number 114310
- Impact Factor:** 4.464 | **Quartile:** 1 | **Citations:** 10  
**DOI:** <https://doi.org/10.1016/j.jelechem.2020.114310>
- Electrocatalytic production of hydrogen over highly efficient ultrathin carbon encapsulated S, P co-existence copper nanorods composite** 2020
- Fei Xu Chen Yu Guangfu Qian Lin Luo Syed Waqar Hasan Shibin Yin Panagiotis Tsiakaras*  
*Renewable Energy*, Volume:151, Pages 1278-1285
- Impact Factor:** 8.001 | **Quartile:** 1 | **Citations:** 12  
**DOI:** <https://doi.org/10.1016/j.renene.2019.11.116>
- Electrochemical corrosion behavior of Sn-0.7Cu solder alloy with the addition of bismuth and iron** 2019
- Hasan Abbas Jaffery Mohd Faizul Mohd Sabri Suhana Mohd Said Syed Waqar Hasan Imran Haider Sajid Nor Ilyana Muhd Nordin Megat Muhammad Ikhsan Megat Hasnan Dhafer Abdulameer Shnawah Chellapilla VKNSN. Moorthy*  
*Journal of Alloys and Compounds*, Volume:810, Article Number 151925
- Impact Factor:** 4.650 | **Quartile:** 1 | **Citations:** 95  
**DOI:** <https://doi.org/10.1016/j.jallcom.2019.151925>
- Highly Efficient Multifunctional Co-N-C Electrocatalysts with Synergistic Effects of Co-N Moieties and Co Metallic Nanoparticles Encapsulated in a N-Doped Carbon Matrix for Water-Splitting and Oxygen Redox Reactions** 2019
- Dandan Lyu Yonghua Du Shangli Huang Bahari Yaser Mollamahale Xiaoran Zhang Syed Waqar Hasan Feng Yu Shuangbao Wang Zhi Qun Tian Pei Kang Shen*  
*ACS Applied Materials and Interfaces*, Volume:11, Issue:43, Pages 39809-39819
- Impact Factor:** 8.758 | **Quartile:** 1 | **Citations:** 97  
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- Crosslinked thermoelectric hydro-ionogels: A new class of highly conductive thermoelectric materials** 2019  
*Imran Haider Sajid Mohd Faizul Mohd Sabri Suhana Mohd Said Mohd Faiz Mohd Salleh Nik Nazri Nik Ghazali R. Saidur Balamurugan Subramaniam Syed Waqar Hasan Hasan Abbas Jaffery*  
*Energy Conversion and Management* , Volume:198, Article Number 111813  
**Impact Factor:** 8.208 | **Quartile:** 1 | **Citations:** 21  
**DOI:** <https://doi.org/10.1016/j.enconman.2019.111813>
- Synthesis and characterization of novel p-type chemically cross-linked ionogels with high ionic seebeck coefficient for low-grade heat harvesting** 2019  
*Imran Haider Sajid Navid Aslfattahi Mohd Faizul Mohd Sabri Suhana Mohd Said R. Saidur Mohd Faiz Mohd Salleh Nik Nazri Nik Ghazali Syed Waqar Hasan*  
*Electrochimica Acta* , Volume:320, Article Number 134575  
**Impact Factor:** 6.215 | **Quartile:** 1 | **Citations:** 23  
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- Oxygen Reduction Reaction over PtFeM (M = Mo, V, W) Alloy Electrocatalysts: Role of the Compressive Strain Effect on Pt** 2019  
*Jiajia Lu Lin Luo Shibin Yin Syed Waqar Hasan Panagiotis Tsiakaras*  
*ACS Sustainable Chemistry & Engineering* , Volume:7, Issue:19, Pages 16209-16214  
**Impact Factor:** 7.632 | **Quartile:** 1 | **Citations:** 23  
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- Thermally Resistive Electrospun Composite Membranes for Low-Grade Thermal Energy Harvesting** 2018  
*Syed Waqar Hasan Suhana Mohd Said Mohd Faizul Mohd Sabri Hasan Abbass Jaffery Ahmad Shuhaimi*  
*Macromolecular Materials and Engineering* , Volume:303, Issue:3, Article Number 1700482  
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*Syed Waqar Hasan Suhana Mohd Said Ahmad Shuhaimi Mohd Faizul Mohd Sabri Imran Haider Sajid Nur Awanis Hashim*  
*Journal of Materials Science* , Volume:52, Issue:17, Page:10353-10363  
**Impact Factor:** 2.993 | **Quartile:** 2 | **Citations:** 10  
**DOI:** <https://doi.org/10.1007/s10853-017-1190-7>
- High Thermal Gradient in Thermo-electrochemical Cells by Insertion of a Poly(Vinylidene Fluoride) Membrane** 2016  
*Syed Waqar Hasan Suhana Mohd Said Mohd Faizul Mohd Sabri Ahmad Shuhaimi Nur awanis Hashim Megat Muhammad Jennifer Pringle Douglas Macfarlane*  
*Scientific Reports* , Volume:6, Article number: 29328  
**Impact Factor:** 4.259 | **Quartile:** 1 | **Citations:** 40  
**DOI:** <https://doi.org/10.1038/srep29328>
- Reduction of lattice thermal conductivity in PbTe induced by artificially generated pores** 2015  
*Jae-Yeol Hwang Eun Sung Kim Syed Waqar Hasan Soon-Mok Choi Kyu Hyoung Lee Sung Wng Kim*  
*Advances in Condensed Matter Physics* , Volume 2015, Article ID 496739, 6 pages  
**Impact Factor:** 0.932 | **Quartile:** 4 | **Citations:** 10  
**DOI:** <https://doi.org/10.1155/2015/496739>

Conference Proceedings

<b>Enhancing electrical conductivity of Cellulose Acetate microfibers through Copper electroplating</b> <i>Warda Khalid Ghadai Syed Waqar Hasan Zeeshan Riaz Syed Mustafa Haider Muntazir Abbas</i> <i>14th International Mechanical Engineering Conference (IMEC-2025)</i> , res.country(177,) <b>Citations:</b> N/A <b>DOI:</b> Nil	2025
<b>FABRICATION AND PERFORMANCE OF SOLAR DESALINATION UNIT USING POROUS MATERIALS</b> <i>Anas Yasir Syed Hamid Ali Yasir Kazmi Syed Waqar Hasan</i> <i>NUST Flagship International Conference on Water, Energy and Environment for Sustainability (IC-WEES)</i> , res.country(177,) <b>Citations:</b> N/A <b>DOI:</b> Nil	2024
<b>Investigating Tidal Energy Potential at Karachi Coastline</b> <i>Muhammad Hassnain Khan Ibrahim Ehsan Noman Ejaz Syed Waqar Hasan</i> <i>NUST Flagship International Conference on Water, Energy and Environment for Sustainability (IC-WEES)</i> , res.country(177,) <b>Citations:</b> N/A <b>DOI:</b> Nil	2024
<b>Application of Abrasive Surface in Tubes to Enhance flow Meter Efficiency</b> <i>Quresha Saghir Anzar Ahmed Dr. Syed Waqar Hasan</i> <i>13th International Mechanical Engineering Conference (IMEC-2024)</i> , res.country(177,) <b>Citations:</b> N/A <b>DOI:</b> Nil	2024

Editorial Activities

<b>Journal of Chemistry and Environment</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2024
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