



Scientific Publication Report 2022

King Saud University
College of Engineering

MESSAGE

Scientific excellence is a major quest of the college of engineering, which has been at the forefront of scientific research quality across the Kingdom of Saudi Arabia. To assess and monitor this progress, the college conducts an annual survey and assessment to track the total number of published papers as well as the impact factor and quartile of each corresponding journal.



The college of engineering through its different departments, namely:-

1. The Department of Chemical Engineering.
2. The Department of Civil Engineering.
3. The Department of Electrical Engineering.
4. The Department of Industrial Engineering.
5. The Department of Mechanical Engineering.
6. The Department of Petroleum and Natural Gas Engineering.

have published a total of 531 papers across 217 unique journals in the academic year of 1443 Hijri (2021/22). On average, 30.5% of the papers were published in journals ranked in the highest quartile (Q1) based on the web-of-science classification, and 48.8% were in the subsequent quartile (Q2). This high percentage is an indication of the high quality of the research conducted within the college, yet we believe that there is room for further improvement.

I would like to congratulate the college faculty and staff members for these achievements, and we look forward for more achievements to come.

Dr. Majid Altamimi

Dean, College of Engineering

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INTRODUCTION

This report surveys all of the College of Engineering journal articles that are indexed in the web-of-science (WoS) database within an indexing range starting from the 1st of September 2021 till the 31st of August 2022, covering the academic year 1443 Hijri.

After surveying the published journals within the stated timeframe, the journal impact factor and its quartile was recorded for each publication. For the College of Engineering as well as each department individually, three charts summarizing the findings of this report are provided:

- 1) A distribution of the journal publications' quartile.

The journals included in the WoS Science Citation Index-Expanded (SCIE) are classified into quartiles based on information obtained from the Journal Citation Reports (JCR) by Clarivate. This chart provides a breakdown of the number of publications within each quartile. As WoS encompasses various categories for each field, this chart serves as an indicator of a department's excellence within its specialty or related fields of study.

- 2) A histogram of the journals' impact factor.

The data extracted from Clarivate's JCR has been utilized to capture the journal impact factor (JIF) for each publication. Subsequently, a histogram distribution representing the complete range of journals has been constructed. The histogram is plotted on a scale ranging from 0 to 10, with an additional bin allocated for JIF values exceeding 10. The x-axis scaling starts from 0 with a bin width of 1 and an overflow bin of values greater than 10. The parentheses "(" and square brackets "[" indicates an open or closed set, respectively. The JIF, which is contingent upon the citations received by an article, serves as a general metric to gauge the influence or level of interest in a particular topic or specialty relative to others.

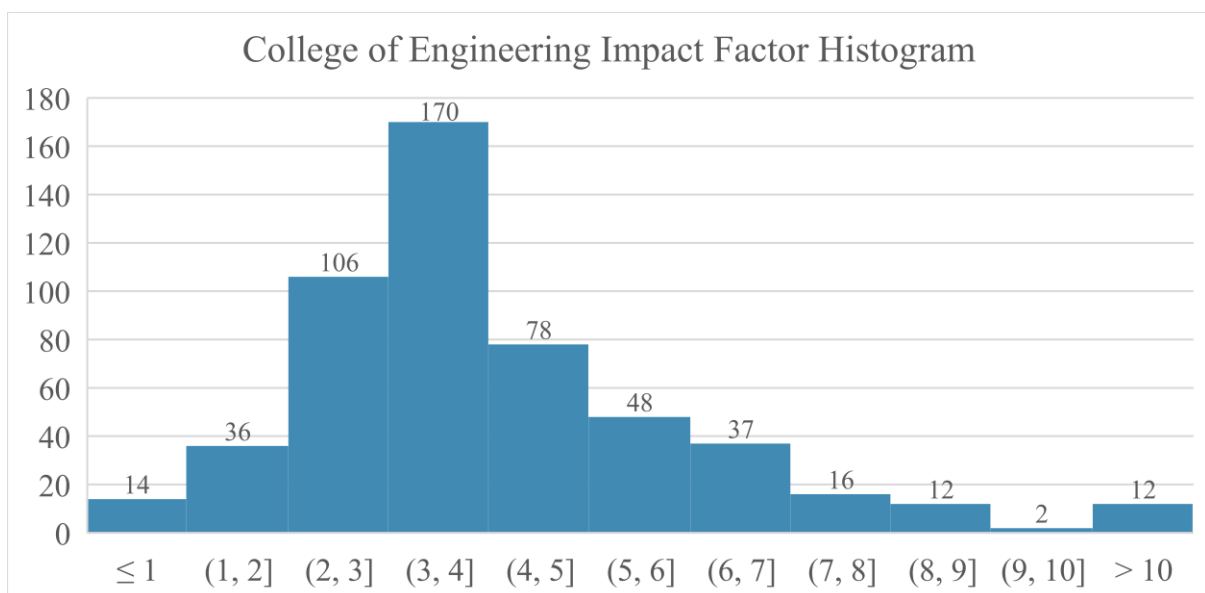
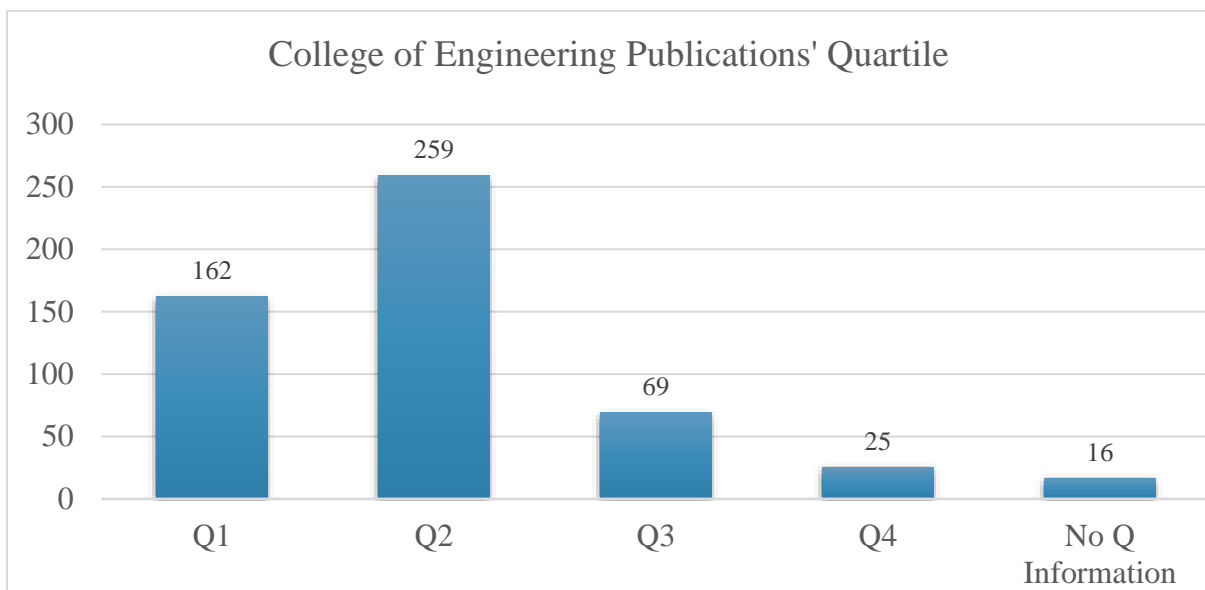
- 3) Classification of Published Papers by WoS Citation Topic Meso

WoS citation topics are algorithmically derived citation clusters. Within WoS, these clusters are organized into three levels of hierarchy. This analysis focuses on the mid-level hierarchy known as the meso-topic classification. By applying this classification to the published papers of each department, as well as the college as a whole, the research areas within the college and departments can be effectively categorized and understood. This chart provides valuable insights into the most active fields of interest within the college, serving as an indicator of its areas of strength.

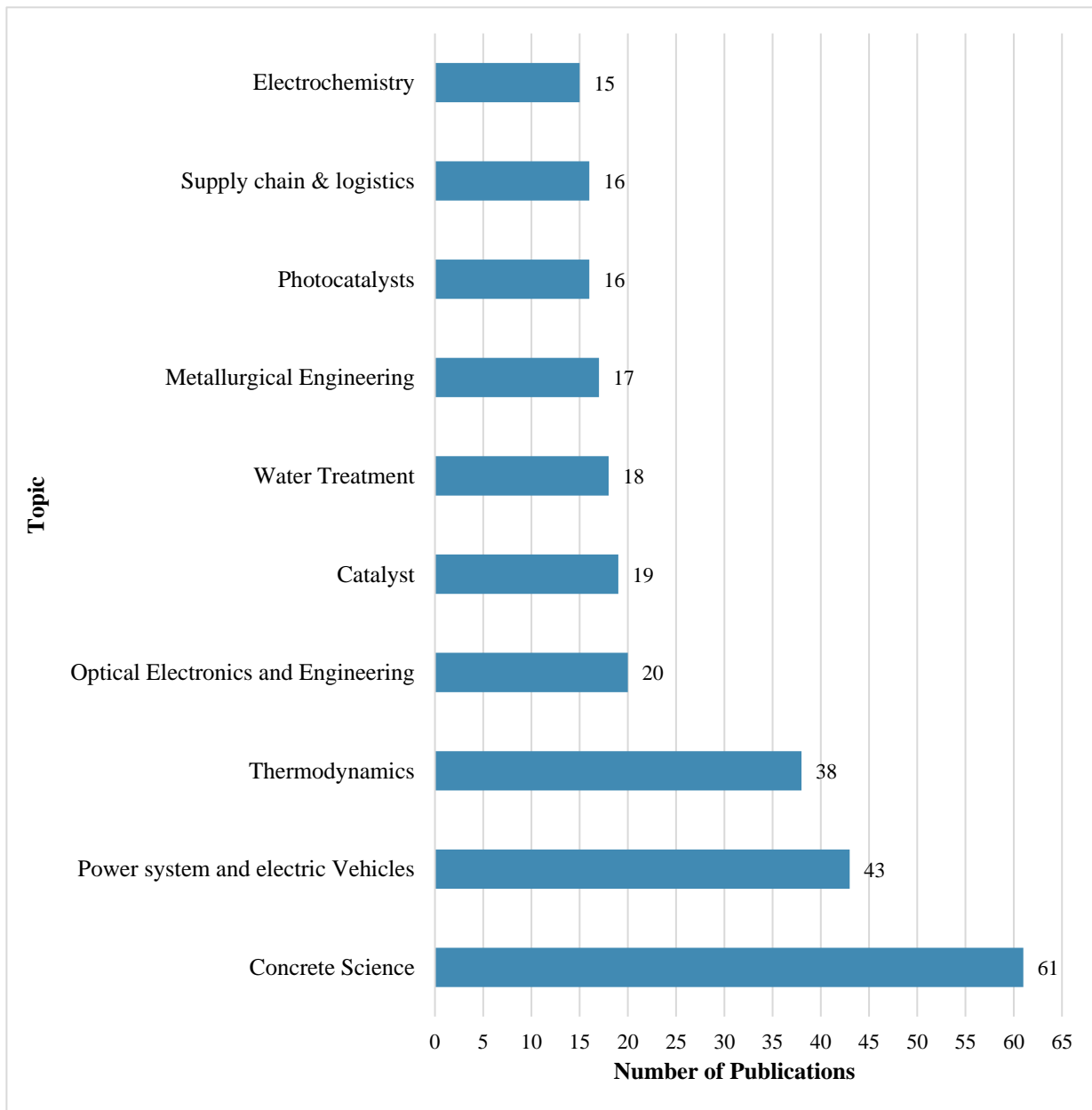
A full list of publications is also included as an appendix to the document.

COLLEGE OF ENGINEERING

The College of Engineering have published a total of 531 journal articles. Approximately 30.5% of those articles were published in Q1 journals while 48.8% were published in Q2 ranked journals. The overall average impact factor was 4.21. The top three research focus areas were: concrete science, power systems and electric vehicles, and thermodynamics.

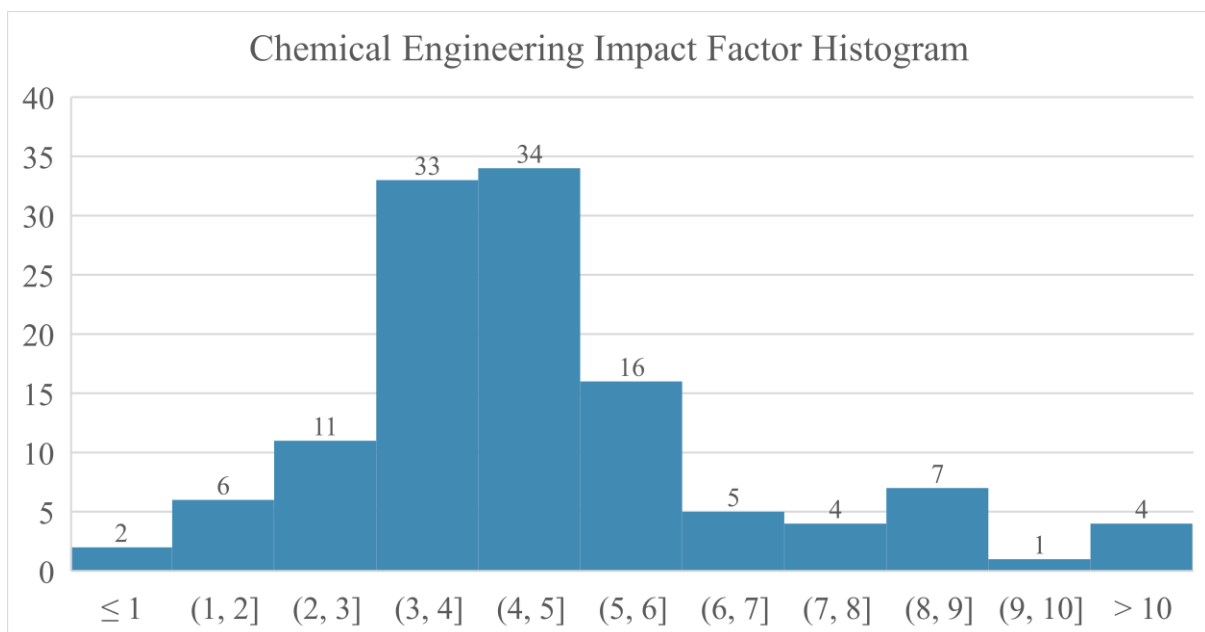
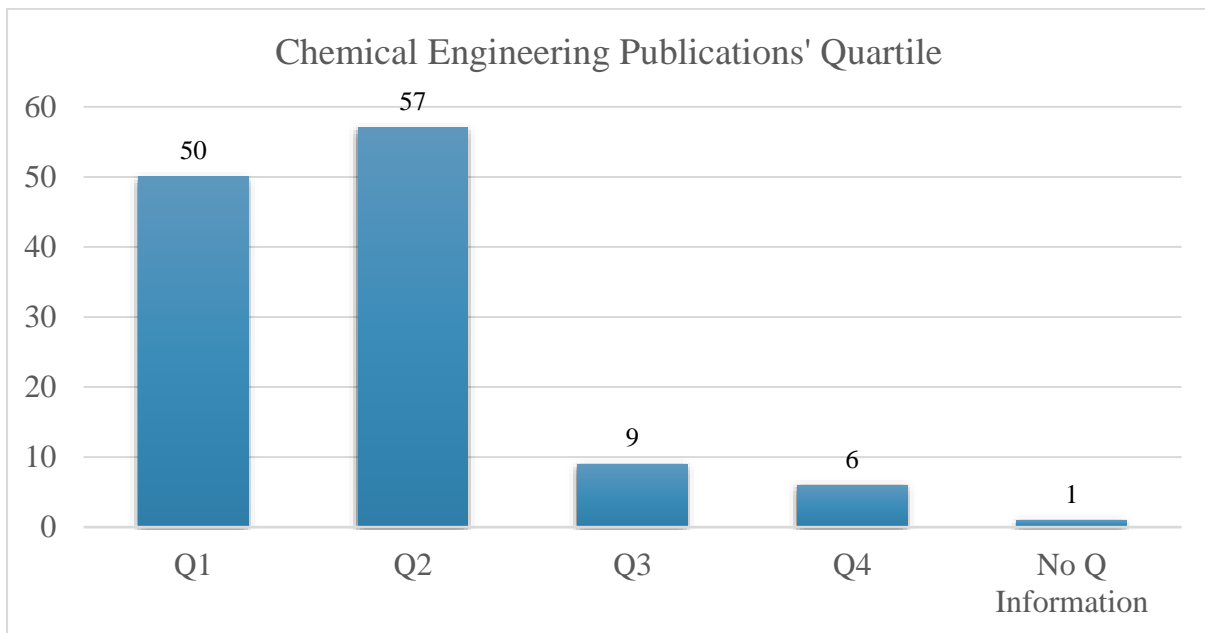


College of Engineering Publications classified by WoS Citation Topic Meso

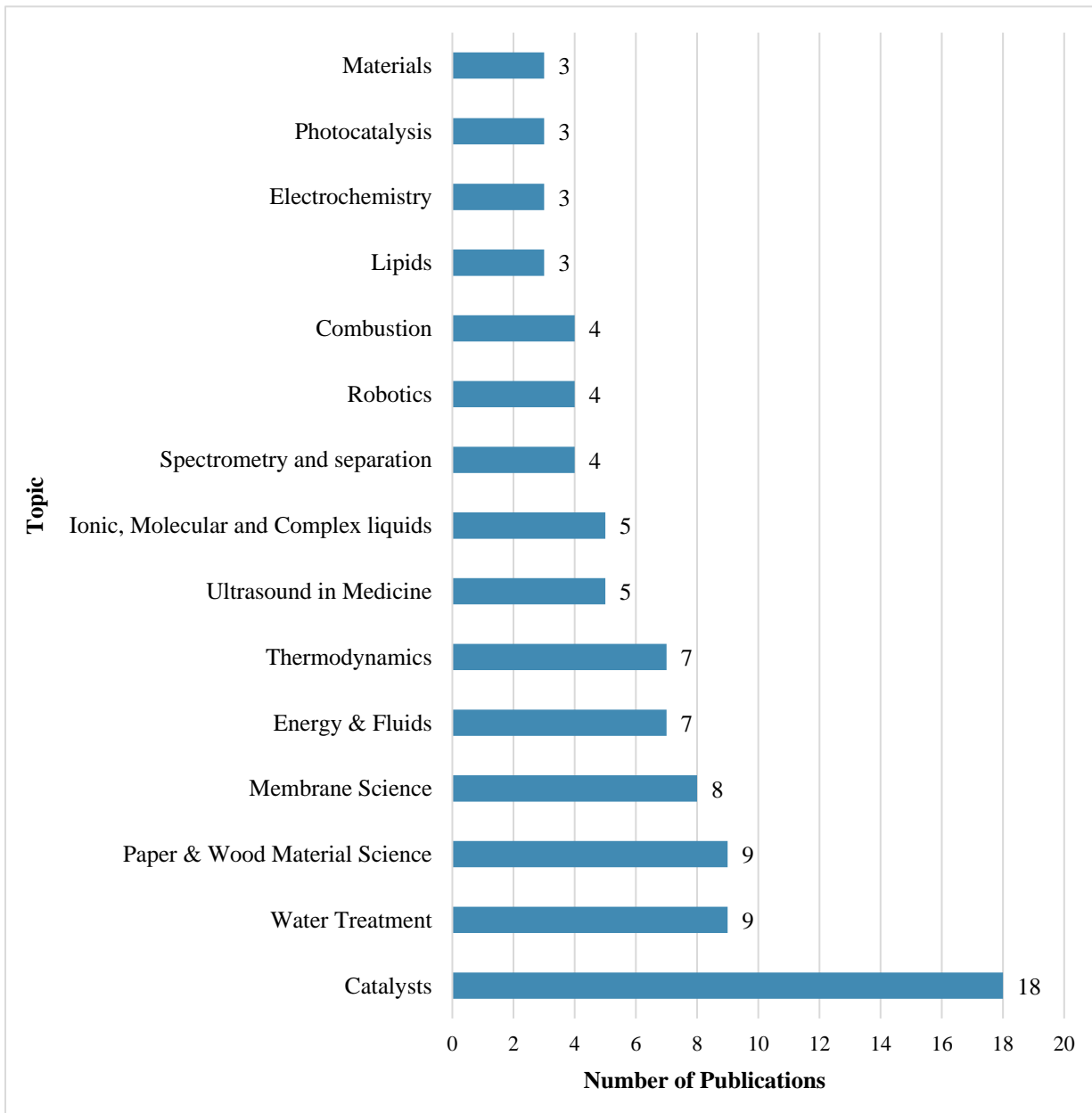


DEPARTMENT OF CHEMICAL ENGINEERING

The Department of Chemical Engineering have published a total of 123 journal articles. Approximately, 40.7% of those articles were published in Q1 journals while 46.3% were published in Q2 ranked journals. The overall average impact factor was 4.82. The top three research focus areas were: catalysts, water treatment, and paper & wood materials science.

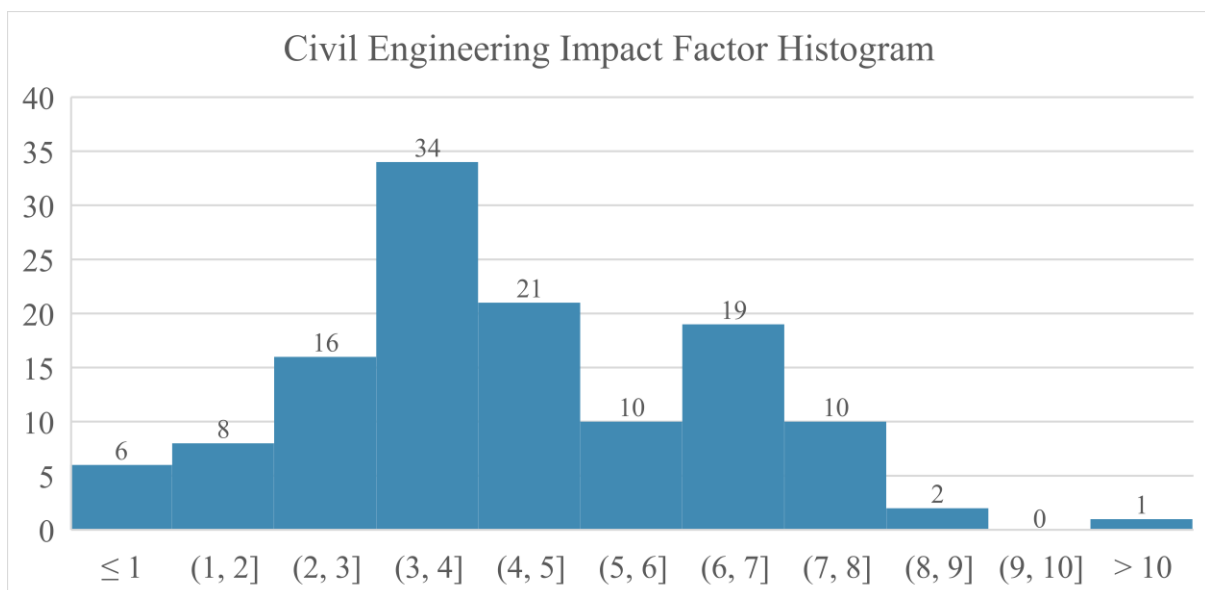
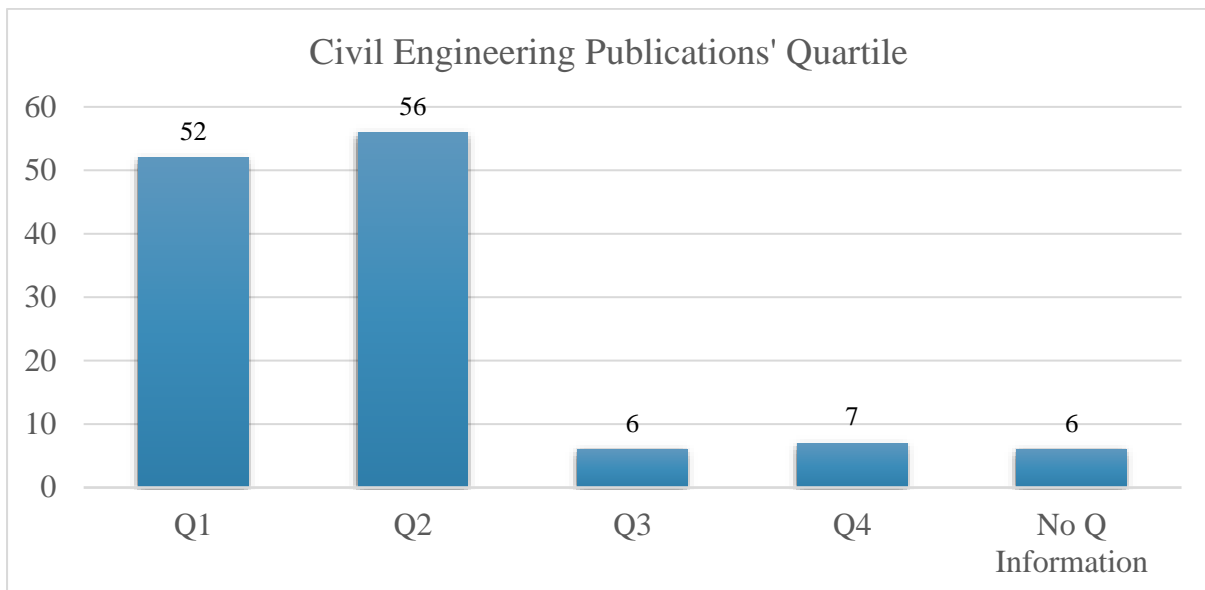


Chemical Engineering Publications classified by WoS Citation Topic Meso

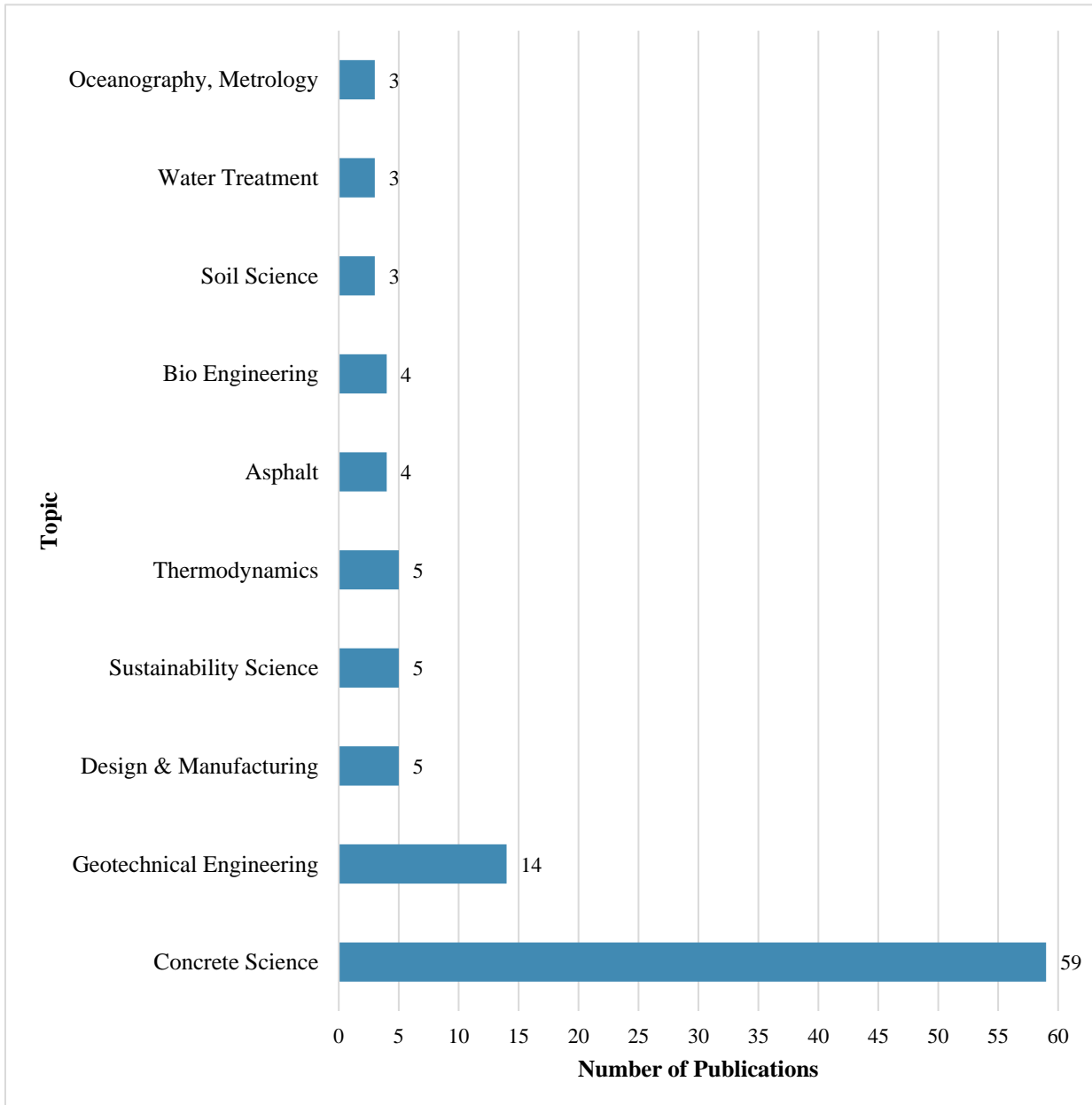


DEPARTMENT OF CIVIL ENGINEERING

The Department of Civil Engineering has published a total of 127 journal articles. Approximately, 40.9% of those articles were published in Q1 journals while 44.1% were published in Q2 ranked journals. The overall average impact factor was 4.4. The top research focus areas were concrete science and geotechnical engineering.

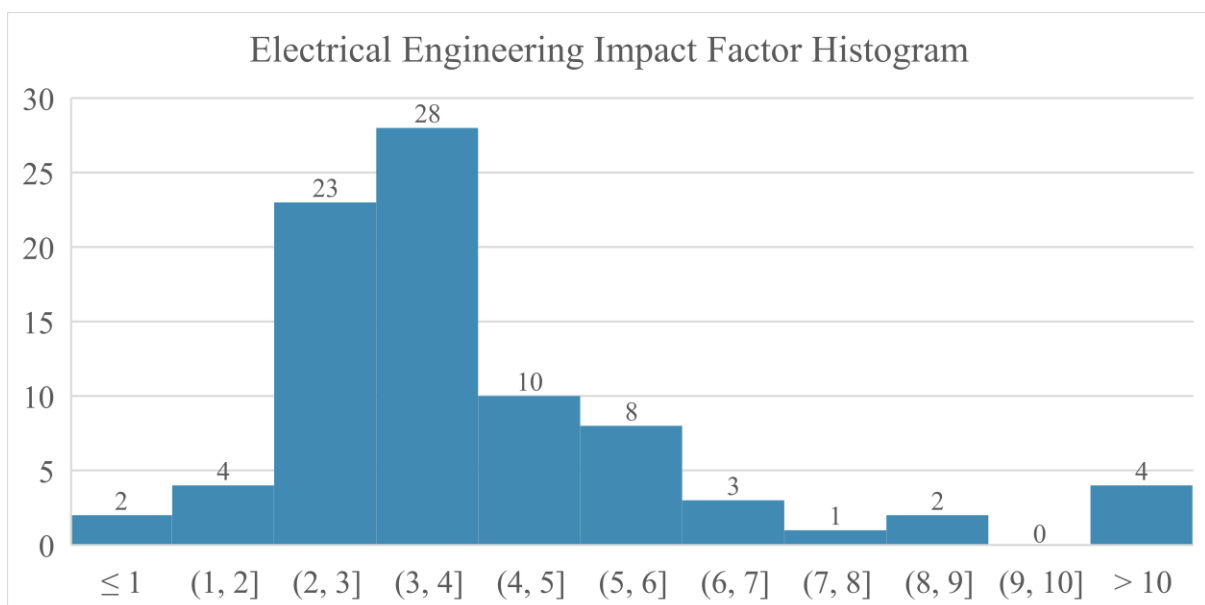
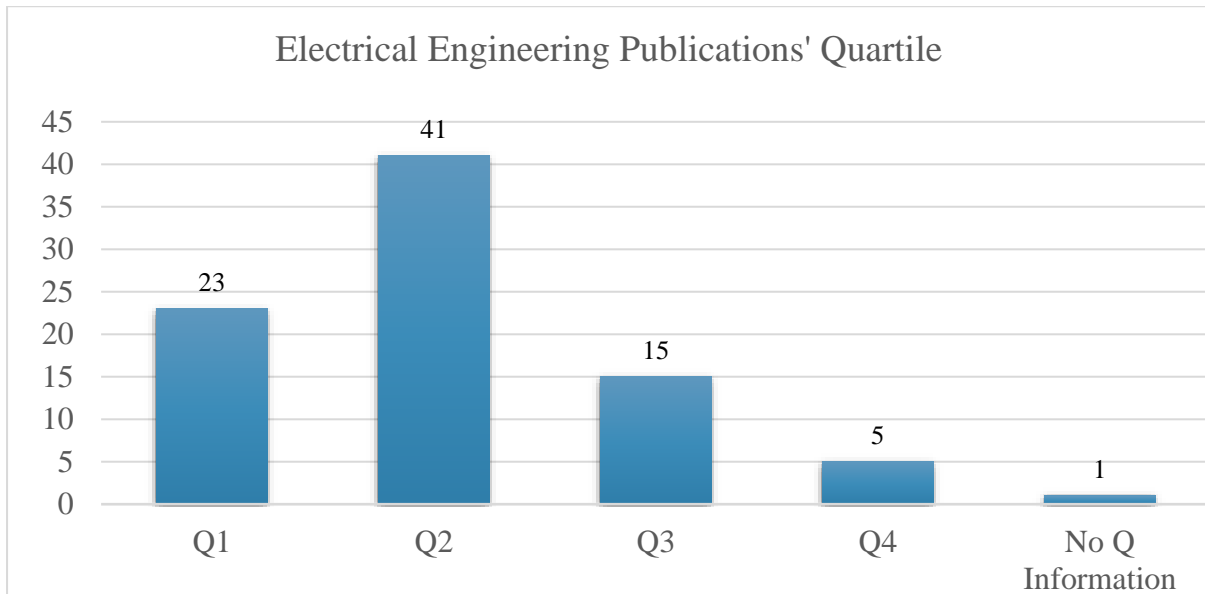


Civil Engineering Publications classified by WoS Citation Topic Meso

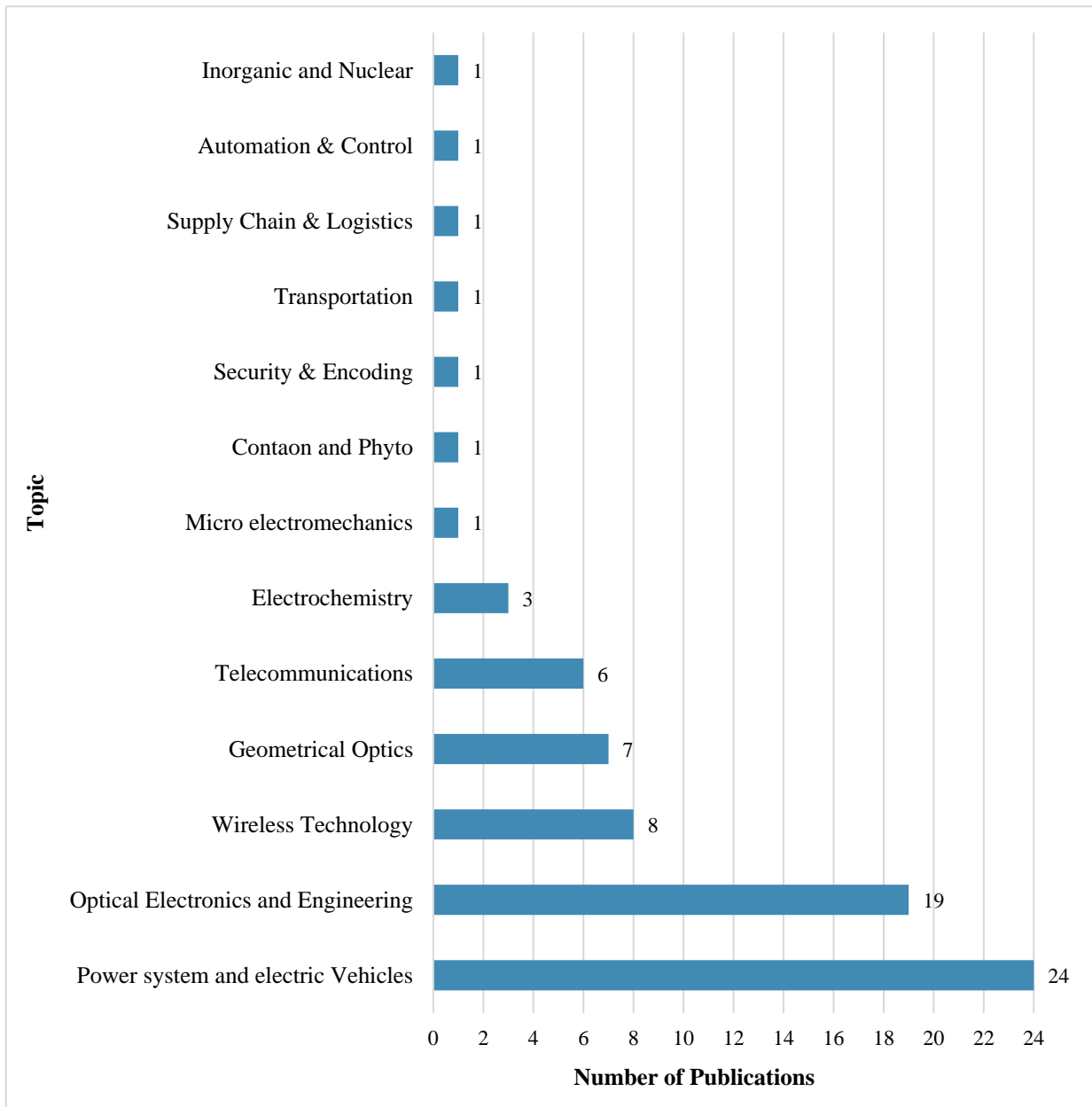


DEPARTMENT OF ELECTRICAL ENGINEERING

The Department of Electrical Engineering have published a total of 85 journal articles. Approximately, 27.1% of those articles were published in Q1 journals while 48.2% were published in Q2 ranked journals. The overall average impact factor was 4.46. The top three research focus areas were: power systems & electric vehicles, optical electronics & engineering, and wireless technology.

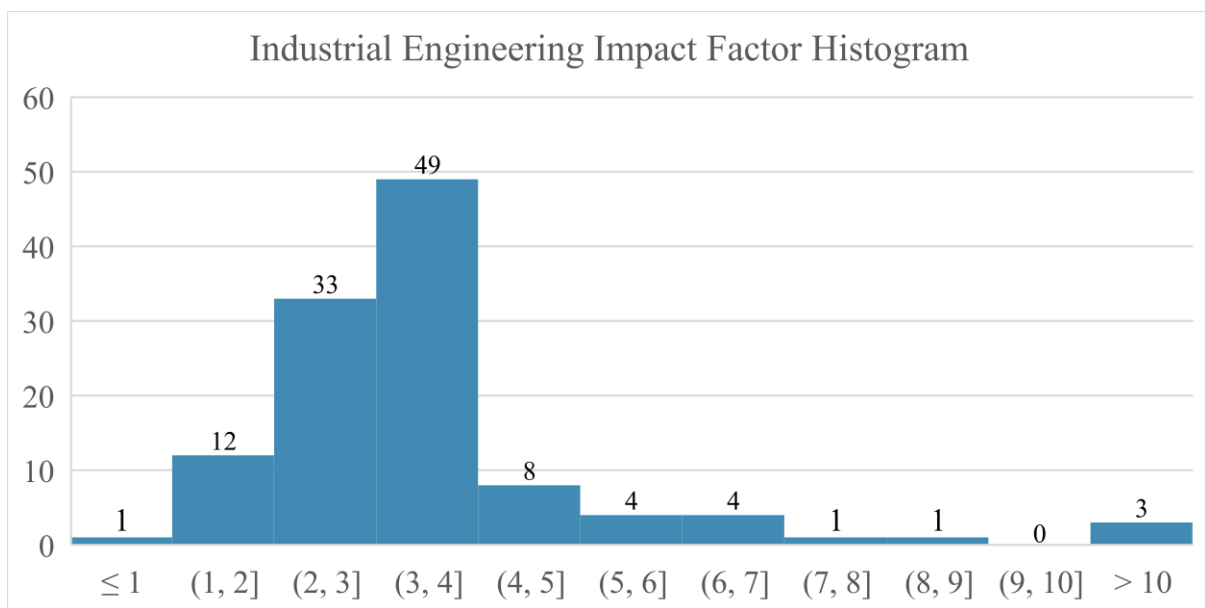
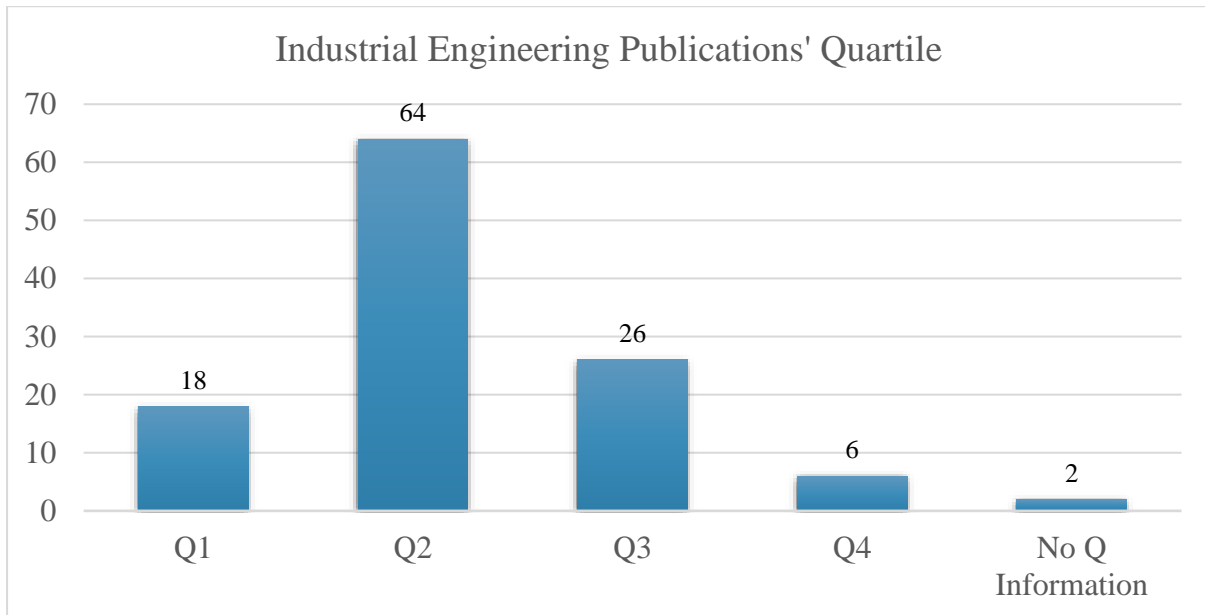


Electrical Engineering Publications classified by WoS Citation Topic Meso

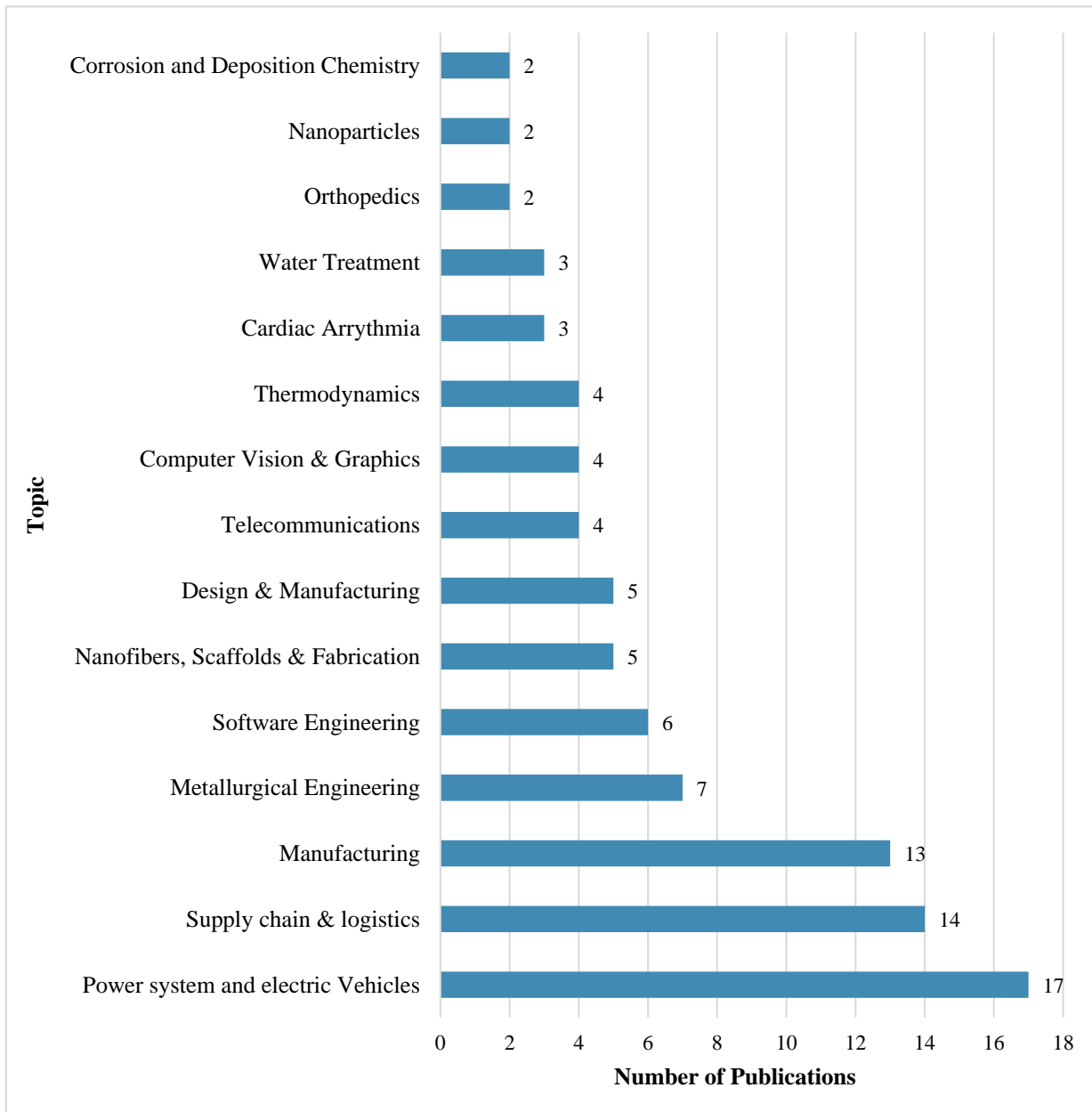


DEPARTMENT OF INDUSTRIAL ENGINEERING

The Department of Industrial Engineering have published a total of 116 journal articles. Approximately, 15.5% of those articles were published in Q1 journals while 55.2% were published in Q2 ranked journals. The overall average impact factor was 3.6. The top three research focus areas were: power systems & electric vehicles, supply chain & logistics, and manufacturing.

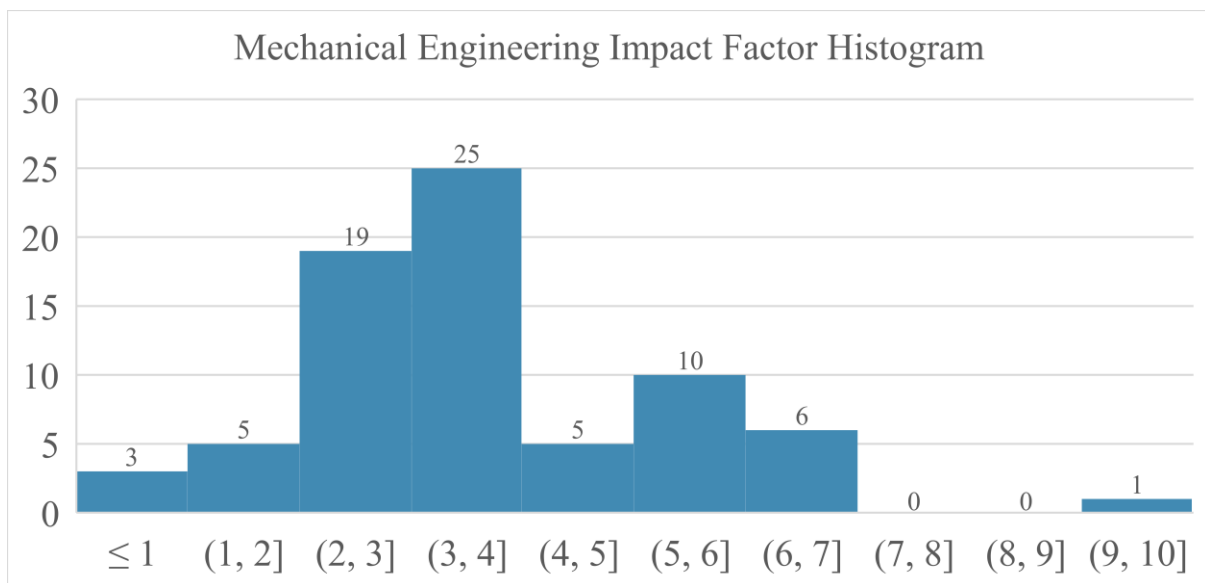
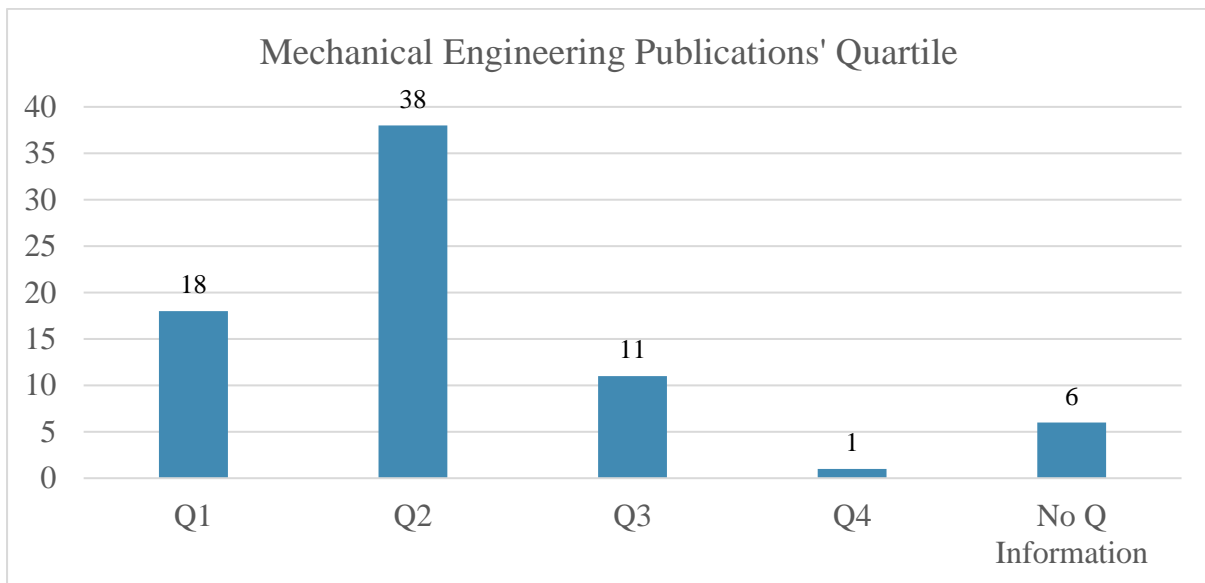


Industrial Engineering Publications classified by WoS Citation Topic Meso

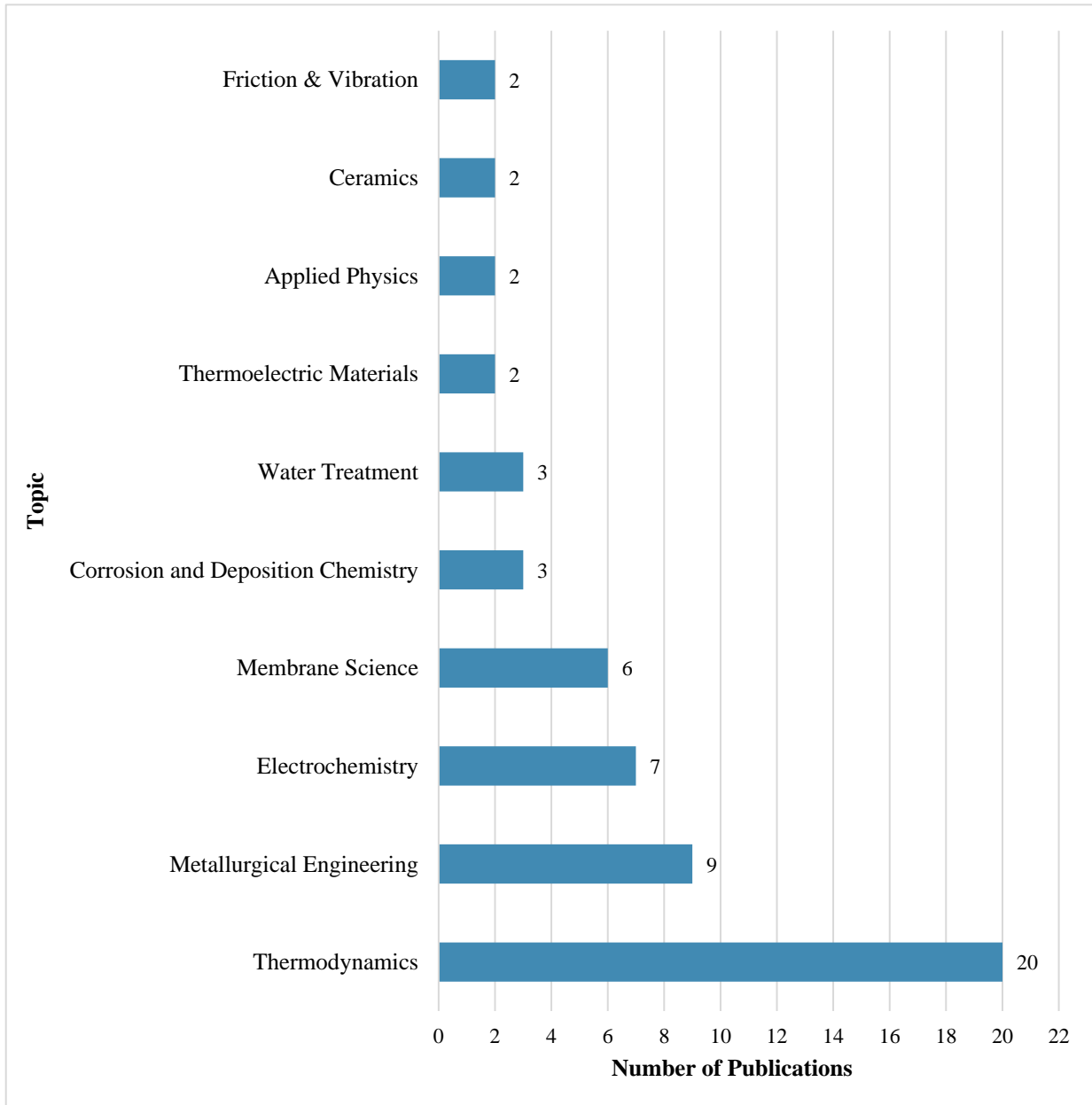


DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering have published a total of 74 journal articles. Approximately, 24.3% of those articles were published in Q1 journals while 51.4% were published in Q2 ranked journals. The overall average impact factor was 3.68. The top three research focus areas were: thermodynamics, metallurgical engineering, and electrochemistry.

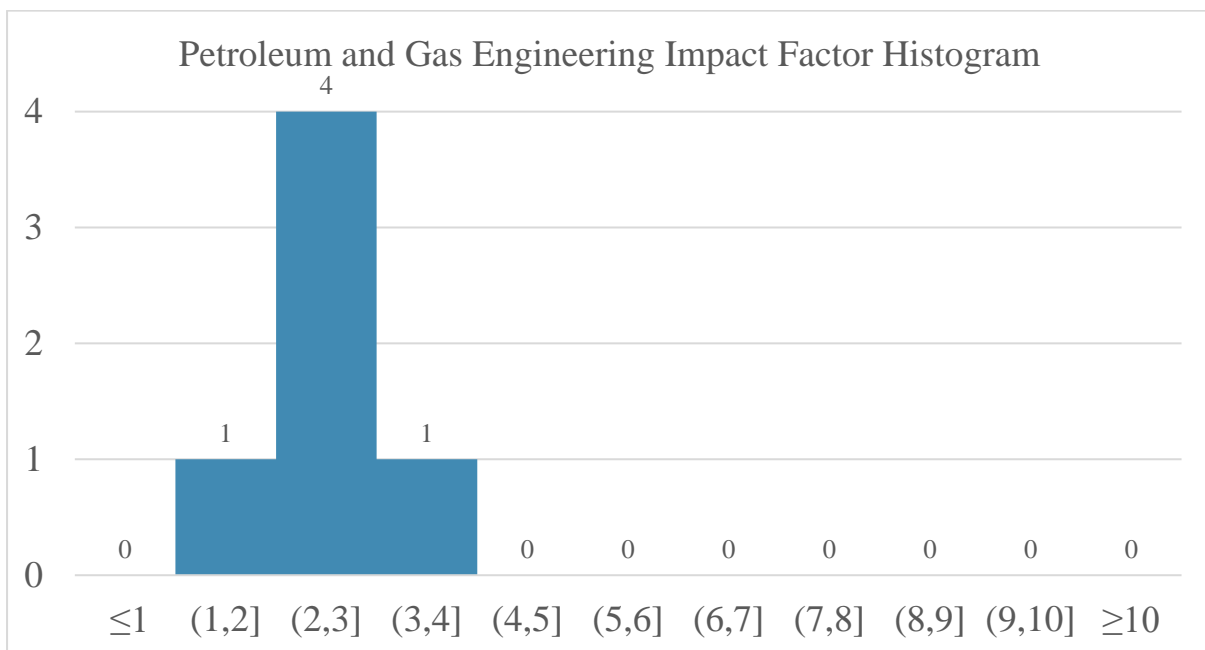
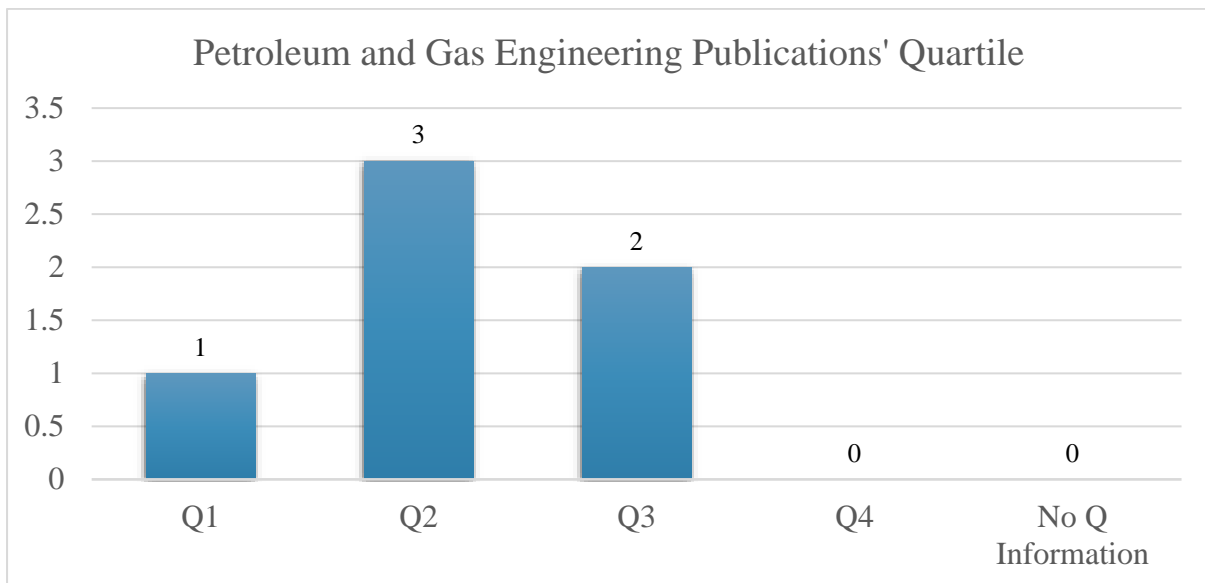


Mechanical Engineering Publications classified by WoS Citation Topic Meso

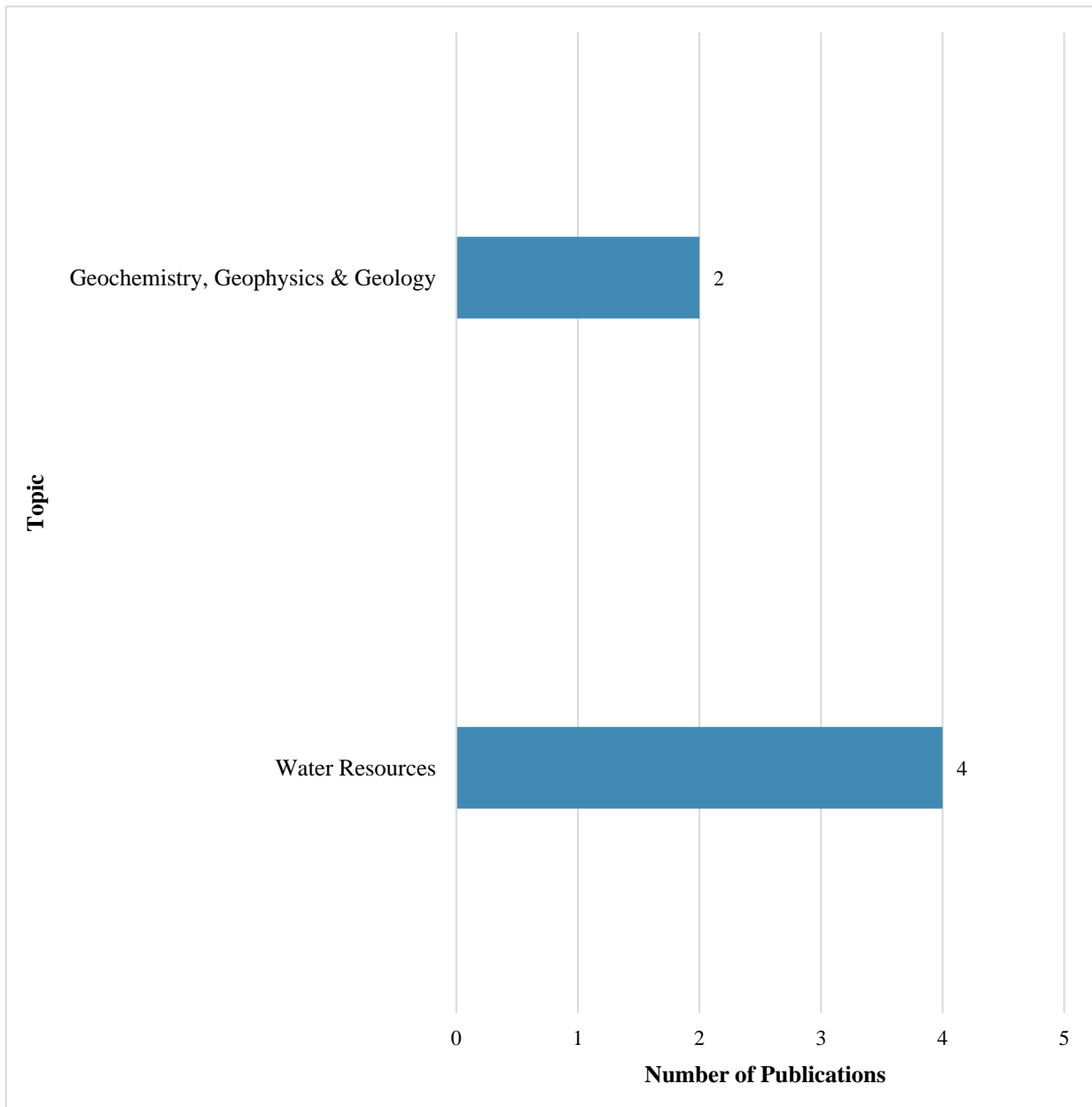


DEPARTMENT OF PETROLEUM AND GAS ENGINEERING

The Department of Petroleum and Gas Engineering have published a total of 6 journal articles. One of the articles was published in a Q1 journals while three were published in Q2 ranked journals. The overall average impact factor was 2.53. The research topics are classified under water resources and geochemistry, geophysics & geology.



Petroleum and Gas Engineering Publications classified by WoS Citation Topic Meso



TEAM AND CONTACT INFORMATION



Dr. Majid Altamimi
Dean, College of Engineering



Dr. Abdullah M. AlFaify
Vice Dean for Graduate Studies & Scientific
Research



Dr. Mohammed S. Al Alshaykh
Coordinator, CoE Research Scientific Unit
Director, CoE Research Center



Eng. Shamshad Alam
Member, CoE Research Scientific Unit

APPENDIX A:
DEPARTMENT WISE LIST OF PUBLISHED PAPERS

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CHEMICAL ENGINEERING

Publications

- [ChE1] Ubair Abdus Samad, Mohammad Asif Alam, Arfat Anis, Hany S. Abdo, Hamid Shaikh, and Saeed M. Al-Zahrani. Nanomechanical and electrochemical properties of zno-nanoparticle-filled epoxy coatings. *COATINGS*, 12(2), FEB 2022.
- [ChE2] Mohammad Asif, Ebrahim H. Al-Ghurabi, and Amanullah Fatehmulla. Pulsed fluidization of nanosilica: Rigorous evaluation of the efficacy of pulsation frequency. *NANOMATERIALS*, 12(13), JUL 2022.
- [ChE3] Abdullrahman A. Al-Shamma'a, Fekri Abduraqeb Ahmed Ali, Mansour S. Alhoshan, Fahd A. Alturki, Hassan M. H. Farh, Javed Alam, and Khalil AlSharabi. Proton exchange membrane fuel cell parameter extraction using a supply-demand-based optimization algorithm. *PROCESSES*, 9(8), AUG 2021.
- [ChE4] M. E. E. Abashar and A. A. Al-Rabiah. Highly efficient co₂ hydrogenation to methanol via in-situ condensation and sorption in a novel multi-stage circulating fast fluidized bed reactor. *CHEMICAL ENGINEERING JOURNAL*, 439, JUL 1 2022.
- [ChE5] A. Najib, J. Orfi, H. Alansary, and E. Ali. Application of the buckingham π theorem to model the multiple effect vacuum membrane distillation. *JOURNAL OF THERMAL SCIENCE AND ENGINEERING APPLICATIONS*, 14(3), MAR 1 2022.
- [ChE6] Anis H. Fakeeha, Abdullrahman Kurdi, Yousef A. Al-Baqmaa, Ahmed A. Ibrahim, Ahmed E. Abasaeed, and Ahmed S. Al-Fatesh. Performance study of methane dry reforming on ni/zro₂ catalyst. *ENERGIES*, 15(10), MAY 2022.
- [ChE7] Mohammad Asif Alam, Ubair Abdus Samad, Asiful Seikh, Jabair Ali Mohammed, Saeed M. Al-Zahrani, and El-Sayed M. Sherif. Development and characterization of pa 450 and pa 3282 epoxy coatings as anti-corrosion materials for offshore applications. *MATERIALS*, 15(7), APR 2022.
- [ChE8] Fahed Alrshoudi, Ubair Abdus Samad, and Othman Y. Alothman. Evaluation of the effect of recycled polypropylene as fine aggregate replacement on the strength performance and chloride penetration of mortars. *POLYMERS*, 14(14), JUL 2022.
- [ChE9] Mai A. Elobeid, Manal A. Awad, Promy Virk, Khalid M. Ortashi, Nada M. Merghani, Atheer M. Asiri, and Emadeldin Abdeljabar Ali Bashir. Synthesis and characterization of noble metal/metal oxide nanoparticles and their potential antidiabetic effect on biochemical parameters and wound healing. *GREEN PROCESSING AND SYNTHESIS*, 11(1):106–115, JAN 24 2022.
- [ChE10] Abdullah Alhamidi, Arfat Anis, Saeed M. Al-Zahrani, Zahir Bashir, and Maher M. Alrashed. Conductive plastics from al platelets in a pbt-pet polyester blend having co-continuous morphology. *POLYMERS*, 14(6), MAR 2022.
- [ChE11] Abdulrhman S. Al-Awadi, Mohanad El-Harbawi, Abdullah Algarawi, Abdullrahman Alalawi, Lahssen El Blidi, Maher M. Alrashed, and Chun-Yang Yin. Synthesis of carbon microspheres via hydrothermal carbonization of sabal palms (sabal palmetto) biomass for adsorption of methylene blue. *BIOMASS CONVERSION AND BIOREFINERY*, 2022 JAN 18 2022.

- [ChE12] Raed Alkathiri, Ali Alshamrani, Irfan Wazeer, Mourad Boumaza, and Mohamed K. Hadj-Kali. Optimization of the oxidative coupling of methane process for ethylene production. *PROCESSES*, 10(6), JUN 2022.
- [ChE13] Emad Ali. Optimal control of direct contact membrane distillation operated under fluctuating energy source. *MEMBRANES*, 12(6), JUN 2022.
- [ChE14] Abdelbasset Bessadok-Jemai and Abdulrahman A. Al-Rabiah. Predictive approach of covid-19 propagation via multiple-terms sigmoidal transition model. *INFECTIOUS DISEASE MODELLING*, 7(3):387–399, SEP 2022.
- [ChE15] Mahmud S. Lanre, Ahmed E. Abasaeed, Anis H. Fakeeha, Ahmed A. Ibrahim, Abdulrahman S. Al-Awadi, Abdulrahman bin Jumah, Fahad S. Al-Mubaddel, and Ahmed S. Al-Fatesh. Lanthanum-cerium-modified nickel catalysts for dry reforming of methane. *CATALYSTS*, 12(7), JUL 2022.
- [ChE16] Abdulrahman N. Kurdi, Ahmed A. Ibrahim, Ahmed S. Al-Fatesh, Abdullah A. Alquraini, Ahmed E. Abasaeed, and Anis H. Fakeeha. Hydrogen production from co₂ reforming of methane using zirconia supported nickel catalyst. *RSC ADVANCES*, 12(17):10846–10854, MAR 31 2022.
- [ChE17] Lahssen El Blidi, Mohamed K. Hadj-Kali, Abdullah M. Al-Anazi, Saeed M. Al-hawtali, and Irfan Wazeer. Liquid-liquid separation of n-hexane/1-hexene and cyclohexane/cyclohexene using deep eutectic solvents. *JOURNAL OF MOLECULAR LIQUIDS*, 344, DEC 15 2021.
- [ChE18] Abdulaziz S. Bin Naqyah and Abdulrahman A. Al-Rabiah. Development and intensification of the ethylene process utilizing a catalytic membrane reactor. *ACS OMEGA*, 2022 AUG 4 2022.
- [ChE19] Mona S. Alwhibi, Khalid M. O. Ortashi, Awatif A. Hendi, M. A. Awad, Dina A. Soliman, and Mohamed El-Zaidy. Green synthesis, characterization and biomedical potential of ag@au core-shell noble metal nanoparticles. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(4), JUN 2022.
- [ChE20] Emad Ali. Optimal control of a reverse osmosis plant for brackish water desalination driven by intermittent wind power. *MEMBRANES*, 12(4), APR 2022.
- [ChE21] Arun Kumar Shukla, Javed Alam, and Mansour Alhoshan. Recent advancements in polyphenylsulfone membrane modification methods for separation applications. *MEMBRANES*, 12(2), FEB 2022.
- [ChE22] Amanullah Fatehmulla, Salman A. Almawash, Abdullah A. Albassam, Abdullah M. Aldhafiri, Eman A. Alghamdi, Shahid M. Ramay, and Mohammad Asif. Influence of γ -radiation on the physical characteristics of thermally evaporated nanostructured cds: Cl films. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(6), AUG 2022.
- [ChE23] Arfat Anis, Ahmed Yagoub Elnour, Abdullah Alhamidi, Mohammad Asif Alam, Saeed M. Al-Zahrani, Fayez AlFayez, and Zahir Bashir. Amorphous poly(ethylene terephthalate) composites with high-aspect ratio aluminium nano platelets. *POLYMERS*, 14(3), FEB 2022.

- [ChE24] M. A. Ahmad, Z. A. Rashid, M. El-Harbawi, and A. S. Al-Awadi. High-pressure methanol synthesis case study: safety and environmental impact assessment using consequence analysis. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, 19(9):8555–8572, SEP 2022.
- [ChE25] Emad Ali, Irfan Wazeer, Abdulaziz Almutlaq, Jagan Rallapalli, and Mohamed K. Hadj-Kali. Retrofitting heat exchanger network of industrial ethylene glycol plant using heat integration based on pinch analysis. *POLISH JOURNAL OF CHEMICAL TECHNOLOGY*, 24(2):8–20, JUN 1 2022.
- [ChE26] Kaouther Kerboua, Oualid Hamdaoui, and Abdulaziz Alghyamah. Numerical characterization of acoustic cavitation bubbles with respect to the bubble size distribution at equilibrium. *PROCESSES*, 9(9), SEP 2021.
- [ChE27] Emad Ali, Jamel Orfi, and Abdullah Najib. Effects of forced input on the performance of direct contact membrane distillation. *DESALINATION AND WATER TREATMENT*, 246:68–81, JAN 2022.
- [ChE28] Waheed A. Al-Masry, Sajjad Haider, Asif Mahmood, Mujeeb Khan, Syed Farooq Adil, and Mohammed Rafiq H. Siddiqui. Evaluation of the thermal and morphological properties of γ -irradiated chitosan-glycerol-based polymeric films. *PROCESSES*, 9(10), OCT 2021.
- [ChE29] Anesh Manjaly Poulouse, Hamid Shaikh, Arfat Anis, Abdullah Alhamidi, Nadavala Siva Kumar, Ahmed Yagoub Elnour, and Saeed M. Al-Zahrani. Effect of compatibilizer on the persistent luminescence of polypropylene/strontium aluminate composites. *POLYMERS*, 14(9), MAY 2022.
- [ChE30] Abdulrahman Bin Jumah, Maryam Malekshahian, Aleksander A. Tedstone, and Arthur A. Garforth. Kinetic modeling of hydrocracking of low-density polyethylene in a batch reactor. *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*, 9(49):16757–16769, DEC 13 2021.
- [ChE31] Rutu Patel, Anis H. Fakeeha, Samsudeen O. Kasim, Mahmud L. Sofiu, Ahmed A. Ibrahim, Ahmed E. Abasaed, Rawesh Kumar, and Ahmed S. Al-Fatesh. Optimizing yttria-zirconia proportions in ni supported catalyst system for h₂ production through dry reforming of methane. *MOLECULAR CATALYSIS*, 510, JUN 2021.
- [ChE32] Abdulrahman Alharthi, I, Mshari A. Alotaibi, Israf Ud Din, E. Abdel-Fattah, Md Afroz Bakht, Ahmed Sadeq Al-Fatesh, and Abdulaziz A. Alanazi. Mg and cu incorporated co₂o₄ catalyst: characterization and methane cracking performance for hydrogen and nano-carbon production. *CERAMICS INTERNATIONAL*, 47(19):27201–27209, OCT 1 2021.
- [ChE33] Aleksander A. Tedstone, Abdulrahman Bin Jumah, Edidiong Asuquo, and Arthur A. Garforth. Transition metal chalcogenide bifunctional catalysts for chemical recycling by plastic hydrocracking: a single-source precursor approach. *ROYAL SOCIETY OPEN SCIENCE*, 9(3), MAR 2022.
- [ChE34] Anesh Manjaly Poulouse, Hamid Shaikh, Arfat Anis, Abdullah Alhamidi, Nadavala Siva Kumar, Ahmed Yagoub Elnour, and Saeed M. Al-Zahrani. Long persistent

luminescent hdpe composites with strontium aluminate and their phosphorescence, thermal, mechanical, and rheological characteristics. *MATERIALS*, 15(3), FEB 2022.

- [ChE35] Asif Mahmood, Shahid M. Ramay, Waheed Al-Masry, and Ateyah A. Al-Zahrani. Predicting ferromagnetism and thermoelectric characteristics in bulk spinels znCr_2x_4 ($x = s, se$) using density functional theory. *PHYSICA SCRIPTA*, 96(12), DEC 2021.
- [ChE36] Abdullah Najib, Hany Al-Ansary, Jamel Orfi, Emad Ali, and Fahad Awjah Almeahdi. Performance comparison of cross- and forward-flow configurations for multiple-effect vacuum membrane distillation. *MEMBRANES*, 12(5), MAY 2022.
- [ChE37] Mahmud S. Lanre, Ahmed E. Abasaheed, Anis H. Fakeeha, Ahmed A. Ibrahim, Abdullah A. Alquraini, Salwa B. AlReshaidan, and Ahmed S. Al-Fatesh. Modification of $\text{Ce}_{0.9}\text{Zr}_{0.1}\text{O}_3$ perovskite catalyst by partially substituting yttrium with zirconia in dry reforming of methane. *MATERIALS*, 15(10), MAY 2022.
- [ChE38] Hamid M. Shaikh, Arfat Anis, Anesh Manjaly Poulouse, Niyaz Ahamad Madhar, and Saeed M. Al-Zahrani. Date-palm-derived cellulose nanocrystals as reinforcing agents for poly(vinyl alcohol)/guar-gum-based phase-separated composite films. *NANOMATERIALS*, 12(7), APR 2022.
- [ChE39] Ahmed Aidid Ibrahim, Anis Hamza Fakeeha, Mahmud Sofiu Lanre, Abdulrhman S. Al-Awadi, Salwa Bader Alreshaidan, Yousef Abdulrahman Albaqmaa, Syed Farooq Adil, Ateyah A. Al-Zahrani, Ahmed Elhag Abasaheed, and Ahmed S. Al-Fatesh. The effect of calcination temperature on various sources of ZrO_2 supported Ni catalyst for dry reforming of methane. *CATALYSTS*, 12(4), APR 2022.
- [ChE40] Hamid M. Shaikh, Arfat Anis, Anesh Manjaly Poulouse, Saeed M. Al-Zahrani, Niyaz Ahamad Madhar, Abdullah Alhamidi, Saleh Husam Aldeligan, and Faisal S. Alsubaie. Synthesis and characterization of cellulose triacetate obtained from date palm (*Phoenix dactylifera* L.) trunk mesh-derived cellulose. *MOLECULES*, 27(4), FEB 2022.
- [ChE41] Saddam Hussain, Sajjad Haider, Waheed Al-Masry, and Soo-Young Park. Optical anticounterfeiting photonic bilayer film based on handedness of solid-state helicoidal structure. *RSC ADVANCES*, 11(59):37498–37503, NOV 22 2021.
- [ChE42] Hamid M. Shaikh, Arfat Anis, Anesh Manjaly Poulouse, Niyaz Ahamad Madhar, and Saeed M. Al-Zahrani. Development of bigels based on date palm-derived cellulose nanocrystal-reinforced guar gum hydrogel and sesame oil/candelilla wax oleogel as delivery vehicles for moxifloxacin. *GELS*, 8(6), JUN 2022.
- [ChE43] Marcio Jose da Silva, Diego Morais Chaves, Sukarno Olavo Ferreira, Rene Chagas da Silva, Jose Balena Gabriel Filho, Carlos Giovanni Oliveira Bruziquesi, and Abdulrahman A. Al-Rabiah. Impacts of Sn(II) doping on the Keggin heteropolyacid-catalyzed etherification of glycerol with tert-butyl alcohol. *CHEMICAL ENGINEERING SCIENCE*, 247, JAN 16 2022.
- [ChE44] Fahad A. AlAbduljabbar, Sajjad Haider, Fekri Abdurraqeb Ahmed Ali, Abdulaziz A. Alghyamah, Waheed A. Almasry, Raj Patel, and Iqbal M. Mujtaba. TiO_2 nanostructured coated functionally modified and composite electrospun chitosan nanofibers

membrane for efficient photocatalytic degradation of organic pollutant in wastewater. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 15:5197–5212, NOV-DEC 2021.

- [ChE45] Mohammad Luqman, Arfat Anis, Hamid M. Shaikh, Saeed M. Al-Zahrani, and Mohammad Asif Alam. Development of a soft robotic bending actuator based on a novel sulfonated polyvinyl chloride-phosphotungstic acid ionic polymer-metal composite (ipmc) membrane. *MEMBRANES*, 12(7), JUL 2022.
- [ChE46] Promy Virk, Sarah Turif Abdulhadi Alajmi, Manal Awad, Mai Elobeid, Khalid M. O. Ortashi, Atheer Mohammed Asiri, Nada M. Merghani, and Dalia Fouad. Attenuating effect of indian mustard (brassica juncea) seed and its nano formulation on arsenic induced-oxidative stress and associated genotoxicity in rat. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(6), AUG 2022.
- [ChE47] Emad Ali, Jamel Orfi, Hany AlAnsary, Sofiane Soukane, Harun Elcik, Alla Alpatova, and Noreddine Ghaffour. Cost analysis of multiple effect evaporation and membrane distillation hybrid desalination system. *DESALINATION*, 517, DEC 1 2021.
- [ChE48] Fahad A. AlAbduljabbar, Sajjad Haider, Fekri Abdulraqeb Ahmed Ali, Abdulaziz A. Alghyamah, Waheed A. Almasry, Raj Patel, and Iqbal M. Mujtaba. Efficient photocatalytic degradation of organic pollutant in wastewater by electrospun functionally modified polyacrylonitrile nanofibers membrane anchoring tio2 nanostructured. *MEMBRANES*, 11(10), OCT 2021.
- [ChE49] Mohammad Luqman, Hamid M. Shaikh, Arfat Anis, Saeed M. Al-Zahrani, and Mohammad Asif Alam. A convenient and simple ionic polymer-metal composite (ipmc) actuator based on a platinum-coated sulfonated poly(ether ether ketone)-polyaniline composite membrane. *POLYMERS*, 14(4), FEB 2022.
- [ChE50] Ravindra Kumar Gupta, Hamid Shaikh, Ahamad Imran, Idriss Bedja, and Abdullah Saleh Aldwayyan. Tetramethyl succinonitrile as a solid plasticizer in a poly(ethylene oxide)8-lii-i2 solid polymer electrolyte. *MACROMOLECULAR RAPID COMMUNICATIONS*, 43(6), MAR 2022.
- [ChE51] Ahlem Taamallah, Oualid Hamdaoui, Kaouther Kerboua, and Abdulaziz Alghyamah. Extraction of cerium(iii) ions from dilute aqueous solutions by emulsion liquid membrane: effects of operating conditions, salts and natural water matrices. *DESALINATION AND WATER TREATMENT*, 238:218–230, OCT 2021.
- [ChE52] Aissa Dehane, Slimane Merouani, and Oualid Hamdaoui. Carbon tetrachloride (ccl4) sonochemistry: A comprehensive mechanistic and kinetics analysis elucidating how ccl4 pyrolysis improves the sonolytic degradation of nonvolatile organic contaminants. *SEPARATION AND PURIFICATION TECHNOLOGY*, 275, NOV 15 2021.
- [ChE53] Aissa Dehane, Slimane Merouani, and Oualid Hamdaoui. Effect of carbon tetrachloride (ccl4) sonochemistry on the size of active bubbles for the production of reactive oxygen and chlorine species in acoustic cavitation field. *CHEMICAL ENGINEERING JOURNAL*, 426, DEC 15 2021.

- [ChE54] Messaouda Hamida, Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, and Muthupandian Ashokkumar. The role of reactive chlorine species and hydroxyl radical in the ultrafast removal of safranin o from wastewater by ccl4/ultrasound sono-process. *CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION*, 178, AUG 2022.
- [ChE55] Ravindra Kumar Gupta, Hamid Shaikh, Ahamad Imran, Idriss Bedja, Abrar Fahad Ajaj, and Abdullah Saleh Aldwayyan. Electrical transport, structural, optical and thermal properties of [(1-x)succinonitrile: xpeo]-litfsi-co(bpy)₃(tfsi)₂-co(bpy)₃ (tfsi)₃ solid redox mediators. *POLYMERS*, 14(9), MAY 2022.
- [ChE56] Aissa Dehane, Slimane Merouani, and Oualid Hamdaoui. Methanol sono-pyrolysis for hydrogen recovery: Effect of methanol concentration under an argon atmosphere. *CHEMICAL ENGINEERING JOURNAL*, 433(2), APR 1 2022.
- [ChE57] Mohammad Luqman, Arfat Anis, Hamid M. Shaikh, Saeed M. Al-Zahrani, and Mohammad Asif Alam. Synthesis, characterization and fabrication of copper nanoparticles embedded non-perfluorinated kraton based ionic polymer metal composite (ipmc) actuator. *ACTUATORS*, 11(7), JUL 2022.
- [ChE58] Oualid Hamdaoui, Slimane Merouani, Meriem Ait Idir, Hadjer C. Benmahmoud, Aissa Dehane, and Abdulaziz Alghyamah. Ultrasound/chlorine sono-hybrid-advanced oxidation process: Impact of dissolved organic matter and mineral constituents. *ULTRASONICS SONOCHEMISTRY*, 83, FEB 2022.
- [ChE59] Deepak Balram, Kuang-Yow Lian, Neethu Sebastian, Fahad S. Al-Mubaddel, and Muhammad Tayyab Noman. Ultrasensitive detection of food colorant sunset yellow using nickel nanoparticles promoted lettuce-like spinel co₃o₄ anchored go nanosheets. *FOOD AND CHEMICAL TOXICOLOGY*, 159, JAN 2022.
- [ChE60] Neethu Sebastian, Wan-Chin Yu, Deepak Balram, Fahad S. Al-Mubaddel, and Muhammad Tayyab Noman. Functionalization of cnfs surface with β -cyclodextrin and decoration of hematite nanoparticles for detection and degradation of toxic fungicide carbendazim. *APPLIED SURFACE SCIENCE*, 586, JUN 1 2022.
- [ChE61] Widi Astuti, Achmad Chafidz, Ahmed S. Al-Fatesh, and Anis H. Fakeeha. Removal of lead (pb(ii)) and zinc (zn(ii)) from aqueous solution using coal fly ash (cfa) as a dual-sites adsorbent. *CHINESE JOURNAL OF CHEMICAL ENGINEERING*, 34:289–298, JUN 2021.
- [ChE62] Abdelbasset J. Bessadok, Mohamed Ben Rabha, F. Abduraqeb Ahmed Ali, Salim Mokraoui, and Lotfi Khezami. Nanostructure, optical and optoelectronic properties of silver nanoparticle-based chemical etching on monocrystalline silicon for solar cell applications. *CURRENT NANOSCIENCE*, 17(6):881–885, 2021.
- [ChE63] Slimane Merouani, Aissa Dehane, Aouattef Belghit, Oualid Hamdaoui, Yasser A. Tobba, Chouaib Lahlou, and Maulin P. Shah. Protonated hydroxylamine-assisted iron catalytic activation of persulfate for the rapid removal of persistent organics from wastewater. *CLEAN-SOIL AIR WATER*, 2022 JUL 17 2022.

- [ChE64] Chawki Djelloul, Oualid Hamdaoui, and Abdulaziz Alghyamah. Batch biosorption of the dye methylene blue from its aqueous solutions by palm spathe: kinetic, isotherm, and thermodynamic studies. *DESALINATION AND WATER TREATMENT*, 231:389–397, AUG 2021.
- [ChE65] Ahmed Aidid Ibrahim, Samsudeen Olajide Kasim, Anis Hamza Fakeeha, Mahmud Sofiu Lanre, Ahmed Elhag Abasaheed, Jehad K. Abu-Dahrieh, and Ahmed Sadeq Al-Fatesh. Dry reforming of methane with ni supported on mechanically mixed yttria-zirconia support. *CATALYSIS LETTERS*, 152(12):3632–3641, DEC 2022.
- [ChE66] Deepak Balram, Kuang-Yow Lian, Neethu Sebastian, Fahad S. Al-Mubaddel, and Muhammad Tayyab Noman. Bi-functional renewable biopolymer wrapped cnfs/ag doped spinel cobalt oxide as a sensitive platform for highly toxic nitroaromatic compound detection and degradation. *CHEMOSPHERE*, 291(2), MAR 2022.
- [ChE67] Neethu Sebastian, Wan-Chin Yu, Deepak Balram, Fahad S. Al-Mubaddel, and Muhammad Tayyab Noman. Nanomolar detection of food additive tert-butylhydroquinone in edible oils based on novel ternary metal oxide embedded β -cyclodextrin functionalized carbon black. *FOOD CHEMISTRY*, 377, MAY 30 2022.
- [ChE68] Deepak Balram, Kuang-Yow Lian, Neethu Sebastian, Fahad S. Al-Mubaddel, and Muhammad Tayyab Noman. A sensitive and economical electrochemical platform for detection of food additive tert-butylhydroquinone based on porous co₃o₄ nanorods embellished chemically oxidized carbon black. *FOOD CONTROL*, 136, JUN 2022.
- [ChE69] Hurun E. Suhaimi, Haneef F. Hizaddin, Irfan Wazeer, Lahssen El Blidi, Mohd A. Hashim, and Mohamed K. Hadj-Kali. Simultaneous extraction of sulfur and nitrogen compounds from model diesel fuel using neoteric green solvents. *ACS OMEGA*, 6(34):22317–22332, AUG 31 2021.
- [ChE70] Fehaid M. Alsubaie, Othman Y. Allothman, Hassan Fouad, and Abdel-Hamid I. Mourad. Abc-type triblock copolyacrylamides via copper-mediated reversible deactivation radical polymerization. *POLYMERS*, 14(1), JAN 2022.
- [ChE71] Abdulrahman Faraj Alharbi, Abdulaziz Abdulkarim Mansour Abahussain, Mian Hammad Nazir, and Syed Zohaib Javaid Zaidi. A high-energy-density magnesium-air battery with nanostructured polymeric electrodes. *POLYMERS*, 14(15), AUG 2022.
- [ChE72] Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, and Muthupandian Ashokkumar. An alternative technique for determining the number density of acoustic cavitation bubbles in sonochemical reactors. *ULTRASONICS SONOCHEMISTRY*, 82, JAN 2022.
- [ChE73] Abdulaziz Bagabas, Ahmed Sadeq Al-Fatesh, Samsudeen Olajide Kasim, Rasheed Arasheed, Ahmed Aidid Ibrahim, Rawan Ashamari, Khalid Anojaidi, Anis Hamza Fakeeha, Jehad K. Abu-Dahrieh, and Ahmed Elhag Abasaheed. Optimizing mgo content for boosting γ -al₂o₃-supported ni catalyst in dry reforming of methane. *CATALYSTS*, 11(10), OCT 2021.

- [ChE74] Chawki Djelloul, Oualid Hamdaoui, Abdulaziz Alghyamah, Sara Rezki, and Safia Mellouli. Combining ultrasound and stirring for the intensification of methylene blue biosorption from aqueous phase by jujube stone. *DESALINATION AND WATER TREATMENT*, 234:277–287, SEP 2021.
- [ChE75] Syed Sadiq Ali, Agus Arsad, S. K. Safdar Hossain, Avijit Basu, and Mohammad Asif. Energy optimization and effective control of reactive distillation process for the production of high purity biodiesel. *PROCESSES*, 9(8), AUG 2021.
- [ChE76] Syed Sadiq Ali, Agus Arsad, S. K. Safdar Hossain, and Mohammad Asif. A detailed insight into acoustic attenuation in a static bed of hydrophilic nanosilica. *NANOMATERIALS*, 12(9), MAY 2022.
- [ChE77] Awatif A. Hendi, Promy Virk, Manal A. Awad, Mai Elobeid, Khalid M. O. Ortashi, Meznah M. Alanazi, Fatemah H. Alkallas, Maha Mohammad Almoneef, and Mohammed Aly Abdou. In silico studies on zinc oxide based nanostructured oil carriers with seed extracts of nigella sativa and pimpinella anisum as potential inhibitors of 3cl protease of sars-cov-2. *MOLECULES*, 27(13), JUL 2022.
- [ChE78] Samer Fawzy, Ahmed I. Osman, Charlie Farrell, Ala ‘a H. Al-Muhtaseb, John Harrison, Ahmed S. Al-Fatesh, Anis H. Fakeeha, and David W. Rooney. Kinetic modelling for pyrolytic conversion of dedicated short rotation woody crop with predictions for isothermal, non-isothermal and stepwise heating regimes. *APPLICATIONS IN ENERGY AND COMBUSTION SCIENCE*, 9, MAR 2022.
- [ChE79] Mohamed K. Hadj-Kali, M. Zulhaziman M. Salleh, Irfan Wazeer, Ahmad Alhadid, and Sarwono Mulyono. Separation of benzene and cyclohexane using eutectic solvents with aromatic structure. *MOLECULES*, 27(13), JUL 2022.
- [ChE80] Sajjad Haider, Salah Uddin Khan, Jawayria Najeeb, Sumaira Naeem, Hummera Rafique, Hira Munir, Waheed A. Al-Masry, and Muhammad Faizan Nazar. Synthesis of cadmium oxide nanostructures by using dalbergia sissoo for response surface methodology based photocatalytic degradation of methylene blue. *JOURNAL OF CLEANER PRODUCTION*, 365, SEP 10 2022.
- [ChE81] Aziz Ullah Awan, Fahad S. Al-Mubaddel, Sumble Ahmad, Nadeem Abbas, and Mohammad Mahtab Alam. Significance of thermal radiation, lorentz force, and non-darcian porous medium on the dynamics of second-grade fluid subject to exponential stretching sheet. *WAVES IN RANDOM AND COMPLEX MEDIA*, 2022 AUG 18 2022.
- [ChE82] Kaouther Kerboua, Oualid Hamdaoui, Naoufel Haddour, and Abdulaziz Alghyamah. Simultaneous galvanic generation of fe²⁺ catalyst and spontaneous energy release in the galvano-fenton technique: A numerical investigation of phenol’s oxidation and energy production and saving. *CATALYSTS*, 11(8), AUG 2021.
- [ChE83] Fahad S. Al-Mubaddel, Meghdad Karimi, Samira Sadeghi, Reza Ghahremani Gavinehroudi, Haleh Mohebali, Alireza Mahjoub, Riadh Marzouki, M. H. El Ouni, and Akbar Heydari. Amino acid-assisted ferrite/mof composite formation for visible-light induced photocatalytic cascade c=c aerobic oxidative cleavage functionalization. *MOLECULAR CATALYSIS*, 516, NOV 2021.

- [ChE84] Ahmed Sadeq Al-Fatesh, Rutu Patel, Vijay Kumar Srivastava, Ahmed Aidid Ibrahim, Muhammad Awais Naeem, Anis Hamza Fakeeha, Ahmed Elhag Abasaheed, Abdullah Ali Alquraini, and Rawesh Kumar. Barium-promoted yttria-zirconia-supported ni catalyst for hydrogen production via the dry reforming of methane: Role of barium in the phase stabilization of cubic zro2. *ACS OMEGA*, 7(19):16468–16483, MAY 17 2022.
- [ChE85] Abdulrahman A. Al-Rabiah, Abdulelah S. Alshehri, Arimiyawo Ibn Idriss, and Omar Y. Abdelaziz. Comparative kinetic analysis and process optimization for the production of dimethyl ether via methanol dehydration over a γ -alumina catalyst. *CHEMICAL ENGINEERING & TECHNOLOGY*, 45(2):319–328, FEB 2022.
- [ChE86] Arfat Anis, Manawwer Alam, Abdullah Alhamidi, Mohammad Asif Alam, Ravindra Kumar Gupta, Mohammad Tariq, Hamid Shaikh, Anesh Manjaly Poulouse, and Saeed M. Al-Zahrani. Characterization of thermal, ionic conductivity and electrochemical properties of some p-tosylate anions-based protic ionic compounds. *CRYSTALS*, 12(4), APR 2022.
- [ChE87] Syed Sadiq Ali, Agus Arsad, Kenneth L. Roberts, and Mohammad Asif. Effect of voidage on the collapsing bed dynamics of fine particles: A detailed region-wise study. *NANOMATERIALS*, 12(12), JUN 2022.
- [ChE88] Mohammad Luqman, Hamid Shaikh, Arfat Anis, Saeed M. Al-Zahrani, Abdullah Hamidi, and Inamuddin. Platinum-coated silicotungstic acid-sulfonated polyvinyl alcohol-polyaniline based hybrid ionic polymer metal composite membrane for bending actuation applications. *SCIENTIFIC REPORTS*, 12(1), MAR 16 2022.
- [ChE89] Yasir Akbar, Haleem Afsar, Fahad S. Al-Mubaddel, Nidal H. Abu-Hamdeh, and Abdullah M. Abusorrah. On the solitary wave solution of the viscosity capillarity van der waals p-system along with painleve analysis. *CHAOS SOLITONS & FRACTALS*, 153(1), DEC 2021.
- [ChE90] Ahmed Sadeq Al-Fatesh, Rawesh Kumar, Samsudeen Olajide Kasim, Ahmed Aidid Ibrahim, Anis Hamza Fakeeha, Ahmed Elhag Abasaheed, Hanan Atia, Udo Armbruster, Carsten Kreyenschulte, Henrik Lund, Stephan Bartling, Yahya Ahmed Mohammed, Yousef Abdulrahman Albaqmaa, Mahmud Sofiu Lanre, Mayankumar Lakshmanbhai Chaudhary, Fahad Almubaddel, and Biswajit Chowdhury. Effect of cerium promoters on an mcm-41-supported nickel catalyst in dry reforming of methane. *INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH*, 61(1):164–174, JAN 12 2022.
- [ChE91] Abdulaziz A. Alghyamah, Sajjad Haider, Uzma Khalil, Rawaiz Khan, Adnan Haider, Waheed A. Almasry, Rida Ihsan, Tahira Perveen, Irfan Wazeer, and Achmad Chafidz. Synthesis and characterization of graphene oxide, reduced graphene oxide and their nanocomposites with polyethylene oxide. *CURRENT APPLIED PHYSICS*, 40:1–11, AUG 2022.
- [ChE92] Hamza Ferkous, Kaouther Kerboua, Oualid Hamdaoui, Naoufel Haddour, and Abdulaziz Alghyamah. Galvano-fenton engineering solution with spontaneous catalyst's generation from waste: Experimental efficiency, parametric analysis and modeling interpretation applied to a clean technology for dyes degradation in water. *MOLECULES*, 26(18), SEP 2021.

- [ChE93] Issam Boudouh, Kazuhiro Tamura, Ismahane Djemai, Maria Dolores Robustillo-Fuentes, and Mohamed K. Hadj-Kali. Solid-liquid equilibria for biphenyl plus n-tetracosane binary mixtures and n-tetracosane plus dibenzofuran plus biphenyl ternary mixtures: Experimental data and prediction with unifac models. *INTERNATIONAL JOURNAL OF THERMOPHYSICS*, 43(8), AUG 2022.
- [ChE94] Ahmed S. Al-Fatesh, Jyoti Khatri, Rawesh Kumar, Vijay Kumar Srivastava, Ahmed Osman, I. Tahani S. AlGarni, Ahmed A. Ibrahim, Ahmed E. Abasaheed, Anis H. Fakkeha, and David W. Rooney. Role of ca, cr, ga and gd promotor over lanthana-zirconia-supported ni catalyst towards h₂-rich syngas production through dry reforming of methane. *ENERGY SCIENCE & ENGINEERING*, 10(3):866–880, MAR 2022.
- [ChE95] Ahmed Halilu, Mohamed K. Hadj-Kali, Mohd Ali Hashim, Emad M. Ali, and Suresh K. Bhargava. Electroreduction of co₂ and quantification in new transition-metal-based deep eutectic solvents using single-atom ag electrocatalyst. *ACS OMEGA*, 7(16):14102–14112, APR 26 2022.
- [ChE96] Umair Khan, Aurang Zaib, Anuar Ishak, Fahad S. Al-Mubaddel, Sakhinah Abu Bakar, Hammad Alotaibi, and Hassan M. Aljohani. Computational modeling of hybrid sisko nanofluid flow over a porous radially heated shrinking/stretching disc. *COATINGS*, 11(10), OCT 2021.
- [ChE97] Adeeb Hayyan, Yee-Sern Ng, Mohamed K. Hadj-Kali, Mohd Usman Mohd Junaidi, Emad Ali, Ahmaad Kadmouse Aldeehani, Khaled H. Alkandari, Falah Dh Alajmi, Andrew T. H. Yeow, M. Y. Zulkifli, Lim Zhi Kai, and Mohd Ali Hashim. Natural and low-cost deep eutectic solvent for soap removal from crude biodiesel using low stirring extraction system. *BIOMASS CONVERSION AND BIOREFINERY*, 12(SUPPL 1, 1, SI):S113–S121, JUL 2022.
- [ChE98] Mohammad Jawaid, Sameer A. Awad, Mohammad Asim, Hassan Fouad, Othman Y. Alothman, and Carlo Santulli. A comparative evaluation of chemical, mechanical, and thermal properties of oil palm fiber/pineapple fiber reinforced phenolic hybrid composites. *POLYMER COMPOSITES*, 42(12):6383–6393, DEC 2021.
- [ChE99] Yongfang Yao, Chetan Patel, Rohit L. Vekariya, Shin-ichi Yusa, Chetan B. Sangani, Yongtao Duan, Sadafara Pillai, Hiren Patel, Nadavala Siva Kumar, and Mehul Khimani. Synthesis and aggregation behaviour of thermo-responsive-b-poly (ionic liquid) diblock copolymers in aqueous solution. *JOURNAL OF MOLECULAR LIQUIDS*, 339, OCT 1 2021.
- [ChE100] Virendra Kumar Yadav, Krishna Kumar Yadav, Javed Alam, Marina M. S. Cabral-Pinto, Govindhan Gnanamoorthy, Mansour Alhoshan, Hesam Kamyab, Ali Awadh Hamid, Fekri Abdurraqeb Ahmed, and Arun Kumar Shukla. Transformation of hazardous sacred incense sticks ash waste into less toxic product by sequential approach prior to their disposal into the water bodies. *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 30(28, SI):71766–71778, JUN 2023.
- [ChE101] M. Jawaid, S. Awad, Hassan Fouad, Othman Y. Alothman, N. Saba, M. Sain, and A. L. Leao. Olive cellulosic fibre based epoxy composites: Thermal and dynamic mechanical properties. *JOURNAL OF NATURAL FIBERS*, 19(15):12182–12194, 2022.

- [ChE102] Adeeb Hayyan, Adrian Samyudia, V, Mohd Ali Hashim, Hanee F. Hizaddin, Emad Ali, Mohamed K. Hadj-Kali, Ahmaad Kadmouse Aldeehani, Khaled H. Alkandari, Hageramismaeel Taha Etigany, Falah Dh Alajmi, Fahad A. Alhumaydhi, Abdullah S. M. Aljohani, M. Y. Zulkifli, Ahmed Halilu, and Andrew T. H. Yeow. Application of deep eutectic solvent as novel co-solvent for oil extraction from flaxseed using sonoenergy. *INDUSTRIAL CROPS AND PRODUCTS*, 176, FEB 2022.
- [ChE103] Siti Noorbaini Sarmin, Mohammad Jawaid, Sameer A. Awad, Naheed Saba, Hassan Fouad, Othman Y. Alothman, and Mohini Sain. Olive fiber reinforced epoxy composites: Dimensional stability, and mechanical properties. *POLYMER COMPOSITES*, 43(1):358–365, JAN 2022.
- [ChE104] Mohammadreza Pishkariahmadabad, Hamdi Aayed, Wei-Feng Xia, Yashar Aryanfar, Abdulaziz M. Almutlaq, and Belgacem Bouallegue. Thermo-economic analysis of working fluids for a ground source heat pump for domestic uses. *CASE STUDIES IN THERMAL ENGINEERING*, 27, OCT 2021.
- [ChE105] Abdelhalim Fetimi, Attef Daas, Yacine Benguerba, Slimane Merouani, Mourad Hamachi, Ounissa Kebiche-Senhajji, and Oualid Hamdaoui. Optimization and prediction of safranin-o cationic dye removal from aqueous solution by emulsion liquid membrane (elm) using artificial neural network-particle swarm optimization (ann-pso) hybrid model and response surface methodology (rsm). *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 9(5), OCT 2021.
- [ChE106] Mohammad Jawaid, Lau Kia Kian, Hassan Fouad, Ramzi Khiari, Othman Y. Alothman, and Mohamed Hashem. Cellulose nanocrystal from washingtonia fibre and its characterization. *JOURNAL OF RENEWABLE MATERIALS*, 10(6):1459–1470, 2022.
- [ChE107] Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, Magda H. Abdellattif, Byong-Hun Jeon, and Yacine Benguerba. A full mechanistic and kinetics analysis of carbon tetrachloride (ccl₄) sono-conversion: Liquid temperature effect. *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 9(6), DEC 2021.
- [ChE108] Farooq Hussain, S. Saleem, Mubbashar Nazeer, Fahad S. Al-Mubaddel, Aamir Ali, Adila Saleem, and Maira Saleem. Mathematical modeling and numerical solution of cross-flow of non-newtonian fluid: Effects of viscous dissipation and slip boundary conditions. *ZAMM-ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK*, 102(3), MAR 2022.
- [ChE109] Umair Khan, Jamel Bouslimi, Aurang Zaib, Fahad S. Al-Mubaddel, Najma Imtiaz, Abdulaziz N. Alharbi, and Mohamed R. Eid. Mhd 3d crossflow in the streamwise direction induced by nanofluid using koo-kleinstreuer and li (kll) correlation. *COATINGS*, 11(12), DEC 2021.
- [ChE110] Siti Noorbaini Sarmin, Mohammad Jawaid, Mohamed H. Mahmoud, Naheed Saba, Hassan Fouad, Othman Y. Alothman, and Carlo Santulli. Mechanical and physical properties analysis of olive biomass and bamboo reinforced epoxy-based hybrid composites. *BIOMASS CONVERSION AND BIOREFINERY*, 2022 JUN 8 2022.
- [ChE111] Sohail Nadeem, Wang Fuzhang, Fahad M. Alharbi, Farrah Sajid, Nadeem Abbas, A. S. El-Shafay, and Fahad S. Al-Mubaddel. Numerical computations for buongiorno

nano fluid model on the boundary layer flow of viscoelastic fluid towards a nonlinear stretching sheet. *ALEXANDRIA ENGINEERING JOURNAL*, 61(2):1769–1778, FEB 2022.

- [ChE112] Shankha Shubhra Goswami, Dhiren Kumar Behera, Asif Afzal, Abdul Razak Kaladgi, Sher Afghan Khan, Parvathy Rajendran, Ram Subbiah, and Mohammad Asif. Analysis of a robot selection problem using two newly developed hybrid mcdm models of topsis-aras and copras-aras. *SYMMETRY-BASEL*, 13(8), AUG 2021.
- [ChE113] T. Sathish, V Mohanavel, Asif Afzal, M. Arunkumar, M. Ravichandran, Sher Afghan Khan, Parvathy Rajendran, and Mohammad Asif. Advancement of steam generation process in water tube boiler using taguchi design of experiments. *CASE STUDIES IN THERMAL ENGINEERING*, 27, OCT 2021.
- [ChE114] Sameer A. Awad, Mohammad Jawaid, Hassan Fouad, Naheed Saba, Hom Nath Dhakal, Othman Y. Alothman, and Eman M. Khalaf. A comparative assessment of chemical, mechanical, and thermal characteristics of treated oil palm/pineapple fiber/bio phenolic composites. *POLYMER COMPOSITES*, 43(4):2115–2128, APR 2022.
- [ChE115] Amina Hachaichi, Sorya Nekkaa, Salah Amroune, Mohammad Jawaid, Othman Y. Alothman, and Alain Dufresne. Effect of alkali surface treatment and compatibilizer agent on tensile and morphological properties of date palm fibers-based high density polyethylene biocomposites. *POLYMER COMPOSITES*, 43(10):7211–7221, OCT 2022.
- [ChE116] Shobha Suresh Kumbar, Dipak Ashok Jadhav, Chetan S. Jarali, Dhananjay B. Talange, Asif Afzal, Sher Afghan Khan, Mohammad Asif, and Mohd Zulkifly Abdullah. Enhancement in cathodic redox reactions of single-chambered microbial fuel cells with castor oil-emitted powder as cathode material. *MATERIALS*, 14(16), AUG 2021.
- [ChE117] Leema Rose Viannie, N. R. Banapurmath, Manzoore Elahi M. Soudagar, Anilkumar Nandi, V, Nazia Hossain, Ashwini Shellikeri, Vinita Kaulgud, Ma Mujtaba, Sher Afghan Khan, and Mohammad Asif. Electrical and mechanical properties of flexible multiwalled carbon nanotube/poly (dimethylsiloxane) based nanocomposite sheets. *JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING*, 9(6), DEC 2021.
- [ChE118] Adeeb Hayyan, Khalid M. Abed, Haneef F. Hizaddin, Wan Muhammad F. W. Yusoff, Yee-Sern Ng, Mohd Usman Mohd Junaidi, Jehad Saleh, Abdullah S. M. Aljohani, Fahad A. Alhumaydhi, Waleed Al Abdulmonem, Khaled H. Alkandari, Falah DH. Alajmi, Ahmaad Kadmouse Aldeehani, Wan Jeffrey, and Mohd Izzudin Izzat Zainal Abidin. Application of natural deep eutectic solvents in bulk liquid membrane system for removal of free glycerol from crude fatty acid methyl ester. *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*, 650, OCT 5 2022.
- [ChE119] Abdelhalim Fetimi, Attef Daas, Slimane Merouani, Abdullah M. Alswieleh, Mourad Hamachi, Oualid Hamdaoui, Ounissa Kebiche-Senhadji, Krishna Kumar Yadav, Byong-Hun Jeon, and Yacine Benguerba. Predicting emulsion breakdown in the

emulsion liquid membrane process: Optimization through response surface methodology and a particle swarm artificial neural network. *CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION*, 176, JUN 2022.

- [ChE120] Sameer A. Awad, Hassan Fouad, Eman M. Khalaf, N. Saba, Hom N. Dhakal, M. Jawaid, and Othman Y. Alothman. Performance evaluation of calcium alkali-treated oil palm/pineapple fibre/bio-phenolic composites. *JOURNAL OF BIONIC ENGINEERING*, 19(5):1493–1503, SEP 2022.
- [ChE121] Adeeb Hayyan, Andrew T. H. Yeow, Khalid M. Abed, Wan Jeffrey Basirun, Low Boon Kiat, Jehad Saleh, Goh Wen Han, Pua Chia Min, Abdullah S. M. Aljohani, M. Y. Zulkifli, Falah D. H. Alajmi, Fahad A. Alhumaydhi, Ahmaad Kadmouse Aldeehani, and Mohd Ali Hashim. The development of new homogenous and heterogeneous catalytic processes for the treatment of low grade palm oil. *JOURNAL OF MOLECULAR LIQUIDS*, 344, DEC 15 2021.
- [ChE122] Adeeb Hayyan, Haneef F. Hizaddin, Khalid M. Abed, Farouq S. Mjalli, Mohd Ali Hashim, Ali Abo-Hamad, Jehad Saleh, Abdullah S. M. Aljohani, Yousef M. Alharbi, Fahad A. Alhumaydhi, Abdul Aziz Ahmad, Andrew T. H. Yeow, Ahmaad Kadmouse Aldeehani, Falah D. H. Alajmi, and Inas Al Nashef. Encapsulated deep eutectic solvent for esterification of free fatty acid. *BIOMASS CONVERSION AND BIOREFINERY*, 12(9, SI):3725–3735, SEP 2022.
- [ChE123] Samer Fawzy, Ahmed I. Osman, Charlie Farrell, Ala'a H. Al-Muhtaseb, John Harrison, Ahmed S. Al-Fatesh, Anis H. Fakeeha, John Doran, Haiping Yang, and David W. Rooney. Characterization and kinetic modeling for pyrolytic conversion of cotton stalks. *ENERGY SCIENCE & ENGINEERING*, 9(10):1908–1918, OCT 2021.

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Publications

- [CE1] Aref Abadel, Hussein Elsanadedy, Tarek Almusallam, Abdulaziz Alaskar, Husain Abbas, and Yousef Al-Salloum. Residual compressive strength of plain and fiber reinforced concrete after exposure to different heating and cooling regimes. *EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING*, 26(14):6746–6765, NOV 9 2022.
- [CE2] Mohammad Iqbal Khan, Galal Fares, and Yassir M. Abbas. Cost-performance balance and new image analysis technique for ultra-high performance hybrid nano-based fiber-reinforced concrete. *CONSTRUCTION AND BUILDING MATERIALS*, 315, JAN 10 2022.
- [CE3] Yousef Al-Salloum, Louai Alaoud, Hussein Elsanadedy, Abdulrahman Albidah, Tarek Almusallam, and Husain Abbas. Bond performance of gfrp bar-splicing in reinforced concrete beams. *JOURNAL OF COMPOSITES FOR CONSTRUCTION*, 26(2), APR 1 2022.
- [CE4] Mohammad J. Alshannag and Abdulhafiz O. Alshenawy. Enhancing the flexural performance of lightweight reinforced concrete beams exposed to elevated temperatures. *AIN SHAMS ENGINEERING JOURNAL*, 12(3):2575–2583, SEP 2021.
- [CE5] Mohammad Iqbal Khan, Galal Fares, and Yassir M. Abbas. Behavior of non-shear-strengthened uhpc beams under flexural loading: Influence of reinforcement depth. *APPLIED SCIENCES-BASEL*, 11(23), DEC 2021.
- [CE6] Muawia Dafalla, Abdullah Shaker, and Mosleh Al-Shamrani. Sustainable road shoulders and pavement protection for expansive soil zones. *TRANSPORTATION RESEARCH RECORD*, 2676(10):341–350, OCT 2022.
- [CE7] Yassir M. Abbas, Ahmet Tuken, and Nadeem A. Siddiqui. Improving the structural behavior of shear-deficient rc deep beams using steel fibers: Experimental, numerical and probabilistic approach. *JOURNAL OF BUILDING ENGINEERING*, 46, APR 1 2022.
- [CE8] Abdulrahman M. Abualreesh, Ahmet Tuken, Abdulrahman Albidah, and Nadeem A. Siddiqui. Reliability-based optimization of shear walls in rc shear wall-frame buildings subjected to earthquake loading. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 16, JUN 2022.
- [CE9] Ammar M. Saud, Khalid S. Al-Gahtani, and Abdullah M. Alsugair. Exterior walls selection framework using building information modeling (bim). *COGENT ENGINEERING*, 9(1), DEC 31 2022.
- [CE10] Mohammad J. Alshannag, Abdulhamid Charif, Ali S. Alqarni, and Salman Nasser. Flexural performance and ductility of rc beams made using natural lwa. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 16, JUN 2022.
- [CE11] Mohammad Iqbal Khan, Galal Fares, Yassir M. Abbas, and Fahad K. Alqahtani. Behavior of non-shear-strengthened uhpc beams under flexural loading: Influence of reinforcement percentage. *APPLIED SCIENCES-BASEL*, 11(23), DEC 2021.

- [CE12] Abdulrahman Salah, Hussein Elsanadedy, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Behavior of axially loaded l-shaped rc columns strengthened using steel jacketing. *JOURNAL OF BUILDING ENGINEERING*, 47, APR 15 2022.
- [CE13] Muawia Dafalla. Effect of fluid chemistry on the consolidation and hydraulic conductivity of sand-clay liners. *SUSTAINABILITY*, 13(20), OCT 2021.
- [CE14] Fahad K. K. Alqahtani. Technical assessment of green lightweight concrete containing manufactured plastic aggregates. *JOURNAL OF BUILDING ENGINEERING*, 50, JUN 1 2022.
- [CE15] Abdulrahman Albidah, Abdulaziz Alsaif, Aref Abadel, Husain Abbas, and Yousef Al-Salloum. Role of recycled vehicle tires quantity and size on the properties of metakaolin-based geopolymer rubberized concrete. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 18:2593–2607, MAY-JUN 2022.
- [CE16] Mohammed Alwalan and Ahmed Alnuaim. Axial loading effect on the behavior of large helical pile groups in sandy soil. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 47(4):5017–5031, APR 2022.
- [CE17] Tarek Almusallam, Aref Abadel, Nadeem Siddiqui, Husain Abbas, and Yousef Al-Salloum. Impact behavior of hybrid-fiber reinforced concrete beams. *STRUCTURES*, 39:782–792, MAY 2022.
- [CE18] Ali S. Alqarni, Husain Abbas, Khattab M. Al-Shwikh, and Yousef A. Al-Salloum. Treatment of recycled concrete aggregate to enhance concrete performance. *CONSTRUCTION AND BUILDING MATERIALS*, 307, NOV 8 2021.
- [CE19] Ali S. Alqarni, Husain Abbas, Khattab M. Al-Shwikh, and Yousef A. Al-Salloum. Influence of treatment methods of recycled concrete aggregate on behavior of high strength concrete. *BUILDINGS*, 12(4), APR 2022.
- [CE20] Ali S. Alqarni, Abdulrahman S. Albidah, and Aref A. Abadel. Shear performance of reinforced concrete deep beams using different coarse aggregates under the effect of elevated temperatures. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 16, JUN 2022.
- [CE21] Husain Abbas, Aref Abadel, Tarek Almusallam, and Yousef Al-Salloum. Experimental and analytical study of flexural performance of concrete beams reinforced with hybrid of gfrp and steel rebars. *ENGINEERING FAILURE ANALYSIS*, 138, AUG 2022.
- [CE22] Mohammed Alrubaidi, Husain Abbas, Hussein Elsanadedy, Tarek Almusallam, Rizwan Iqbal, and Yousef Al-Salloum. Experimental and fe study on strengthened steel beam-column joints for progressive collapse robustness under column-loss event. *ENGINEERING STRUCTURES*, 258, MAY 1 2022.
- [CE23] Abdullah A. Shaker, Muawia Dafalla, Ahmed M. Al-Mahbashi, and Mosleh A. Al-Shamrani. Predicting hydraulic conductivity for flexible wall conditions using rigid wall permeameter. *WATER*, 14(3), FEB 2022.

- [CE24] Aref A. Abadel. Experimental investigation for shear strengthening of reinforced self-compacting concrete beams using different strengthening schemes. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 15:1815–1829, NOV-DEC 2021.
- [CE25] Abdulaziz Alsaif, Abdulrahman Albidah, Aref Abadel, Husain Abbas, and Yousef Al-Salloum. Development of metakaolin-based geopolymer rubberized concrete: fresh and hardened properties. *ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING*, 22(3), JUN 10 2022.
- [CE26] Aref A. Abadel and Yousef R. Alharbi. Confinement effectiveness of cfrp strengthened ultra-high performance concrete cylinders exposed to elevated temperatures. *MATERIALS SCIENCE-POLAND*, 39(4):478–490, DEC 1 2021.
- [CE27] Abdullah Al-Mansour, I and Amr A. Shokri. Correlation of pavement distress and roughness measurement. *APPLIED SCIENCES-BASEL*, 12(8), APR 2022.
- [CE28] Fahad K. Alqahtani. Development of composite pet plastic-based aggregate and its utilization in green lightweight concrete. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 47(10):13397–13406, OCT 2022.
- [CE29] Abdulrahman Albidah, Ali S. Alqarni, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Behavior of metakaolin-based geopolymer concrete at ambient and elevated temperatures. *CONSTRUCTION AND BUILDING MATERIALS*, 317, JAN 24 2022.
- [CE30] Aref Abadel, Husain Abbas, Abdulrahman Albidah, Tarek Almusallam, and Yousef Al-Salloum. Effectiveness of gfrp strengthening of normal and high strength fiber reinforced concrete after exposure to heating and cooling. *ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH*, 36, DEC 2022.
- [CE31] Abdulrahman M. Alhozaimy, Mshtaq Ahmed, Raja Rizwan Hussain, and Abdulaziz Al-Negheimish. Quantitative non-linear effect of high ambient temperature on chloride threshold value for steel reinforcement corrosion in concrete under extreme boundary conditions. *MATERIALS*, 14(24), DEC 2021.
- [CE32] Abdulaziz Al-Negheimish, I, Galal Fares, Abdulrahman M. Alhozaimy, and M. Iqbal Khan. Limestone dust variability characterization and its influence on the properties of self-compacting concrete and pinhole formation. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 47(10):12745–12763, OCT 2022.
- [CE33] Ibrahim M. H. Alshaikh, Aref A. Abadel, and Mohammed Alrubaidi. Precast rc structures' progressive collapse resistance: Current knowledge and future requirements. *STRUCTURES*, 37:338–352, MAR 2022.
- [CE34] Galal Fares and Abdulrahman M. Alhozaimy. Assessment of pozzolanic activity of ground scoria rocks under low- and high-pressure (autoclave) steam curing. *MATERIALS*, 15(13), JUL 2022.
- [CE35] Yassir M. Abbas, Lotfi A. Hussain, and M. Iqbal Khan. Constitutive compressive stress-strain behavior of hybrid steel-pva high-performance fiber-reinforced concrete. *JOURNAL OF MATERIALS IN CIVIL ENGINEERING*, 34(1), JAN 1 2022.

- [CE36] Sarfaraz Hadi, Husain Abbas, Abdullah Almajed, Abobaker Binyahya, and Yousef Al-Salloum. Biocementation by *Sporosarcina pasteurii* atcc6453 under simulated conditions in sand columns. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 18:4375–4384, MAY-JUN 2022.
- [CE37] Abdullah H. Alsabhan, Kahkashan Perveen, and Aisha S. Alwadi. Heavy metal content and microbial population in the soil of riyadh region, saudi arabia. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(1), JAN 2022.
- [CE38] Wasim Abbass and Mohammad Iqbal Khan. Experimental and numerical investigation of flexural behavior of hybrid fiber reinforced high strength incorporating binary and ternary blend of ultra fines. *STRUCTURES*, 42:53–64, AUG 2022.
- [CE39] Galal Fares, Abdulaziz Al-Negheimish, Abdulrahman M. M. Alhozaimy, and M. Iqbal Khan. Polycarboxylate superplasticizer and viscosity modifying agent: Mode of addition and its effect on cement paste rheology using image analysis. *JOURNAL OF BUILDING ENGINEERING*, 48, MAY 1 2022.
- [CE40] Abdulaziz Al-Negheimish, I, Ahmed K. El-Sayed, Mohammed A. Al-Saawani, and Abdulrahman M. Alhozaimy. Effect of stirrups on plate end debonding in reinforced concrete beams strengthened with fiber reinforced polymers. *POLYMERS*, 13(19), OCT 2021.
- [CE41] Mohammed A. Al-Saawani, Ahmed K. El-Sayed, and Abdulaziz I. Al-Negheimish. Frp u-wrap anchorage for preventing concrete cover separation: Experimental study and design method. *JOURNAL OF COMPOSITES FOR CONSTRUCTION*, 26(4), AUG 1 2022.
- [CE42] Mohammed A. Al-Saawani, Abdulaziz Al-Negheimish, I, Ahmed K. El-Sayed, and Abdulrahman M. Alhozaimy. Finite element modeling of debonding failures in frp-strengthened concrete beams using cohesive zone model. *POLYMERS*, 14(9), MAY 2022.
- [CE43] Amir Detho, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Sattam Fahad Almojil. Adsorption isotherm, kinetic, and removal efficiency mechanism of leachate using coconut shell activated carbon and peat soil as composite adsorbent. *WATER AIR AND SOIL POLLUTION*, 233(7), JUL 2022.
- [CE44] Ashraf Farah. Efficient cost-effective static-ppp using mixed gps/glonass single-frequency observations (ksa). *ARTIFICIAL SATELLITES-JOURNAL OF PLANETARY GEODESY*, 57(1):1–17, MAR 1 2022.
- [CE45] Gudla Amulya, Arif Ali Baig Moghal, and Abdullah Almajed. A state-of-the-art review on suitability of granite dust as a sustainable additive for geotechnical applications. *CRYSTALS*, 11(12), DEC 2021.
- [CE46] Hussein M. Elsanadedy and Aref A. Abadel. High-fidelity fe models for assessing progressive collapse robustness of rc ordinary moment frame (omf) buildings. *ENGINEERING FAILURE ANALYSIS*, 136, JUN 2022.
- [CE47] Ali O. Alnahit, Ashok K. Mishra, and Abdul A. Khan. Stream water quality prediction using boosted regression tree and random forest models. *STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT*, 36(9):2661–2680, SEP 2022.

- [CE48] A. Hamid, W. M. Hamid, and A. M. Alnuaim. Factors affecting energy pile efficiency. *SOIL MECHANICS AND FOUNDATION ENGINEERING*, 58(4):302–307, SEP 2021.
- [CE49] Abdullah AlOmani, Khaled El-Rayes, and Ayman Altuwaim. Optimizing the use of acoustic materials in office buildings. *SCIENTIFIC REPORTS*, 11(1), OCT 19 2021.
- [CE50] Mohammed Alrubaidi, Mohammed S. Alhaddad, Sulaiman I. H. Al-Safi, S. A. Alhammadi, Abobaker S. Yahya, and Aref A. Abadel. Assessment of seismic hazards in yemen. *HELIYON*, 7(12), DEC 2021.
- [CE51] Ahmed M. Al-Mahbashi, Mosleh Ali Al-Shamrani, Arif Ali Baig Moghal, and K. Venkata Vydehi. Correlation-based studies on resilient modulus values for fiber-reinforced lime-blended clay. *INTERNATIONAL JOURNAL OF GEOSYNTHETICS AND GROUND ENGINEERING*, 7(3), SEP 2021.
- [CE52] Hani Alanazi, Yousef R. Alharbi, Aref A. Abadel, and Oussama Elalaoui. Effect of edge oxidized graphene oxide on micro and macro mechanical properties and microstructure of cement paste. *INTERNATIONAL JOURNAL OF MATERIALS RESEARCH*, 113(4):271–277, APR 27 2022.
- [CE53] Aref A. Abadel, M. Iqbal Khan, and Radhouane Masmoudi. Axial capacity and stiffness of post-heated circular and square columns strengthened with carbon fiber reinforced polymer jackets. *STRUCTURES*, 33:2599–2610, OCT 2021.
- [CE54] Ahmed M. Al-Mahbashi, Mosleh A. Al-Shamrani, and Mohammad F. Abbas. Hydromechanical behavior of unsaturated expansive clay under repetitive loading. *JOURNAL OF ROCK MECHANICS AND GEOTECHNICAL ENGINEERING*, 13(5):1136–1146, OCT 2021.
- [CE55] Aref Abadel, Husain Abbas, Tarek Almusallam, Ibrahim M. H. Alshaikh, Mohammad Khawaji, Hussam Alghamdi, and Abdulrahman A. Salah. Experimental study of shear behavior of cfrp strengthened ultra-high-performance fiber-reinforced concrete deep beams. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 16, JUN 2022.
- [CE56] Abdullah Al-Mansour, Kang-Won Wayne Lee, and Abdulraoof H. Al-Qaili. Prediction of pavement maintenance performance using an expert system. *APPLIED SCIENCES-BASEL*, 12(10), MAY 2022.
- [CE57] Aref A. Abadel, M. Iqbal Khan, and Radhouane Masmoudi. Experimental and numerical study of compressive behavior of axially loaded circular ultra-high-performance concrete-filled tube columns. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 17, DEC 2022.
- [CE58] Ola A. Mayhoub, Alaa Mohsen, Yousef R. Alharbi, Aref A. Abadel, A. O. Habib, and Mohamed Kohail. Effect of curing regimes on chloride binding capacity of geopolymer. *AIN SHAMS ENGINEERING JOURNAL*, 12(4):3659–3668, DEC 2021.
- [CE59] Qing Lu, Chunfu Xin, Mohammed Alamri, and Mohammad Alharthai. Development of porous asphalt mixture with bio-based epoxy asphalt. *JOURNAL OF CLEANER PRODUCTION*, 317, OCT 1 2021.

- [CE60] Fouad Ismail Ismail, Yassir M. Abbas, Nasir Shafiq, Galal Fares, Montasir Osman, Lotfi A. Hussain, and Mohammad Iqbal Khan. Investigation of the impact of graphene nanoplatelets (gnp) on the bond stress of high-performance concrete using pullout testing. *MATERIALS*, 14(22), NOV 2021.
- [CE61] Menatalah A. Kotop, M. S. El-Feky, Yousef R. Alharbi, Aref A. Abadel, and Abobaker S. Binyahya. Engineering properties of geopolymer concrete incorporating hybrid nano-materials. *AIN SHAMS ENGINEERING JOURNAL*, 12(4):3641–3647, DEC 2021.
- [CE62] M. Marzouk, I Abdelbasset, and K. Al-Gahtani. Evaluating building systems energy performance superiority and inferiority ranking. *JOURNAL OF ENVIRONMENTAL INFORMATICS*, 38(1):56–67, SEP 2021.
- [CE63] Ali Altheeb, Ibrahim M. H. Alshaikh, Aref Abadel, Moncef Nehdi, and Hussam Alghamdi. Effects of non-structural walls on mitigating the risk of progressive collapse of rc structures. *LATIN AMERICAN JOURNAL OF SOLIDS AND STRUCTURES*, 19(3), 2022.
- [CE64] Abdelrahman Khalifa, Bashar Bashir, Abdullah Alsalman, and Nazik oegretmen. Morpho-tectonic assessment of the abu-dabbab area, eastern desert, egypt: Insights from remote sensing and geospatial analysis. *ISPRS INTERNATIONAL JOURNAL OF GEO-INFORMATION*, 10(11), NOV 2021.
- [CE65] Hossam A. Elaqla, Mohhamed A. Abou Haloub, Rifat N. Rustom, and Fahad K. Alqahtani. Effect of curing temperature on mechanical behaviour of green concrete containing glass powder as cement replacement. *ADVANCES IN CEMENT RESEARCH*, 33(10):458–468, OCT 2021.
- [CE66] Bahia Louafi and Muawia A. Dafalla. Moisture and dry density influence on compacted clay and clay-sand mixtures. *REVUE DES COMPOSITES ET DES MATERIAUX AVANCES-JOURNAL OF COMPOSITE AND ADVANCED MATERIALS*, 32(1):33–38, FEB 2022.
- [CE67] Mansour AlOtaibi, Khaled El-Rayes, Ayman Altuwaim, and Abdullah AlOmani. Optimal planning of hotel renovation projects. *BUILDINGS*, 11(12), DEC 2021.
- [CE68] Abdullah H. Alsabhan, Md Rehan Sadique, Shahbaz Ahmad, Shamshad Alam, and Abobaker S. Binyahya. The effect of opening shapes on the stability of underground tunnels: A finite element analysis. *INTERNATIONAL JOURNAL OF GEOMATE*, 21(87):19–27, NOV 2021.
- [CE69] Raja Rizwan Hussain, Abdulrahman Alhozaimy, Abdulaziz Al-Negheimish, and D. D. N. Singh. Role of phosphorus as micro alloying element and its effect on corrosion characteristics of steel rebars in concrete environment. *SCIENTIFIC REPORTS*, 12(1), JUL 21 2022.
- [CE70] Zongming Zhou, Hayder A. Dhahad, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojil, Abdulrhman Fahmi Alali, Ali E. Anqi, Ali A. Rajhi, and SAGR Alamri. Multi-objective optimization of a clean combined system based gasifier-solid oxide fuel cell. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 47(43):18648–18662, MAY 19 2022.

- [CE71] Hong-Hu Chu, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Ali E. Anqi, Ali A. Rajhi, and Sagr Alamri. Evaluation of building integrated with phase change material considering of ashrae classification using seasonal and annual analysis. *JOURNAL OF BUILDING ENGINEERING*, 52, JUL 15 2022.
- [CE72] Arun Kumar, Parveen Berwal, Abdullah Al-Mansour, I, Mohammad Amir Khan, Shamshad Alam, Seongkwan Mark Lee, Akash Malik, and Amjad Iqbal. Impact of crumb rubber concentration and plastic coated aggregates on the rheological performance of modified bitumen asphalt. *SUSTAINABILITY*, 14(7), APR 2022.
- [CE73] Abdelrahman Khalifa, Bashar Bashir, Abdullah Alsalman, and Hussein Bachir. Morphometric-hydro characterization of the coastal line between el-qussier and marsa-alam, egypt: Preliminary flood risk signatures. *APPLIED SCIENCES-BASEL*, 12(12), JUN 2022.
- [CE74] Mohammad Faraz Athar, Md Rehan Sadique, Abdullah H. Alsabhan, and Shamshad Alam. Ground settlement due to tunneling in cohesionless soil. *APPLIED SCIENCES-BASEL*, 12(7), APR 2022.
- [CE75] Abdullah H. Alsabhan, Kanwarpreet Singh, Abhishek Sharma, Shamshad Alam, Desh Deepak Pandey, Shamshad Alam S. Rahman, Anwar Khursheed, and Faris M. Munshi. Landslide susceptibility assessment in the himalayan range based along kasauli-parwanoo road corridor using weight of evidence, information value, and frequency ratio. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(2), FEB 2022.
- [CE76] Osama Zaid, Rebeca Martinez-Garcia, Aref A. Abadel, Fernando J. Fraile-Fernandez, Ibrahim M. H. Alshaikh, and Covadonga Palencia-Coto. To determine the performance of metakaolin-based fiber-reinforced geopolymer concrete with recycled aggregates. *ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING*, 22(3), APR 30 2022.
- [CE77] Mohamed Badawy, Fahad Alqahtani, and Hisham Hafez. Identifying the risk factors affecting the overall cost risk in residential projects at the early stage. *AIN SHAMS ENGINEERING JOURNAL*, 13(2), MAR 2022.
- [CE78] Hamdy A. Abdel-Gawwad, Salah Kassem, Aref Abadel, Hussam Alghamdi, Moncef L. Nehdi, and Hamad Shoukry. Valorizing hazardous lead glass sludge and alumina flakes filling waste for the synthesis of geopolymer building bricks. *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 30(2):5267–5279, JAN 2023.
- [CE79] Mohd Obaid Qamar, Izharul Haq Farooqi, Faris M. Munshi, Abdullah H. Alsabhan, Mohab Amin Kamal, Mohd Amir Khan, and Aisha Saleh Alwadai. Performance of full-scale slaughterhouse effluent treatment plant (setp). *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(3), APR 2022.
- [CE80] Ibrahim M. H. Alshaikh, B. H. Abu Bakar, Emad A. H. Alwesabi, Aref A. Abadel, Hussam Alghamdi, Ali Altheeb, and Rabin Tuladhar. Progressive collapse behavior of steel fiber-reinforced rubberized concrete frames. *JOURNAL OF BUILDING ENGINEERING*, 57, OCT 1 2022.

- [CE81] Yan Cao, A. S. El-Shafay, Adil Hussein Mohammed, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Controlling the charge carriers recombination kinetics on the g-c3n4-bisi n-n heterojunction with efficient photocatalytic activity in n2 fixation and degradation of mb and phenol. *ADVANCED POWDER TECHNOLOGY*, 33(4), APR 2022.
- [CE82] Fahad K. Alqahtani, Mohammed Alkhaldi, Tamim Alsaqer, Ibrahim S. Abotaleb, Ahmed Gouda Mohamed, and Simar Dirar. A comparative assessment of advanced construction systems incorporating green concrete. *JOURNAL OF CONSTRUCTION ENGINEERING AND MANAGEMENT*, 148(9), SEP 1 2022.
- [CE83] Plaban Deb, Barnali Debnath, Murtaza Hasan, Ali S. Alqarni, Abdulaziz Alaskar, Abdullah H. Alsabhan, Mohammad Amir Khan, Shamsad Alam, and Khalid S. Hashim. Development of eco-friendly concrete mix using recycled aggregates: Structural performance and pore feature study using image analysis. *MATERIALS*, 15(8), APR 2022.
- [CE84] Ibrahim M. H. Alshaikh, B. H. Abu Bakar, Emad A. H. Alwesabi, Aref A. Abadel, Hussam Alghamdi, and Muhammad Wasim. An experimental study on enhancing progressive collapse resistance using a steel fiber-reinforced concrete frame. *JOURNAL OF STRUCTURAL ENGINEERING*, 148(7), JUL 1 2022.
- [CE85] Rauoof Ahmad Rather, Abdul Waheed Wani, Sumaya Mumtaz, Shahid Ahmad Padder, Afzal Husain Khan, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojil, Shah Saud Alam, and Tawseef Rehman Baba. Bioenergy: a foundation to environmental sustainability in a changing global climate scenario. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(1), JAN 2022.
- [CE86] Afzal Husain Khan, Mufeed Sharholy, Pervez Alam, Abdullah Al-Mansour, I, Kafeel Ahmad, Mohab Amin Kamal, Shamsad Alam, Md Nahid Pervez, and Vincenzo Naddeo. Evaluation of cost benefit analysis of municipal solid waste management systems. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(4), JUN 2022.
- [CE87] Md. Amir Khan, Nayan Sharma, Jaan Pu, Faisal M. Alfaisal, Shamsad Alam, and Wahaj Ahmad Khan. Analysis of turbulent flow structure with its fluvial processes around mid-channel bar. *SUSTAINABILITY*, 14(1), JAN 2022.
- [CE88] M. Ramadan, Mohamed Kohail, Aref A. Abadel, Yousef R. Alharbi, Rabin Tuladhar, and Alaa Mohsen. De-aluminated metakaolin-cement composite modified with commercial titania as a new green building material for gamma-ray shielding applications. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 17, DEC 2022.
- [CE89] Mohamed Badawy, Fahad K. Alqahtani, and Mohamed A. Sherif. Impact of the covid-19 pandemic on risk factors in residential projects. *JOURNAL OF ASIAN ARCHITECTURE AND BUILDING ENGINEERING*, 22(3):1637–1647, MAY 4 2023.
- [CE90] Emad A. H. Alwesabi, B. H. Abu Bakar, Ibrahim M. H. Alshaikh, Abdullah M. Zeyad, Ali Altheeb, and Hussam Alghamdi. Experimental investigation on fracture characteristics of plain and rubberized concrete containing hybrid steel-polypropylene fiber. *STRUCTURES*, 33:4421–4432, OCT 2021.

- [CE91] Mohamed Sherif, Ibrahim Abotaleb, and Fahad K. Alqahtani. Application of integrated project delivery (ipd) in the middle east: Implementation and challenges. *BUILDINGS*, 12(4), APR 2022.
- [CE92] Muhammad Salem, Arghadeep Bose, Bashar Bashir, Debanjan Basak, Subham Roy, Indrajit R. Chowdhury, Abdullah Alsalman, and Naoki Tsurusaki. Urban expansion simulation based on various driving factors using a logistic regression model: Delhi as a case study. *SUSTAINABILITY*, 13(19), OCT 2021.
- [CE93] Muntjeer Ali, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Mohab Amin Kamal, Abbas Khursheed, Anwar Khursheed, and A. A. Kazmi. Common effluent treatment plants monitoring and process augmentation options to conform non-potable reuse. *FRONTIERS IN ENVIRONMENTAL SCIENCE*, 9, DEC 10 2021.
- [CE94] Abdullah M. Zeyad, Megat Azmi Megat Johari, Aref Abadel, Ahmed Abutaleb, M. J. A. Mijarsh, and Ali Almalki. Transport properties of palm oil fuel ash-based high-performance green concrete subjected to steam curing regimes. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 16, JUN 2022.
- [CE95] Mohamed Badawy, Fahad K. Alqahtani, and Mohamed Sherif. A multilayer perception for estimating the overall risk of residential projects in the conceptual stage. *BUILDINGS*, 12(4), APR 2022.
- [CE96] Endre Harsanyi, Bashar Bashir, Firas Alsilibe, Karam Alsafadi, Abdullah Alsalman, Adrienn Szeles, Muhammad Habib ur Rahman, Istvan Bacskai, Csaba Juhasz, Tamas Ratonyi, and Safwan Mohammed. Impact of agricultural drought on sunflower production across hungary. *ATMOSPHERE*, 12(10), OCT 2021.
- [CE97] Ankur Rajpal, Muntjeer Ali, Moharana Choudhury, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Faris Mohammad A. Munshi, Anwar Khursheed, and Absar Ahmad Kazmi. Abattoir wastewater treatment plants in india: Understanding and performance evaluation. *FRONTIERS IN ENVIRONMENTAL SCIENCE*, 10, MAY 30 2022.
- [CE98] Mohammad Amir Khan, Nayan Sharma, Jaan H. Pu, Faisal M. Alfaisal, Shamshad Alam, Rishav Garg, and Mohammad Obaid Qamar. Mid-channel braid-bar-induced turbulent bursts: Analysis using octant events approach. *WATER*, 14(3), FEB 2022.
- [CE99] Murtaza Hasan, Mehboob Anwer Khan, Abdullah H. Alsabhan, Abdullah A. Almajid, Shamshad Alam, Mohammad Amir Khan, Tinku Biswas, and Jaan Pu. Geotechnical behaviour of fly ash-bentonite used in layers. *APPLIED SCIENCES-BASEL*, 12(3), FEB 2022.
- [CE100] Mabkhoot Alsaiari, Rozina, Mushtaq Ahmad, Muhammad Zafar, Shazia Sultana, Moustafa A. Rizk, Abdulaziz Ibrahim Almohana, Zubair Ahmad, Raiedhah A. Alsaiari, and Muhammad Saeed Akhtar. Treatment of saussurea heteromalla for biofuel synthesis using catalytic membrane reactor. *CHEMOSPHERE*, 305, OCT 2022.
- [CE101] Akhileshwar Nirala, Shatrughan Soren, Navneet Kumar, Yogesh Shrivastava, Rajeev Kamal, Abdullah Ibrahim Al-Mansour, and Shamshad Alam. Assessing the mechanical properties of a new high strength aluminum hybrid mmc based on the ann approach for automotive application. *MATERIALS*, 15(6), MAR 2022.

- [CE102] Emad A. H. Alwesabi, B. H. Abu Bakar, Ibrahim M. H. Alshaikh, Aref A. Abadel, Hussam Alghamdi, and Muhammad Wasim. An experimental study of compressive toughness of steel-polypropylene hybrid fibre-reinforced concrete. *STRUCTURES*, 37:379–388, MAR 2022.
- [CE103] Fodhil Kassimi, Ahmed Kamal El-Sayed, and Kamal Henri Khayat. Flexural behavior of fiber-reinforced scc for monolithic and composite beams. *JOURNAL OF ADVANCED CONCRETE TECHNOLOGY*, 19(8):937–949, AUG 2021.
- [CE104] Abdullah Alsharaf, Alex Albert, and Siddharth Bhandari. Safety challenges experienced by driver license examiners and related safety measures. *SAFETY SCIENCE*, 154, OCT 2022.
- [CE105] Safwan Mohammed, Karam Alsafadi, Glory O. Enaruvbe, Bashar Bashir, Ahmed Elbeltagi, Adrienn Szeles, Abdullah Alsalman, and Endre Harsanyi. Assessing the impacts of agricultural drought (spi/spei) on maize and wheat yields across hungary. *SCIENTIFIC REPORTS*, 12(1), MAY 25 2022.
- [CE106] Bashar Bashir, Abdullah Alsalman, Arsalan Ahmed Othman, Ahmed K. Obaid, and Hussein Bashir. New approach to selecting civil defense centers in al-riyadh city (ksa) based on multi-criteria decision analysis and gis. *LAND*, 10(11), NOV 2021.
- [CE107] Ammar Qassem Ahdal, Mokhtar Ali Amrani, Abdulrakeeb A. A. Ghaleb, Aref A. Abadel, Hussam Alghamdi, Mohammed Alamri, Muhammad Wasim, and Mutahar Shameeri. Mechanical performance and feasibility analysis of green concrete prepared with local natural zeolite and waste pet plastic fibers as cement replacements. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 17, DEC 2022.
- [CE108] Ola A. Mayhoub, Aref A. Abadel, Yousef R. Alharbi, Moncef L. Nehdi, Afonso R. G. de Azevedo, and Mohamed Kohail. Effect of polymers on behavior of ultra-high-strength concrete. *POLYMERS*, 14(13), JUL 2022.
- [CE109] Rishav Garg, Rajni Garg, Nnabuk Okon Eddy, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojlil, Mohammad Amir Khan, and Seung Ho Hong. Biosynthesized silica-based zinc oxide nanocomposites for the sequestration of heavy metal ions from aqueous solutions. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 34(4), JUN 2022.
- [CE110] Hassan Amer Algaifi, Mohammad Iqbal Khan, Shahiron Shahidan, Galal Fares, Yasir M. Abbas, Ghasan Fahim Huseien, Babatunde Abiodun Salami, and Hisham Alabduljabbar. Strength and acid resistance of ceramic-based self-compacting alkali-activated concrete: Optimizing and predicting assessment. *MATERIALS*, 14(20), OCT 2021.
- [CE111] Jiwen Li, Jiapeng Dai, Alibek Issakhov, Sattam Fahad Almojlil, and Alireza Souri. Towards decision support systems for energy management in the smart industry and internet of things. *COMPUTERS & INDUSTRIAL ENGINEERING*, 161, NOV 2021.
- [CE112] Amir Dethoada, Zawawi Daud, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojlil, Abdulrhman Fahmi Alali, Asif Ali Memon, Saleem Raza Samo, Mohd Arif Rosli, Halizah Awang, Mohd Baharudin Ridzuan, Mohamad Anuar Kamaruddin,

- and Azhar Abdul Halim. Adsorption efficiency and isotherm of cod and nh₃-n removal from stabilized leachate using natural low-cost adsorbent green mussel (*perna viridis*). *DESALINATION AND WATER TREATMENT*, 245:191–201, JAN 2022.
- [CE113] Hassan Amer Algaifi, Ali S. Alqarni, Rayed Alyousef, Suhaimi Abu Bakar, M. H. Wan Ibrahim, Shahiron Shahidan, Mohammed Ibrahim, and Babatunde Abiodun Salami. Mathematical prediction of the compressive strength of bacterial concrete using gene expression programming. *AIN SHAMS ENGINEERING JOURNAL*, 12(4):3629–3639, DEC 2021.
- [CE114] Hassan Amer Algaifi, Suhaimi Abu Bakar, Rayed Alyousef, Abdul Rahman Mohd Sam, Ali S. Alqarni, M. H. Wan Ibrahim, Shahiron Shahidan, Mohammed Ibrahim, and Babatunde Abiodun Salami. Machine learning and rsm models for prediction of compressive strength of smart bio-concrete. *SMART STRUCTURES AND SYSTEMS*, 28(4):535–551, OCT 2021.
- [CE115] Yan Cao, Hayder A. Dhahad, A. S. El-Shafay, Ahmed Najat Ahmed, Abdullah Mohamed, Sattam Fahad Almojlil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Economic examination and multi-objective optimization of integrating a novel geothermal-driven combined cooling and power (ccp) system using a bi-evaporator cycle with a low-temperature electrolyzer. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 47(46):19955–19976, MAY 29 2022.
- [CE116] Mohamed G. Arab, Rami Alsodi, Abdullah Almajed, Hideaki Yasuhara, Waleed Zeiada, and Mohamed A. Shahin. State-of-the-art review of enzyme-induced calcite precipitation (eicp) for ground improvement: Applications and prospects. *GEO-SCIENCES*, 11(12), DEC 2021.
- [CE117] Amjad Iqbal Falak, Ayesha Iqbal, Grzegorz Moskal, Muhammad Yasir, Abdullah I. Al-Mansour, Mohammad Amir Khan, Shamshad Alam, Muhammad Shahbaz, Adeel Zia, and Ahsan Ejaz. Long-term potentiodynamic testing and tribometric properties of amorphous alloy coatings under saline environment. *MOLECULES*, 27(4), FEB 2022.
- [CE118] Endre Harsanyi, Bashar Bashir, Gafar Almhamad, Omar Hijazi, Mona Maze, Ahmed Elbeltagi, Abdullah Alsalman, Glory O. Enaruvbe, Safwan Mohammed, and Szilard Szabo. Ghgs emission from the agricultural sector within eu-28: A multivariate analysis approach. *ENERGIES*, 14(20), OCT 2021.
- [CE119] Asmaa Abdeldaim Ahmed, Mohamed Hassan, Radhouane Masmoudi, and M-Iqbal Khan. Flexural strength of post-tensioned concrete-filled fiber-reinforced-polymer rectangular tube beams. *PCI JOURNAL*, 67(4):58–78, JUL-AUG 2022.
- [CE120] Nisha Choudhary, Virendra Kumar Yadav, Krishna Kumar Yadav, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojlil, Govhindhan Gnanamoorthy, Do-Hyeon Kim, Saiful Islam, Pankaj Kumar, and Byong-Hun Jeon. Application of green synthesized mmt/ag nanocomposite for removal of methylene blue from aqueous solution. *WATER*, 13(22), NOV 2021.
- [CE121] Biljana Petkovic, Alireza Sadighi Agdas, Yousef Zandi, Ivica Nikolic, Nebojsa Denic, Sonja D. Radenkovic, Sattam Fahad Almojlil, Angel Roco-Videla, Nenad Kojic, Dragan Zlatkovic, and Jelena Stojanovic. Neuro fuzzy evaluation of circular

economy based on waste generation, recycling, renewable energy, biomass and soil pollution. *RHIZOSPHERE*, 19, SEP 2021.

- [CE122] Safwan Mohammed, Ahmed Elbeltagi, Bashar Bashir, Karam Alsafadi, Firas Alsilibe, Abdullah Alsalman, Mojtaba Zeraatpisheh, Adrienn Szeles, and Endre Harsanyi. A comparative analysis of data mining techniques for agricultural and hydrological drought prediction in the eastern mediterranean. *COMPUTERS AND ELECTRONICS IN AGRICULTURE*, 197, JUN 2022.
- [CE123] Yan Cao, Hayder A. Dhahad, Hasanen M. Hussen, El-Awady Attia, Shima Rashidi, Mohamed A. Shamseldin, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Techno-economic investigation and multi-criteria optimization of a novel combined cycle based on biomass gasifier, s-co₂ cycle, and liquefied natural gas for cold exergy usage. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 52(B), AUG 2022.
- [CE124] Ghasan Fahim Huseien, Mohammad Ali Asaad, Aref A. Abadel, Sib Krishna Ghoshal, Hussein K. Hamzah, Omrane Benjeddou, and Jahangir Mirza. Drying shrinkage, sulphuric acid and sulphate resistance of high-volume palm oil fuel ash-included alkali-activated mortars. *SUSTAINABILITY*, 14(1), JAN 2022.
- [CE125] Pradip Kumar Maurya, S. K. Ajim Ali, Raied Saad Alharbi, Krishna Kumar Yadav, Faisal M. Alfaisal, Ateeque Ahmad, Pakorn Ditthakit, Shiv Prasad, You-Kyung Jung, and Byong-Hun Jeon. Impacts of land use change on water quality index in the upper ganges river near haridwar, uttarakhand: A gis-based analysis. *WATER*, 13(24), DEC 2021.
- [CE126] Ghasan Fahim Huseien, Iman Faridmehr, Moncef L. Nehdi, Aref A. Abadel, Timothy A. Aiken, and S. K. Ghoshal. Structure, morphology and compressive strength of alkali-activated mortars containing waste bottle glass nanoparticles. *CONSTRUCTION AND BUILDING MATERIALS*, 342(A), AUG 1 2022.
- [CE127] Yan Cao, Hayder A. Dhahad, Kamal Sharma, A. S. El-Shafay, Ahmed Najat Ahmed, Mohamed A. Shamseldin, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Babak Farhang. Techno-economic evaluation and parametric study of generating green hydrogen from waste heat recovery of efficient solid oxide fuel cell. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 47(62):26632–26645, JUL 22 2022.

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Publications

- [EE1] Abderrahmen Trichili, Amr Ragheb, Dmitrii Briantcev, Maged A. Esmail, Majid Altamimi, Islam Ashry, Boon S. Ooi, Saleh Alshebeili, and Mohamed-Slim Alouini. Retrofitting fso systems in existing rf infrastructure: A non-zero-sum game technology. *IEEE OPEN JOURNAL OF THE COMMUNICATIONS SOCIETY*, 2:2597–2615, 2021.
- [EE2] Irfan Ahmad, Amro Emad Awad Ali, and Yasser Bin Salamah. Mimo h_{μ} feedback controller with feedforward compensator for scanning tunneling microscope having 3d cross-coupled piezoelectric actuator. *IEEE ACCESS*, 9:153750–153766, 2021.
- [EE3] Marcos Tostado-Veliz, Hany M. Hasanien, Rania A. Turkey, Abdulaziz Alkuhayli, Salah Kamel, and Francisco Jurado. Mann-iteration process for power flow calculation of large-scale ill-conditioned systems: Theoretical analysis and numerical results. *IEEE ACCESS*, 9:132255–132266, 2021.
- [EE4] Muhammad Zeeshan Malik, Hassan M. H. Farh, Abdullah M. Al-Shaalan, Abdullrahman A. Al-Shamma'a, and Hassan Haes Alhelou. A novel single-input-multi-output converter for flexible-order power-distributive with mppt capability. *IEEE ACCESS*, 9:131020–131032, 2021.
- [EE5] Yosef T. Aladadi and Majeed A. S. Alkanhal. Accurate characterization of electromagnetic band-gap structures. *IEEE ACCESS*, 9:121654–121664, 2021.
- [EE6] Basem Aqlan, Mohamed Himdi, Hamsakutty Vettikalladi, and Laurent Le-Coq. A circularly polarized sub-terahertz antenna with low-profile and high-gain for 6g wireless communication systems. *IEEE ACCESS*, 9:122607–122617, 2021.
- [EE7] Hamsakutty Vettikalladi, Waleed Tariq Sethi, Mohammed Himdi, and Majeed Alkanhal. 60 ghz beam-tilting coplanar slotted siw antenna array. *FREQUENZ*, 76(1-2):29–36, JAN 27 2022.
- [EE8] N. Mohd Yusoff, H. K. Lee, E. K. Ng, A. F. Abas, M. T. Alresheedi, N. H. Zainol Abidin, and M. A. Mahdi. Molybdenum trioxide decorated on tapered microfiber for mode-locked erbium-doped fiber laser. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 14:942–953, SEP-OCT 2021.
- [EE9] Samuel Raafat Fahim, Hany M. Hasanien, Rania A. Turkey, Abdulaziz Alkuhayli, Abdullrahman A. Al-Shamma'a, Abdullah M. Noman, Marcos Tostado-Veliz, and Francisco Jurado. Parameter identification of proton exchange membrane fuel cell based on hunger games search algorithm. *ENERGIES*, 14(16), AUG 2021.
- [EE10] Hao Song, Xinzhou Su, Haoqian Song, Runzhou Zhang, Zhe Zhao, Nanzhe Hu, Kaiheng Zou, Huibin Zhou, Kai Pang, Cong Liu, Karapet Manukyan, Ahmed Almaiman, Andreas F. Molisch, Robert W. Boyd, Shlomo Zach, Moshe Tur, and Alan E. Willner. Simultaneous turbulence mitigation and channel demultiplexing using a single multi-plane light convertor for a free-space optical link with two 100-gbit/s oam channels. *OPTICS COMMUNICATIONS*, 501, DEC 15 2021.

- [EE11] Hamsakutty Vettikalladi, Waleed Tariq Sethi, and Wonsuk Ko. Sub-terahertz (thz) antenna for internet of things and 6g communication. *FREQUENZ*, 76(3-4):177–184, APR 26 2022.
- [EE12] Anmar Arif and Kostas Margellos. Locating parking hubs in free-floating ride share systems via data-driven optimization. *IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS*, 23(8):11621–11632, AUG 2022.
- [EE13] Yosef T. Aladadi and Majeed A. S. Alkanhal. Anisotropy characterization of metallic lens structures. *MICROMACHINES*, 12(9), SEP 2021.
- [EE14] Mohamed Marey, Hala Mostafa, Saleh A. Alshebeili, and Octavia A. Dobre. Iterative modulation classification algorithm for two-path successive relaying systems. *IEEE WIRELESS COMMUNICATIONS LETTERS*, 10(9):2017–2021, SEP 2021.
- [EE15] Semih Isik, Mohammed Alharbi, and Subhashish Bhattacharya. An optimized circulating current control method based on pr and pi controller for mmc applications. *IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS*, 57(5):5074–5085, SEP 2021.
- [EE16] Basem Aqlan, Mohamed Himdi, Hamsakutty Vettikalladi, and Laurent Le-Coq. Experimental realization of sub-thz circularly polarized antenna based on metasurface superstrate at 300 ghz. *MATERIALS*, 14(17), SEP 2021.
- [EE17] Md Anowar Hossain, Ibrahim Elshafiey, Abdulhameed Al-Sanie, Amr Ragheb, and Habib Fathallah. Ofdm based fiber nonlinear impairment compensation for long-reach passive optical networks. *OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS*, 15(9-10):442–447, SEP-OCT 2021.
- [EE18] Ahmed Almaiman, Hao Song, Amir Minoofar, Haoqian Song, Runzhou Zhang, Xinzhou Su, Kaiheng Zou, Kai Pang, Cong Liu, Peicheng Liao, Nanzhe Hu, Zhe Zhao, Shlomo Zach, Moshe Tur, and Alan E. Willner. Demonstration of qpsk data correlation and equalization using a tunable optical tapped delay line based on orbital angular momentum mode delays. *OPTICS COMMUNICATIONS*, 503, JAN 15 2022.
- [EE19] Qianzhi Zhang, Zhaoyu Wang, Shanshan Ma, and Anmar Arif. Stochastic pre-event preparation for enhancing resilience of distribution systems. *RENEWABLE & SUSTAINABLE ENERGY REVIEWS*, 152, DEC 2021.
- [EE20] Gorg Abdelmassih, Mohammed Al-Numay, and Abdelali El Aroudi. Map optimization fuzzy logic framework in wind turbine site selection with application to the usa wind farms. *ENERGIES*, 14(19), OCT 2021.
- [EE21] Runzhou Zhang, Nanzhe Hu, Huibin Zhou, Kaiheng Zou, Xinzhou Su, Yiyu Zhou, Haoqian Song, Kai Pang, Hao Song, Amir Minoofar, Zhe Zhao, Cong Liu, Karapet Manukyan, Ahmed Almaiman, Brittany Lynn, Robert W. Boyd, Moshe Tur, and Alan E. Willner. Turbulence-resilient pilot-assisted self-coherent free-space optical communications using automatic optoelectronic mixing of many modes. *NATURE PHOTONICS*, 15(10):743–750, OCT 2021.

- [EE22] M. H. M. Ahmed, N. Mohd Yusoff, C. A. Che Abdullah, M. T. Alresheedi, N. S. Rosli, Z. A. Talib, and M. A. Mahdi. Nanosized titanium dioxide saturable absorber for soliton mode-locked thulium-doped fiber laser. *RESULTS IN PHYSICS*, 31, DEC 2021.
- [EE23] Abdullah Aldughaiyem, Yasser Bin Salamah, and Irfan Ahmad. Control design and assessment for a reversing tractor-trailer system using a cascade controller. *APPLIED SCIENCES-BASEL*, 11(22), NOV 2021.
- [EE24] Wazie M. Abdulkawi, Abdel Fattah A. Sheta, Ibrahim Elshafiey, and Majeed A. Alkanhal. Design of low-profile single- and dual-band antennas for iot applications. *ELECTRONICS*, 10(22), NOV 2021.
- [EE25] Ali Faisal Murtaza, Hadeed Ahmed Sher, Filippo Spertino, Alessandro Ciocia, Abdullah M. Noman, Abdullrahman A. Al-Shamma'a, and Abdulaziz Alkuhayli. A novel mppt technique based on mutual coordination between two pv modules/arrays. *ENERGIES*, 14(21), NOV 2021.
- [EE26] Mohamed Marey, Hala Mostafa, Saleh A. Alshebeili, and Octavia A. Dobre. Blind modulation identification algorithm for two-path successive relaying systems. *IEEE WIRELESS COMMUNICATIONS LETTERS*, 10(11):2369–2373, NOV 2021.
- [EE27] Jameel Ali and Majid Altamimi. Energy consumption model for data transfer in smartphone. *COMPUTER COMMUNICATIONS*, 182:13–21, JAN 15 2022.
- [EE28] Naveed Islam, Majid Altamimi, Khalid Haseeb, and Mohammad Siraj. Secure and sustainable predictive framework for iot-based multimedia services using machine learning. *SUSTAINABILITY*, 13(23), DEC 2021.
- [EE29] Zineb Hekss, Abdelmajid Abouloifa, Ibtissam Lachkar, Abdelali El Aroudi, Salwa Echalih, Mohammed Al-Numay, and Fouad Giri. Advanced nonlinear controller of single-phase shunt active power filter interfacing solar photovoltaic source and electrical power grid. *INTERNATIONAL TRANSACTIONS ON ELECTRICAL ENERGY SYSTEMS*, 31(12), DEC 2021.
- [EE30] Mohammed Alharbi, Semih Isik, and Subhashish Bhattacharya. An equivalent hybrid model for a large-scale modular multilevel converter and control simulations. *IEEE ACCESS*, 10:53504–53512, 2022.
- [EE31] Anmar Arif, Bai Cui, and Zhaoyu Wang. Switching device-cognizant sequential distribution system restoration. *IEEE TRANSACTIONS ON POWER SYSTEMS*, 37(1):317–329, JAN 2022.
- [EE32] Ali H. Alqahtani, Yosef T. Aladadi, and Mohammed T. Alresheedi. Dielectric slabs-based lens for millimeter-wave beamforming. *APPLIED SCIENCES-BASEL*, 12(2), JAN 2022.
- [EE33] Mansoor Khan, Muhammad Rashid Naeem, Essam A. Al-Ammar, Wonsuk Ko, Hamsakutty Vettikalladi, and Irfan Ahmad. Power forecasting of regional wind farms via variational auto-encoder and deep hybrid transfer learning. *ELECTRONICS*, 11(2), JAN 2022.

- [EE34] Taghreed Saad Alofaisan, Amr M. Ragheb, Ahmed B. Ibrahim, Musaed Alhussein, and Saleh A. Alshebeili. Pn code acquisition in ds-cdma wireless systems using smart antenna and s-cfar processor. *IEEE ACCESS*, 10:6720–6736, 2022.
- [EE35] Ahmed Moreab Hussien, Rania A. Turkey, Abdulaziz Alkuhayli, Hany M. Hasanien, Marcos Tostado-Veliz, Francisco Jurado, and Ramesh C. Bansal. Coot bird algorithms-based tuning pi controller for optimal microgrid autonomous operation. *IEEE ACCESS*, 10:6442–6458, 2022.
- [EE36] Abdullrahman A. Al-Shamma'a, Hamed O. Omotoso, Fahd A. Alturki, Hassan. M. H. Farh, Abdulaziz Alkuhayli, Khalil Alsharabi, and Abdullah M. Noman. Parameter estimation of photovoltaic cell/modules using bonobo optimizer. *ENERGIES*, 15(1), JAN 2022.
- [EE37] A. W. Al-Alimi, N. A. Cholan, M. T. Alresheedi, A. F. Abas, Z. A. Talib, N. Mohd Yusoff, and M. A. Mahdi. Q-switched fiber laser employing a passive polarization-maintaining thulium-doped fiber as a saturable absorber. *RESULTS IN PHYSICS*, 33, FEB 2022.
- [EE38] Saleh Al-Senaidi, Abdullrahman Alolah, and Majeed Alkanhal. Parallel operation of three-phase self-excited induction generators with different numbers of poles. *ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH*, 25, JAN 2022.
- [EE39] Waddah S. Saif, Amr M. Ragheb, Maged A. Esmail, Mohamed Marey, and Saleh A. Alshebeili. Machine learning based low-cost optical performance monitoring in mode division multiplexed optical networks. *PHOTONICS*, 9(2), FEB 2022.
- [EE40] Hassan M. H. Farh, Abdullrahman A. Al-Shamma'a, Abdullah M. Al-Shaalan, Abdulaziz Alkuhayli, Abdullah M. Noman, and Tarek Kandil. Technical and economic evaluation for off-grid hybrid renewable energy system using novel bonobo optimizer. *SUSTAINABILITY*, 14(3), FEB 2022.
- [EE41] Huma Rehman, Ali Faisal Murtaza, Hadeed Ahmed Sher, Abdullah M. Noman, Abdullrahman A. Al-Shamma'a, Abdulaziz Alkuhayli, and Filippo Spertino. Neighboring-pixel-based maximum power point tracking algorithm for partially shaded photovoltaic (pv) systems. *ELECTRONICS*, 11(3), FEB 2022.
- [EE42] N. Z. A. Naharuddin, M. H. Abu Bakar, A. R. Sadrolhosseini, N. Tamchek, M. T. Alresheedi, A. F. Abas, and M. A. Mahdi. Pulsed-laser-ablated gold-nanoparticles saturable absorber for mode-locked erbium-doped fiber lasers. *OPTICS AND LASER TECHNOLOGY*, 150, JUN 2022.
- [EE43] Mohammed T. Alresheedi, Yahya M. Al-Moliki, Yahya Al-Harhi, and Ali H. Alqah-tani. Dynamic hyperchaotic key generation using optical orthogonal frequency division multiplexing-based visible light communication networks. *IEEJ TRANSACTIONS ON ELECTRICAL AND ELECTRONIC ENGINEERING*, 17(5):695–704, MAY 2022.
- [EE44] Salwa Echalih, Abdelmajid Abouloifa, Ibtissam Lachkar, Zineb Hekss, Abdelali El Aroudi, Fouad Giri, and Mohammed S. Al-Numay. Nonlinear control design and

- stability analysis of single phase half bridge interleaved buck shunt active power filter. *IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS*, 69(5):2117–2128, MAY 2022.
- [EE45] Hassaan Muhammad, Junaid Massab, Shamir Muhammad, Abdulaziz Alkuhayli, Abdullah M. Noman, and Abdullrahman A. Al-Shamma'a. Indentation creep behavior of pulsed tungsten inert gas welded ti-5al-2.5sn alloy joints by nanoindentation and atomic force microscopy. *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART E-JOURNAL OF PROCESS MECHANICAL ENGINEERING*, 236(5):1936–1946, OCT 2022.
- [EE46] Muhamad Amir Waliuddin Abdul Hadi, Farah Diana Muhammad, Norita Mohd Yusoff, Mohammed Thamer Alresheedi, Chee Seong Goh, and Mohd Adzir Mahdi. Noise-like pulse generation with tungsten trioxide/polydimethylsiloxane-clad microfiber saturable absorber. *MICROWAVE AND OPTICAL TECHNOLOGY LETTERS*, 64(5):972–977, MAY 2022.
- [EE47] Hany M. Hasanien, Mohamed A. M. Shaheen, Rania A. Turkey, Mohammed H. Qais, Saad Alghuwainem, Salah Kamel, Marcos Tostado-Veliz, and Francisco Jurado. Precise modeling of pem fuel cell using a novel enhanced transient search optimization algorithm. *ENERGY*, 247, MAY 15 2022.
- [EE48] Rania A. Turkey, Hany M. Hasanien, and Abdulaziz Alkuhayli. Dynamic stability improvement of aws-based wave energy systems using a multiobjective salp swarm algorithm-based optimal control scheme. *IEEE SYSTEMS JOURNAL*, 16(1):79–87, MAR 2022.
- [EE49] Ahmed B. Ibrahim, Amr M. Ragheb, Waddah S. Saif, and Saleh A. Alshebeili. Structured light transmission under free space jamming: An enhanced mode identification and signal-to-jamming ratio estimation using machine learning. *PHOTONICS*, 9(3), MAR 2022.
- [EE50] Salwa Echalih, Abdelmajid Abouloifa, Ibtissam Lachkar, Abdelali El Aroudi, Zineb Hekss, Fouad Giri, and Mohammed S. Al-Numay. A cascaded controller for a grid-tied photovoltaic system with three-phase half-bridge interleaved buck shunt active power filter: Hybrid control strategy and fuzzy logic approach. *IEEE JOURNAL ON EMERGING AND SELECTED TOPICS IN CIRCUITS AND SYSTEMS*, 12(1):320–330, MAR 2022.
- [EE51] M. H. M. Ahmed, N. Mohd Yusoff, N. H. Zainol Abidin, H. K. Lee, M. T. Alresheedi, A. F. Abas, C. S. Goh, and M. A. Mahdi. Ultrashort pulse thulium-doped fiber laser with molybdenum trioxide on tapered fiber. *OPTIK*, 257, MAY 2022.
- [EE52] Senthil Murugan Nagarajan, Ganesh Gopal Deverajan, Ali Kashif Bashir, Rajendra Prasad Mahapatra, and Mohammed S. Al-Numay. Iadf-cps: Intelligent anomaly detection framework towards cyber physical systems. *COMPUTER COMMUNICATIONS*, 188:81–89, APR 15 2022.
- [EE53] Yahya M. Al-Moliki, Mohammed T. Alresheedi, Yahya Al-Harhi, and Ali H. Alqah-tani. Robust lightweight-channel-independent ofdm-based encryption method for vlc-iot networks. *IEEE INTERNET OF THINGS JOURNAL*, 9(6):4661–4676, MAR 15 2022.

- [EE54] N. Mohd Yusoff, M. A. W. Abdul Hadi, N. H. Zainol Abidin, M. T. Alresheedi, C. S. Goh, and M. A. Mahdi. Aluminum oxide/polydimethylsiloxane-based q-switched mode-locked erbium-doped fiber laser. *OPTIK*, 257, MAY 2022.
- [EE55] Mohammed Y. Abbass, Nevein Sadic, Huda I. Ashiba, Emad S. Hassan, Sami El-Dolil, Naglaa F. Soliman, Abeer D. Algarni, Eatedal A. Alabdulkreem, Fatimah Algarni, Ghada M. El-Banby, Mohamed R. Abdel-Rahman, Saeed A. Aldosari, Moawad I. Dessouky, El-Sayed M. El-Rabaie, Walid El-Shafai, Ashraf A. M. Khalaf, Ibrahim M. El-Dokany, and Fathi E. Abd El-Samie. An efficient technique for non-uniformity correction of infrared video sequences with histogram matching. *JOURNAL OF ELECTRICAL ENGINEERING & TECHNOLOGY*, 17(5):2971–2983, SEP 2022.
- [EE56] Amr Saleh, Walid A. Omran, Hany M. Hasanien, Marcos Tostado-Veliz, Abdulaziz Alkuhayli, and Francisco Jurado. Manta ray foraging optimization for the virtual inertia control of islanded microgrids including renewable energy sources. *SUSTAINABILITY*, 14(7), APR 2022.
- [EE57] Faroq Razzaz, Saud M. Saeed, and Majeed A. S. Alkanhal. Ultra-wideband bandpass filters using tapered resonators. *APPLIED SCIENCES-BASEL*, 12(7), APR 2022.
- [EE58] Ahmad Fauzi Abas, Kuen Y. Lau, Wazie M. Abdulkawi, Mohammed T. Alresheedi, Farah D. Muhammad, and Mohd Adzir Mahdi. Dispersion management and pulse characterization of graphene-based soliton mode-locked fiber lasers. *APPLIED SCIENCES-BASEL*, 12(7), APR 2022.
- [EE59] Waddah S. Saif, Amr M. Ragheb, Bernd Nebendahl, Tariq Alshawi, Mohamed Marey, and Saleh A. Alshebeili. Performance investigation of modulation format identification in super-channel optical networks. *IEEE PHOTONICS JOURNAL*, 14(2), APR 2022.
- [EE60] M. H. M. Ahmed, S. A. Sadeq, N. Mohd Yusoff, N. H. Zainol Abidin, M. T. Alresheedi, A. F. Abas, Z. A. Talib, and M. A. Mahdi. Graded-index multimode fiber in nonlinear absorbing loop mirror as saturable absorber for noise-like pulse generation in $2\mu\text{m}$ region. *INFRARED PHYSICS & TECHNOLOGY*, 123, JUN 2022.
- [EE61] A. W. Al-Alimi, N. A. Cholan, Y. G. Shee, M. T. Alresheedi, C. S. Goh, and M. A. Mahdi. Ultralong wavelength operation of a tunable multiwavelength brillouin-raman fiber laser in $1.65\mu\text{m}$ band. *RESULTS IN PHYSICS*, 37, JUN 2022.
- [EE62] Muhammad Syauqi Kusyairi Jamalus, Abdul Hadi Sulaiman, Fairuz Abdullah, Nadiatulhuda Zulkifli, Mohammed Thamer Alresheedi, Mohd Adzir Mahdi, and Nelidya Md. Yusoff. Selectable multiwavelength thulium-doped fiber laser based on parallel lyot filter. *OPTICAL FIBER TECHNOLOGY*, 70, MAY 2022.
- [EE63] A. Murad, J. Y. C. Liew, M. H. Yaacob, I. M. Noor, N. H. Osman, M. A. Kamarudin, S. T. Tan, H. K. Lee, Z. A. Talib, M. T. Alresheedi, and M. A. Mahdi. Effect of nickel ion concentration on structural, optical and electrical properties towards ni-h3btc-mof formation for nonlinear saturable absorption phenomenon. *JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS*, 167, AUG 2022.

- [EE64] Mohammed H. Qais, Hany M. Hasanien, Saad Alghuwainem, K. H. Loo, M. A. Elgendy, and Rania A. Turkey. Accurate three-diode model estimation of photovoltaic modules using a novel circle search algorithm. *AIN SHAMS ENGINEERING JOURNAL*, 13(3), MAY 2022.
- [EE65] Majid Aljalal, Saeed A. Aldosari, Khalil AlSharabi, Akram M. Abdurraqueeb, and Fahd A. Alturki. Parkinson's disease detection from resting-state eeg signals using common spatial pattern, entropy, and machine learning techniques. *DIAGNOSTICS*, 12(5), MAY 2022.
- [EE66] Mohammed Alharbi, Semih Isik, Abdulaziz Alkuhayli, and Subhashish Bhat-tacharya. Power ripple control method for modular multilevel converter under grid imbalances. *ENERGIES*, 15(10), MAY 2022.
- [EE67] Akram M. Abdurraqueeb, Abdullrahman A. Al-Shamma'a, Abdulaziz Alkuhayli, Abdullah M. Noman, and Khaled E. Addoweesh. Rst digital robust control for dc/dc buck converter feeding constant power load. *MATHEMATICS*, 10(10), MAY 2022.
- [EE68] Mohammed H. Qais, Hany M. Hasanien, Rania A. Turkey, Saad Alghuwainem, Marcos Tostado-Veliz, and Francisco Jurado. Circle search algorithm: A geometry-based metaheuristic optimization algorithm. *MATHEMATICS*, 10(10), MAY 2022.
- [EE69] Abdullrahman A. Al-Shammaa, Akram M. Abdurraqueeb, Abdullah M. Noman, Abdulaziz Alkuhayli, and Hassan M. H. Farh. Hardware-in-the-loop validation of direct mppt based cuckoo search optimization for partially shaded photovoltaic system. *ELECTRONICS*, 11(10), MAY 2022.
- [EE70] Waddah S. Saif, Amr M. Ragheb, Bernd Nebendahl, Tariq Alshawi, Mohamed Marey, and Saleh A. Alshebeili. Machine learning-based optical performance monitoring for super-channel optical networks. *PHOTONICS*, 9(5), MAY 2022.
- [EE71] Ali M. Albishi. A novel coupling mechanism for csrrs as near-field dielectric sensors. *SENSORS*, 22(9), MAY 2022.
- [EE72] Amr M. Ragheb, Hussein E. Seleem, Ahmed S. Almaiman, and Saleh A. Alshebeili. Reconfigurable photonics-based millimeter wave signal aggregation for non-orthogonal multiple access. *OPTICS EXPRESS*, 30(10):16812–16826, MAY 9 2022.
- [EE73] Beenish Tahir, Muhammad Tahir, Mohammad Siraj, and Amanullah Fatehmulla. Synergistic effect of cobalt in hierarchical carbon nitride nanorods (hcnnr) with promising charge transfer rate by hole scavenger for stimulating solar h₂ production. *JOURNAL OF ALLOYS AND COMPOUNDS*, 916, SEP 25 2022.
- [EE74] M. A. W. Abdul Hadi, K. Y. Lau, N. Mohd Yusoff, N. H. Zainol Abidin, M. T. Alresheedi, A. F. Abas, C. S. Goh, and M. A. Mahdi. Nano-tungsten trioxide saturable absorber for l-band noise-like pulse mode-locked fiber laser. *OPTICAL FIBER TECHNOLOGY*, 71, JUL 2022.
- [EE75] Mohammed H. Qais, Hany M. Hasanien, Rania A. Turkey, Saad Alghuwainem, Ka-Hong Loo, and Mohammed Elgendy. Optimal pem fuel cell model using a novel circle search algorithm. *ELECTRONICS*, 11(12), JUN 2022.

- [EE76] Saly Abd-Elateif El-Gindy, Fatma E. Ibrahim, Mohamed Alabasy, Hesham M. Abdelzاهر, Mahmoud El-Refy, Ashraf A. M. Khalaf, Sami M. El-Dolil, Adel S. El-Fishawy, Taha E. Taha, El-Sayed M. El-Rabaie, Moawad Dessouky, I, Ibrahim El-Dokany, Osama A. Oraby, Turkey N. Alotaiby, Saleh A. Alshebeili, and Fathi E. Abd El-Samie. Detection of abnormal activities from various signals based on statistical analysis. *WIRELESS PERSONAL COMMUNICATIONS*, 125(2):1013–1046, JUL 2022.
- [EE77] Maisarah Mansor, Nadiyah Hussein Zainol Abidin, Josephine Ying Chyi Liew, Mohammed Thamer Alresheedi, Amit Kumar Garg, Vijay Janyani, and Mohd Adzir Mahdi. Cerium oxide/polydimethylsiloxane composite tapered fiber saturable absorber for mode-locked pulsed erbium-doped fiber laser. *INFRARED PHYSICS & TECHNOLOGY*, 125, SEP 2022.
- [EE78] Mohamed Marey, Hala Mostafa, Saleh A. Alshebeili, and Octavia A. Dobre. Stbc recognition for ofdm transmissions: Channel decoder aided algorithm. *IEEE COMMUNICATIONS LETTERS*, 26(7):1658–1662, JUL 2022.
- [EE79] Mohammed Alharbi, Semih Isik, Faris E. Alfaris, Abdulaziz Alkuhayli, and Subhashish Bhattacharya. A fault clearance and restoration approach for mmc-based mtde grid. *ELECTRONICS*, 11(14), JUL 2022.
- [EE80] Mohamed Elhoseny, Mohammad Siraj, Khalid Haseeb, Muhammad Nawaz, Majid Altamimi, and Mohammed Alghamdi, I. Energy-efficient mobile agent protocol for secure iot sustainable applications. *SUSTAINABILITY*, 14(14), JUL 2022.
- [EE81] Huibin Zhou, Xinzhou Su, Amir Minoofar, Runzhou Zhang, Kaiheng Zou, Hao Song, Kai Pang, Haoqian Song, Nanzhe Hu, Zhe Zhao, Ahmed Almainan, Shlomo Zach, Moshe Tur, Andreas F. Molisch, Hirofumi Sasaki, Doohwan Lee, and Alan E. Willner. Utilizing multiplexing of structured thz beams carrying orbital-angular-momentum for high-capacity communications. *OPTICS EXPRESS*, 30(14):25418–25432, JUL 4 2022.
- [EE82] Hsuan-Hao Lu, Karthik Myilswamy, V, Ryan S. Bennink, Suparna Seshadri, Mohammed S. Alshaykh, Junqiu Liu, Tobias J. Kippenberg, Daniel E. Leaird, Andrew M. Weiner, and Joseph M. Lukens. Bayesian tomography of high-dimensional on-chip biphoton frequency combs with randomized measurements. *NATURE COMMUNICATIONS*, 13(1), JUL 27 2022.
- [EE83] Ishaani Priyadarshini, Rohit Sharma, Dhowmya Bhatt, and M. Al-Numay. Human activity recognition in cyber-physical systems using optimized machine learning techniques. *CLUSTER COMPUTING-THE JOURNAL OF NETWORKS SOFTWARE TOOLS AND APPLICATIONS*, 26(4):2199–2215, AUG 2023.
- [EE84] L. Sathish Kumar, Sidheswar Routray, A. Prabu, V, S. Rajasoundaran, V Pandimurugan, Amrit Mukherjee, and Mohammed S. Al-Numay. Artificial intelligence based health indicator extraction and disease symptoms identification using medical hypothesis models. *CLUSTER COMPUTING-THE JOURNAL OF NETWORKS SOFTWARE TOOLS AND APPLICATIONS*, 26(4):2325–2337, AUG 2023.

- [EE85] Yasmin Mustapha Kamil, Sura Hmoud Al-Rekabi, Muhammad Hafiz Abu Bakar, Yap Wing Fen, Husam Abduldaem Mohammed, Nor Hafizah Mohamed Halip, Mohammed Thamer Alresheedi, and Mohd Adzir Mahdi. Arsenic detection using surface plasmon resonance sensor with hydrous ferric oxide layer. *PHOTONIC SENSORS*, 12(3), SEP 2022.

INDUSTRIAL ENGINEERING

Publications

- [IE1] Zakariya Kaneesamkandi and Ateekh Ur Rehman. Optimum and sustainable cooling technology selection for different climatic conditions. *ENERGIES*, 14(19), OCT 2021.
- [IE2] Bashir Salah. Real-time implementation of a fully automated industrial system based on ir 4.0 concept. *ACTUATORS*, 10(12), DEC 2021.
- [IE3] Saqib Anwar, Ateekh Ur Rehman, Yusuf Usmani, and Ali M. Al-Samhan. Influence of post weld heat treatment on the grain size, and mechanical properties of the alloy-800h rotary friction weld joints. *MATERIALS*, 14(16), AUG 2021.
- [IE4] Mohammed H. Alhaag, Mohamed Z. Ramadan, Ibrahim M. Al-harkan, Faisal M. Alessa, Hisham Alkhalefah, Mustufa Haider Abidi, and Abdelaty E. Sayed. Determining the fatigue associated with different task complexity during maintenance operations in males using electromyography features. *INTERNATIONAL JOURNAL OF INDUSTRIAL ERGONOMICS*, 88, MAR 2022.
- [IE5] Mohammed Alkahtani. Supply chain management optimization and prediction model based on projected stochastic gradient. *SUSTAINABILITY*, 14(6), MAR 2022.
- [IE6] Mohammed A. El-Meligy, Ahmed M. El-Sherbeeney, Ahmed T. A. Soliman, Abd E. E. Abd Elgawad, and Emad A. Naser. On the solution of robust transmission expansion planning using duality theorem under polyhedral uncertainty set. *ELECTRIC POWER SYSTEMS RESEARCH*, 206, MAY 2022.
- [IE7] Abdulmajeed Dabwan, Saqib Anwar, Ali M. Al-Samhan, Mustafa M. Nasr, and Abdullah AlFaify. On the influence of heat treatment in suppressing the layer orientation effect in finishing of electron beam melted ti6al4v. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 118(9-10):3035–3048, FEB 2022.
- [IE8] Mohammed Alkahtani. Mathematical modelling of inventory and process outsourcing for optimization of supply chain management. *MATHEMATICS*, 10(7), APR 2022.
- [IE9] Chintakindi Sanjay, Ali Alsamhan, and Mustufa Haider Abidi. Multi response optimization of machining parameters for an annealed monel k 500 alloy in drilling using machine learning techniques and ann. *JOURNAL OF INTELLIGENT & FUZZY SYSTEMS*, 42(6):5605–5625, 2022.
- [IE10] Lotfi Hidri and Ahmed M. Elsherbeeney. Optimal solution to the two-stage hybrid flow shop scheduling problem with removal and transportation times. *SYMMETRY-BASEL*, 14(7), JUL 2022.
- [IE11] Mohammed A. El-Meligy and Ahmed M. El-Sherbeeney. Hybrid robust/stochastic transmission expansion planning considering uncertainties in generators' offer prices: A second-order cone program approach. *ELECTRIC POWER SYSTEMS RESEARCH*, 203, FEB 2022.
- [IE12] Usama Umer and Abdulrahman Al-Ahmari. 3d modeling of tool wear and optimization in hard turning considering the effects of tool cutting edge and nose radii. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 118(5-6):1919–1932, JAN 2022.

- [IE13] Malk Almalki and Mohammed Alkahtani. Allocation of regional logistics hubs and assessing their contribution to saudi arabia's logistics performance index ranking. *SUSTAINABILITY*, 14(12), JUN 2022.
- [IE14] Fawaz M. Abdullah, Abdulrahman M. Al-Ahmari, and Saqib Anwar. Exploring key decisive factors in manufacturing strategies in the adoption of industry 4.0 by using the fuzzy dematel method. *PROCESSES*, 10(5), MAY 2022.
- [IE15] S. M. Bhati, G. Murali, and Ch Sanjay. Law of electric fields via bianchi identities. *JOURNAL OF APPLIED SCIENCE AND ENGINEERING*, 25(4):659–662, 2022.
- [IE16] Mohammed A. Noman, Moath Alatefi, Abdulrahman M. Al-Ahmari, and Tamer Ali. Tabu search algorithm based on lower bound and exact algorithm solutions for minimizing the makespan in non-identical parallel machines scheduling. *MATHEMATICAL PROBLEMS IN ENGINEERING*, 2021, DEC 25 2021.
- [IE17] Lotfi Hidri, Mehdi Mrad, and Mohammed Alkahtani. Suitable mass density function for an artificial satellite to prevent chaotic motion after collision with space debris. *SYMMETRY-BASEL*, 14(4), APR 2022.
- [IE18] Srinivasan Palanisamy, Muthuramalingam Thangaraj, Khaja Moiduddin, and Abdulrahman M. Al-Ahmari. Fabrication and performance analysis of 3d inkjet flexible printed touch sensor based on agnp electrode for infotainment display. *COATINGS*, 12(3), MAR 2022.
- [IE19] Basem A. Alkhaleel, Haitao Liao, and Kelly M. Sullivan. Model and solution method for mean-risk cost-based post-disruption restoration of interdependent critical infrastructure networks. *COMPUTERS & OPERATIONS RESEARCH*, 144, AUG 2022.
- [IE20] Muneer Baig, Asiful H. Seikh, Ateekh Ur Rehman, Jabair A. Mohammed, Faraz Husain Hashmi, and Sameh Mohamed Ragab. Microstructure evaluation study of al5083 alloy using ebsd technique after processing with different ecap processes and temperatures. *CRYSTALS*, 11(8), AUG 2021.
- [IE21] Shoufa Liu, Muthuramalingam Thangaraj, Khaja Moiduddin, and Abdulrahman M. Al-Ahmari. Influence of adaptive gap control mechanism and tool electrodes on machining titanium (ti-6al-4v) alloy in edm process. *MATERIALS*, 15(2), JAN 2022.
- [IE22] Wadea Ameen, Muneer Khan Mohammed, Abdulrahman Al-Ahmari, Naveed Ahmed, Abdulmajeed Dabwan, and Husam Kaid. Optimization of perforated support structures for electron beam additive manufacturing. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 120(11-12):7305–7323, JUN 2022.
- [IE23] Asiful H. Seikh, Muneer Baig, Ateekh Ur Rehman, Faraz H. Hashmi, and Jabair A. Mohammed. Stress corrosion cracking behavior of fine-grained al5083 alloys processed by equal-channel angular pressing (ecap). *MOLECULES*, 26(24), DEC 2021.
- [IE24] Md Ziyaur Rahman, Zahid A. Khan, Arshad Noor Siddiquee, Mustufa Haider Abidi, Mohamed K. Aboudaif, and Abdulrahman Al-Ahmari. Mechanical and microstructural characterization of ti-sic reinforced aa5083 surface composites fabricated via friction stir process. *MATERIALS RESEARCH EXPRESS*, 8(12), DEC 2021.

- [IE25] Wadea Ameen, Abdulrahman Al-Ahmari, Muneer Khan Mohammed, and Osama Abdulhameed. Evaluation of the support structure removal techniques for additively manufactured ti6al4v parts. *ADVANCES IN MATERIALS SCIENCE AND ENGINEERING*, 2022, JUN 14 2022.
- [IE26] Mohammed El-Meligy, Ahmed M. El-Sherbeeney, and Amjad Anvari-Moghaddam. Transmission expansion planning considering resistance variations of overhead lines using minimum-volume covering ellipsoid. *IEEE TRANSACTIONS ON POWER SYSTEMS*, 37(3):1916–1926, MAY 2022.
- [IE27] Shubha Sumesh, John Yearwood, Shamsul Huda, and Shafiq Ahmad. A global training model for beat classification using basic electrocardiogram morphological features. *CMC-COMPUTERS MATERIALS & CONTINUA*, 70(3):4503–4521, 2022.
- [IE28] Sanjay Chintakindi, Ali Alsamhan, Mustufa Haider Abidi, and Maduri Praveen Kumar. Annealing of monel 400 alloy using principal component analysis, hyper-parameter optimization, machine learning techniques, and multi-objective particle swarm optimization. *INTERNATIONAL JOURNAL OF COMPUTATIONAL INTELLIGENCE SYSTEMS*, 15(1), MAR 21 2022.
- [IE29] Abdulrahman Al-Ahmari, Husam Kaid, Zhiwu Li, NaiQi Wu, Abdul-Aziz El-Tamimi, and Yan Qiao. A new minlp continuous time formulation for scheduling optimization of oil refinery with unreliable cdus. *MATHEMATICAL PROBLEMS IN ENGINEERING*, 2022, MAR 10 2022.
- [IE30] Mohammed Alnahhal, Diane Ahrens, and Bashir Salah. Optimizing inventory replenishment for seasonal demand with discrete delivery times. *APPLIED SCIENCES-BASEL*, 11(23), DEC 2021.
- [IE31] Fawaz M. Abdullah, Mustafa Saleh, Abdulrahman M. Al-Ahmari, and Saqib Anwar. The impact of industry 4.0 technologies on manufacturing strategies: Proposition of technology-integrated selection. *IEEE ACCESS*, 10:21574–21583, 2022.
- [IE32] Aiman Ziout, Mohammed Alkahtani, Abd Elatty E. Abd Elgawad, and Bashir Salah. Environmental inventory analysis for remanufacturing initiative: Case study of air conditioner remanufacturing. *APPLIED SCIENCES-BASEL*, 12(12), JUN 2022.
- [IE33] Ateekh Ur Rehman, Nagumothu Kishore Babu, Mahesh Kumar Talari, Yusuf Usmani, and Hisham Alkhalefah. Characterisation of microstructure and mechanical properties of linear friction welded α plus β titanium alloy to nitinol. *APPLIED SCIENCES-BASEL*, 11(22), NOV 2021.
- [IE34] Mohammed Alkahtani, Bashir Salah, Aiman Ziout, and Moath Alatefi. Collection system of air conditioners remanufacturing: Development and optimization under probabilistic uncertainty. *MATHEMATICAL PROBLEMS IN ENGINEERING*, 2022, APR 21 2022.
- [IE35] Mohammed Alnahhal, Diane Ahrens, and Bashir Salah. Dynamic lead-time forecasting using machine learning in a make-to-order supply chain. *APPLIED SCIENCES-BASEL*, 11(21), NOV 2021.

- [IE36] Ateekh Ur Rehman, Nagumothu Kishore Babu, Mahesh Kumar Talari, Yusuf Siraj Usmani, and Hisham Al-Khalefah. Microstructure and mechanical property correlation between rotary friction welded nitinol-nitinol joints. *FRONTIERS IN MATERIALS*, 8, NOV 11 2021.
- [IE37] A. Korbi, A. Soued, A. Ben Makhlof, M. Graa, M. Tlija, and B. Louhichi. A tolerance analysis model of cad assemblies considering thermo-mechanical deformations of non-rigid parts. *INTERNATIONAL JOURNAL OF INTERACTIVE DESIGN AND MANUFACTURING - IJIDEM*, 16(1):1–16, MAR 2022.
- [IE38] Ateekh Ur Rehman, Nagumothu Kishore Babu, Mahesh Kumar Talari, Saqib Anwar, Yusuf Usmani, and Ali M. Al-Samhan. Dissimilar rotary friction welding of inconel 718 to f22 using inconel 625 interlayer. *APPLIED SCIENCES-BASEL*, 11(22), NOV 2021.
- [IE39] Zia Ur Rehman, Saud Altaf, Shafiq Ahmad, Shamsul Huda, Adel M. Al-Shayea, and Sofia Iqbal. An efficient, hybrid authentication using ecg and lightweight cryptographic scheme for wban. *IEEE ACCESS*, 9:133809–133819, 2021.
- [IE40] Lavanya Nagamalla, J. V. Shanmukha Kumar, Chintakindi Sanjay, Ali M. Alsamhan, and Mohammed Rafi Shaik. In-silico study of seaweed secondary metabolites as axl kinase inhibitors. *SAUDI JOURNAL OF BIOLOGICAL SCIENCES*, 29(2):689–701, FEB 2022.
- [IE41] Mohammed Alnahhal, Diane Ahrens, and Bashir Salah. Modeling freight consolidation in a make-to-order supply chain: A simulation approach. *PROCESSES*, 9(9), SEP 2021.
- [IE42] Mohd Asif, Mohd Tariq, Adil Sarwar, Md Reyaz Hussan, Shafiq Ahmad, Lucian Mihet-Popa, and Adamali Shah Noor Mohamed. A robust multilevel inverter topology for operation under fault conditions. *ELECTRONICS*, 10(24), DEC 2021.
- [IE43] Bashir Salah, Ali M. Alsamhan, Sajjad Khan, and Mohammed Ruzayqat. Designing and developing a smart yogurt filling machine in the industry 4.0 era. *MACHINES*, 9(11), NOV 2021.
- [IE44] Husam Kaid, Abdulrahman Al-Ahmari, Zhiwu Li, and Wadea Ameen. An improved synthesis method based on ilpp and colored petri net for liveness enforcing controller of flexible manufacturing systems. *IEEE ACCESS*, 10:68570–68581, 2022.
- [IE45] Jehangir Arshad, Ayesha Khan, Mariam Aftab, Mujtaba Hussain, Ateeq Ur Rehman, Shafiq Ahmad, Adel M. Al-Shayea, and Muhammad Shafiq. Deep deterministic policy gradient to regulate feedback control systems using reinforcement learning. *CMC-COMPUTERS MATERIALS & CONTINUA*, 71(1):1153–1169, 2022.
- [IE46] Khalid Alnowibet, Adel Abduljabbar, Shafiq Ahmad, Latifah Alqasem, Nabil Alrajeh, Luigi Guiso, Mazin Zaindin, and Madhusudhan Varanasi. Healthcare human resources: Trends and demand in saudi arabia. *HEALTHCARE*, 9(8), AUG 2021.
- [IE47] Mohammed Alnahhal, Bashir Salah, and Mohammed Ruzayqat. An efficient approach to investigate the tradeoff between double handling and needed capacity in automated distribution centers. *SUSTAINABILITY*, 14(13), JUL 2022.

- [IE48] Zia Ur Rehman, Saud Altaf, Shafiq Ahmad, Mejdal Alqahtani, Shamsul Huda, and Sofia Iqbal. Advanced authentication scheme with bio-key using artificial neural network. *SUSTAINABILITY*, 14(7), APR 2022.
- [IE49] Mohammed Alnahhal, Bashir Salah, and Rafiq Ahmad. Increasing throughput in warehouses: The effect of storage reallocation and the location of input/output station. *SUSTAINABILITY*, 14(8), APR 2022.
- [IE50] Mostafa R. Abukhadra, Mohamed Hamdy Eid, Ahmed M. El-Sherbeeney, Abd Elatty E. Abd Elgawad, and Jae-Jin Shim. Effective desalination of brackish groundwater using zeolitized diatomite/kaolinite geopolymer as low-cost inorganic membrane; siwa oasis in egypt as a realistic case study. *JOURNAL OF CONTAMINANT HYDROLOGY*, 244, JAN 2022.
- [IE51] Kashif Ishfaq, Muhammad Asad Maqsood, Saqib Anwar, Abdullah Alfaify, and Abdul Wasy Zia. Analyzing micromachining errors in edm of inconel 600 using various biodegradable dielectrics. *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*, 44(6), JUN 2022.
- [IE52] Naiqi Wu, Yan Qiao, Zhiwu Li, Abdulrahman M. Al-Ahmari, Abdul-Aziz El-Tamimi, and Husam Kaid. A novel control-theory-based approach to scheduling of high-throughput screening system for enzymatic assay. *IEEE TRANSACTIONS ON SYSTEMS MAN CYBERNETICS-SYSTEMS*, 52(12):7667–7678, DEC 2022.
- [IE53] Jagannath Paramguru, Subrat Kumar Barik, Ajit Kumar Barisal, Gaurav Dhiman, Rutvij H. Jhaveri, Mohammed Alkahtani, and Mustufa Haider Abidi. Addressing economic dispatch problem with multiple fuels using oscillatory particle swarm optimization. *CMC-COMPUTERS MATERIALS & CONTINUA*, 69(3):2863–2882, 2021.
- [IE54] Tayyab Zafar, Khurram Kamal, Senthana Mathavan, Ghulam Hussain, Mohammed Alkahtani, Fahad M. Alqahtani, and Mohamed K. Aboudaif. A hybrid approach for noise reduction in acoustic signal of machining process using neural networks and arma model. *SENSORS*, 21(23), DEC 2021.
- [IE55] Bashir Salah, Mohammed Alnahhal, and Rafiq Ahmad. Automated stacker cranes: A two-step storage reallocation process for enhanced service efficiency. *PROCESSES*, 10(1), JAN 2022.
- [IE56] Muhammad Samiullah, Waqar Aslam, Arif Mehmood, Muhammad Saeed Ahmad, Shafiq Ahmad, Adel M. Al-Shayea, and Muhammad Shafiq. Chaos-based cryptographic mechanism for smart healthcare iot systems. *CMC-COMPUTERS MATERIALS & CONTINUA*, 71(1):753–769, 2022.
- [IE57] Muhammad Abas, Mohammed Alkahtani, Qazi Salman Khalid, Ghulam Hussain, Mustufa Haider Abidi, and Johannes Buhl. Parametric study and optimization of end-milling operation of aisi 1522h steel using definitive screening design and multi-criteria decision-making approach. *MATERIALS*, 15(12), JUN 2022.
- [IE58] Afroz Alam, Mohd Tariq, Mohammad Zaid, Preeti Verma, Marwan Alsultan, Shafiq Ahmad, Adil Sarwar, and Md. Alamgir Hossain. Optimal placement of reclosers in a radial distribution system for reliability improvement. *ELECTRONICS*, 10(24), DEC 2021.

- [IE59] Adel Al-Shayea, Husam Kaid, Abdulrahman Al-Ahmari, Emad Abouel Nasr, Ali K. Kamrani, and Haitham A. Mahmoud. Colored resource-oriented petri nets for deadlock control and reliability design of automated manufacturing systems. *IEEE ACCESS*, 9:125616–125627, 2021.
- [IE60] Nimra Idris Siddiqui, Afroz Alam, Layeba Quayyoom, Adil Sarwar, Mohd Tariq, Hani Vahedi, Shafiq Ahmad, and Adamali Shah Noor Mohamed. Artificial jellyfish search algorithm-based selective harmonic elimination in a cascaded h-bridge multilevel inverter. *ELECTRONICS*, 10(19), OCT 2021.
- [IE61] Husam Kaid, Abdulrahman Al-Ahmari, Adel Al-Shayea, Emad Abouel Nasr, Ali K. Kamrani, and Haitham A. Mahmoud. Metaheuristics for optimizing unrelated parallel machines scheduling with unreliable resources to minimize makespan. *ADVANCES IN MECHANICAL ENGINEERING*, 14(5), MAY 2022.
- [IE62] Kashif Ishfaq, Muhammad Asad, Muhammad Harris, Abdullah Alfaify, Saqib Anwar, Luciano Lamberti, and Maria Luminita Scutaru. Edm of ti-6al-4v under nano-graphene mixed dielectric: A detailed investigation on axial and radial dimensional overcuts. *NANOMATERIALS*, 12(3), FEB 2022.
- [IE63] Nimel Sworna Ross, Mozammel Mia, Saqib Anwar, G. Manimaran, Mustafa Saleh, and Shafiq Ahmad. A hybrid approach of cooling lubrication for sustainable and optimized machining of ni-based industrial alloy. *JOURNAL OF CLEANER PRODUCTION*, 321, OCT 25 2021.
- [IE64] Ashish Jacob, Sachin Maheshwari, Arshad Noor Siddiquee, Abdulrahman Al-Ahmari, Mustufa Haider Abidi, Sergey Konovalov, and Xizhang Chen. The effects of in-process cooling during friction stir welding of 7475 aluminium alloy. *SAINS MALAYSIANA*, 50(9):2743–2754, SEP 2021.
- [IE65] Ebrahim Ali Alzalab, Ahmed M. El-Sherbeeny, Mohammed A. El-Meligy, and Hafiz Tayyab Rauf. Trust-based petri net model for fault detection and treatment in automated manufacturing systems. *IEEE ACCESS*, 9:157997–158009, 2021.
- [IE66] Mohammad Fahad, Marwan Alsultan, Shafiq Ahmad, Adil Sarwar, Mohd Tariq, and Irfan Ahmad Khan. Reliability analysis and fault-tolerant operation in a multilevel inverter for industrial application. *ELECTRONICS*, 11(1), JAN 2022.
- [IE67] Syed Waqar Azeem, Kashif Mehmood, Khalid Mehmood Cheema, Muhammad Faizan Tahir, and Ahmed M. El-Sherbeeny. Dual-transformer-based hybrid resonant three-level zcs converter. *ENERGY REPORTS*, 7:421–429, NOV 2021.
- [IE68] Shakeel Ahmed, Khurram Kamal, Tahir Abdul Hussain Ratlamwala, Senthana Mathavan, Ghulam Hussain, Mohammed Alkahtani, and Marwan Bin Muhammad Alsultan. Aerodynamic analyses of airfoils using machine learning as an alternative to rans simulation. *APPLIED SCIENCES-BASEL*, 12(10), MAY 2022.
- [IE69] Mohammad Fahad, Mohd Tariq, Mohammad Faizan, Atib Ali, Adil Sarwar, Hossein Dehghani Tafti, Shafiq Ahmad, and Adamali Shah Noor Mohamed. A dual source switched-capacitor multilevel inverter with reduced device count. *ELECTRONICS*, 11(1), JAN 2022.

- [IE70] Kashif Ishfaq, Muhammad Asad Maqsood, Saqib Anwar, Muhammad Harris, Abdullah Alfaify, and Abdul Wasy Zia. Edm of ti6al4v under nano-graphene mixed dielectric: a detailed roughness analysis. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 120(11-12):7375–7388, JUN 2022.
- [IE71] Hafiz Ahmed, Ghulam Hussain, Sohail Gohar, Aaqib Ali, and Mohammed Alkahtani. Impact toughness of hybrid carbon fiber-pla/abs laminar composite produced through fused filament fabrication. *POLYMERS*, 13(18), SEP 2021.
- [IE72] Arshad Mohammad, Mohd Zuhaib, Imtiaz Ashraf, Marwan Alsultan, Shafiq Ahmad, Adil Sarwar, and Mali Abdollahian. Integration of electric vehicles and energy storage system in home energy management system with home to grid capability. *ENERGIES*, 14(24), DEC 2021.
- [IE73] Rabbia Mahum, Saeed Ur Rehman, Talha Meraj, Hafiz Tayyab Rauf, Aun Irtaza, Ahmed M. El-Sherbeeney, and Mohammed A. El-Meligy. A novel hybrid approach based on deep cnn features to detect knee osteoarthritis. *SENSORS*, 21(18), SEP 2021.
- [IE74] M. Farooq, M. Farhan, Gulzar Ahmad, Zia ul Rehman Tahir, M. Usman, M. Sultan, M. Saad Hanif, M. Imran, Saqib Anwar, Ahmed M. El-Sherbeeney, and M. Ali Shakir. Thermal performance enhancement of nanofluids based parabolic trough solar collector (nptsc) for sustainable environment. *ALEXANDRIA ENGINEERING JOURNAL*, 61(11):8943–8953, NOV 2022.
- [IE75] Waqar Mehmood, Abdul Waheed Khan, Waqar Aslam, Shafiq Ahmad, Ahmed M. El-Sherbeeney, and Muhammad Shafiq. Requirement design for software configuration and system modeling. *INTELLIGENT AUTOMATION AND SOFT COMPUTING*, 32(1):441–454, 2022.
- [IE76] Manita Kumari, Adil Sarwar, Mohd Tariq, Shafiq Ahmad, Adamali Shah Noor Mohamed, and Eduardo M. G. Rodrigues. A symbiotic organism search-based selective harmonic elimination in a switched capacitor multilevel inverter. *ENERGIES*, 15(1), JAN 2022.
- [IE77] Vikram Rajpoot, Vivek Tiwari, Akash Saxena, Prashant Chaturvedi, Dharmendra Singh Rajput, Mohammed Alkahtani, and Mustufa Haider Abidi. Rss-based selective clustering technique using master node for wsn. *CMC-COMPUTERS MATERIALS & CONSTRUCTION*, 69(3):3917–3930, 2021.
- [IE78] Mohammed S. Alqahtani, Abdulsalam Abdulaziz Al-Tamimi, Mohamed H. Hassan, Fengyuan Liu, and Paulo Bartolo. Optimization of a patient-specific external fixation device for lower limb injuries. *POLYMERS*, 13(16), AUG 2021.
- [IE79] Shafiq Ahmad, Firoz Ahmad, Intekhab Alam, Abdelaty Edrees Sayed, and Mali Abdollahian. Modeling and optimizing the system reliability using bounded geometric programming approach. *MATHEMATICS*, 10(14), JUL 2022.
- [IE80] Bashir Salah, Razaullah Khan, Muawia Ramadan, Rafiq Ahmad, and Waqas Saleem. Lab scale implementation of industry 4.0 for an automatic yogurt filling production system-experimentation, modeling and process optimization. *APPLIED SCIENCES-BASEL*, 11(21), NOV 2021.

- [IE81] Muhammad Shabir, Naveed Islam, Zahoor Jan, Inayat Khan, Taj Rahman, Asim Zeb, Shafiq Ahmad, Abdelaty Edrees Abdelgawad, and Mali Abdollahian. Real-time pashto handwritten character recognition using salient geometric and spectral features. *IEEE ACCESS*, 9:160238–160248, 2021.
- [IE82] Ravi Pratap Singh, Ravinder Kataria, Mustufa Haider Abidi, Sudhir Ranjan, Ashutosh Kumar Gupta, and Abdulrahman Al-Ahmari. Surface morphology and machinability aspects in wire-edm of incoloy-800 superalloy: An experimental evaluation and microstructure analysis. *SURFACE REVIEW AND LETTERS*, 29(08), AUG 2022.
- [IE83] Nazar Hussain, Muhammad Attique Khan, Usman Tariq, Seifedine Kadry, Muhammad Asfand E. Yar, Almetwally M. Mostafa, Abeer Ali Alnuaim, and Shafiq Ahmad. Multiclass cucumber leaf diseases recognition using best feature selection. *CMC-COMPUTERS MATERIALS & CONTINUA*, 70(2):3281–3294, 2022.
- [IE84] Ahmed M. El-Sherbeeney, Samar R. Soliman, Ali A. AlHammadi, Jae-Jin Shim, and Mostafa R. Abukhadra. Insight into the cao green decorated clinoptilolite as an effective adsorbent for nitrate and phosphate ions; equilibrium; kinetic, and safety studies. *SURFACES AND INTERFACES*, 27, DEC 2021.
- [IE85] Nagumothu Kishore Babu, Mahesh Kumar Talari, Prakash Srirangam, Abdullah Yahia AlFaify, and Ateekh Ur Rehman. Characterization of microstructure, weld heat input, and mechanical properties of mg-al-zn alloy gta weldments. *APPLIED SCIENCES-BASEL*, 12(9), MAY 2022.
- [IE86] Wadea Ameen, Abdulrahman Al-Ahmari, Naveed Ahmed, Wasim Alshammary, Sachin Salunkhe, and Hussein M. A. Hussein. Investigation of effect of electron beam melting parameters on overhang structure deformation. *MATERIALS TECHNOLOGY*, 37(10):1586–1593, AUG 24 2022.
- [IE87] Firoz Ahmad, Shafiq Ahmad, Ahmed T. Soliman, and Mali Abdollahian. Solving multi-level multiobjective fractional programming problem with rough interval parameter in neutrosophic environment. *RAIRO-OPERATIONS RESEARCH*, 55(4):2567–2581, AUG 30 2021.
- [IE88] Islam R. Sayed, Amna M. Farhan, Ali A. AlHammadi, Mohamed El-Sayed, I, Ibrahim M. Abd El-Gaied, Ahmed M. El-Sherbeeney, Wail Al Zoubi, Young Gun Ko, and Mostafa R. Abukhadra. Synthesis of novel nanoporous zinc phosphate/hydroxyapatite nano-rods (zph/hpanrs) core/shell for enhanced adsorption of ni²⁺ and co²⁺ ions: Characterization and application. *JOURNAL OF MOLECULAR LIQUIDS*, 360, AUG 15 2022.
- [IE89] Ahmed M. El-Sherbeeney, Sherouk M. Ibrahim, Ali A. AlHammadi, Ahmed Tawhid Ahmed Soliman, Jae-Jin Shim, and Mostafa R. Abukhadra. Effective retention of radioactive cs⁺ and ba²⁺ ions using β -cyclodextrin functionalized diatomite (β -cd/d) as environmental adsorbent; characterization, application, and safety. *SURFACES AND INTERFACES*, 26, OCT 2021.
- [IE90] Azeem Shahzad, Bushra Habib, Muhammad Nadeem, Muhammad Kamran, Hijaz Ahma, Muhammad Atif, and Shafiq Ahmad. Numerical analysis of flow and heat

transfer in a thin film along an unsteady stretching cylinder. *THERMAL SCIENCE*, 25(SI):S441–S448, 2021.

- [IE91] Faisal Hafeez, Naveed Ahmed, Muhammad Asad Ali, Muhammad Umar Farooq, Abdullah Yahia AlFaify, and Ateekh Ur Rehman. A comprehensive efficiency evaluation of conventional and ablation sand casting on the example of the als7mg alloy impeller. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 121(5-6):3653–3672, JUL 2022.
- [IE92] Sherouk M. Ibrahim, Ahmed M. El-Sherbeeney, Jae-Jin Shim, Ali A. AlHammadi, and Mostafa R. Abukhadra. -so3h-functionalization of sub-bituminous coal as a highly active acidic catalyst during the transesterification of spent sunflower oil; characterization, application, and mechanism. *ENERGY REPORTS*, 7:8699–8710, NOV 2021.
- [IE93] Xiaoxun Yang, Jichao Wang, Ahmed M. El-Sherbeeney, Ali A. AlHammadi, Woo-Hyung Park, and Mostafa R. Abukhadra. Insight into the adsorption and oxidation activity of a zno/piezoelectric quartz core-shell for enhanced decontamination of ibuprofen: Steric, energetic, and oxidation studies. *CHEMICAL ENGINEERING JOURNAL*, 431(3), MAR 1 2022.
- [IE94] Md Reyaz Hussan, Mohammad Irfan Sarwar, Adil Sarwar, Mohd Tariq, Shafiq Ahmad, Adamali Shah Noor Mohamed, Irfan A. Khan, and Mohammad Muktafi Ali Khan. Aquila optimization based harmonic elimination in a modified h-bridge inverter. *SUSTAINABILITY*, 14(2), JAN 2022.
- [IE95] Seongsoo Cho, Bhanu Shrestha, Bashir Salah, Inam Ullah, and Nermin M. Salem. A proposed waiting time algorithm for a prediction and prevention system of traffic accidents using smart sensors. *ELECTRONICS*, 11(11), JUN 2022.
- [IE96] Najam-ur Rehman, Muhammad Sultan Zia, Talha Meraj, Hafiz Tayyab Rauf, Robertas Damasevicius, Ahmed M. El-Sherbeeney, and Mohammed A. El-Meligy. A self-activated cnn approach for multi-class chest-related covid-19 detection. *APPLIED SCIENCES-BASEL*, 11(19), OCT 2021.
- [IE97] Preeti Verma, Afroz Alam, Adil Sarwar, Mohd Tariq, Hani Vahedi, Deeksha Gupta, Shafiq Ahmad, and Adamali Shah Noor Mohamed. Meta-heuristic optimization techniques used for maximum power point tracking in solar pv system. *ELECTRONICS*, 10(19), OCT 2021.
- [IE98] Shoeb Ahmad Khan, Shafiq Ahmad, Adil Sarwar, Mohd Tariq, Javed Ahmad, Mohammed Asim, Ahmed T. Soliman, and Md Alamgir Hossain. Chaos induced coyote algorithm (cica) for extracting the parameters in a single, double, and three diode model of a mono-crystalline, polycrystalline, and a thin-film solar pv cell. *ELECTRONICS*, 10(17), SEP 2021.
- [IE99] Tanveer Ahmad, Imran Khan, Azeem Irshad, Shafiq Ahmad, Ahmed T. Soliman, Akber Abid Gardezi, Muhammad Shafiq, and Jin-Ghoo Choi. Spark spectrum allocation for d2d communication in cellular networks. *CMC-COMPUTERS MATERIALS & CONTINUA*, 70(3):6381–6394, 2022.

- [IE100] Numrah Sultan, Syed Mujtaba ul Hassan, Ahmat Khurshid, M. Fakhar-e Alam, Faisal Shahzad, Attaullah Shah, Muhammad Atif, Shafiq Ahmad, and Muhammad Tamoor Masood. Pegylated eu-enabled submicron alumina spheres as potential theranostics agent rd cell line as model. *SAUDI JOURNAL OF BIOLOGICAL SCIENCES*, 28(11):6063–6068, NOV 2021.
- [IE101] Adel Al-Shayea, Emad Abouel Nasr, Hisham Al-Mubaid, Abdulrahman Al-Ahmari, Ali K. Kamrani, Husam Kaid, and Haitham A. Mahmoud. A new association analysis-based method for enhancing maintenance and repair in manufacturing. *TRANSACTIONS OF FAMENA*, 45(4):85–104, 2021.
- [IE102] Aqib Mashood Khan, Mohammed Alkahtani, Shubham Sharma, Muhammad Jamil, Asif Iqbal, and Ning He. Sustainability-based holistic assessment and determination of optimal resource consumption for energy-efficient machining of hardened steel. *JOURNAL OF CLEANER PRODUCTION*, 319, OCT 15 2021.
- [IE103] Syed Yawar Abbas Zaidi, Munam Ali Shah, Hasan Ali Khattak, Carsten Maple, Hafiz Tayyab Rauf, Ahmed M. El-Sherbeeney, and Mohammed A. El-Meligy. An attribute-based access control for iot using blockchain and smart contracts. *SUSTAINABILITY*, 13(19), OCT 2021.
- [IE104] Kholi Anwar, Taj Rahman, Asim Zeb, Yousaf Saeed, Muhammad Adnan Khan, Inayat Khan, Shafiq Ahmad, Abdelaty Edrees Abdelgawad, and Mali Abdollahian. Improving the convergence period of adaptive data rate in a long range wide area network for the internet of things devices. *ENERGIES*, 14(18), SEP 2021.
- [IE105] Tariq Munir, Arslan Mahmood, Fahad Shafiq, Muhammad Fakhar-E-Alam, Muhammad Atif, Ali Raza, Shafiq Ahmad, Khurram Saleem Alimgeer, and Nadeem Abbas. Experimental and theoretical analyses of nano-silver for antibacterial activity based on differential crystal growth temperatures. *SAUDI JOURNAL OF BIOLOGICAL SCIENCES*, 28(12):7561–7566, DEC 2021.
- [IE106] M. Kavitha Margret, E. Golden Julie, Y. Harold Robinson, D. Vijayanandh, S. Vimal, Seifidine Kadry, Ahmed M. El-Sherbeeney, and Mohammed A. El-Meligy. Smart-pharma: Blockchain enabled internet of things for smart pharmaceutical traceability system. *IETE JOURNAL OF RESEARCH*, 2021 NOV 23 2021.
- [IE107] Zhenhua Yu, Xiaobo Li, Emad Abouel Nasr, Haitham A. Mahmoud, and Liang Xu. Stability analysis method and application of multi-agent systems from the perspective of hybrid systems. *MEASUREMENT & CONTROL*, 54(9-10):1347–1355, NOV 2021.
- [IE108] Eliezer Zahid Gill, Tahir Abdul Hussain Ratlamwala, Sheharyar Waseem, G. Hussain, Mohammed Alkahtani, and Khurram Altaf. Life cycle assessment and feasibility study of solar based multi-generation system. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 47, OCT 2021.
- [IE109] Mohammad Wasiq, Adil Sarwar, Zeeshan Sarwer, Mohd Tariq, Shafiq Ahmad, Adel M. Al-Shayea, and Jahangir Hossain. Design and validation of a reduced switching components step-up multilevel inverter (rscs-mli). *PROCESSES*, 9(11), NOV 2021.

- [IE110] Muhammad Raza Naqvi, Muhammad Waseem Iqbal, Muhammad Usman Ashraf, Shafiq Ahmad, Ahmed T. Soliman, Shahzada Khurram, Muhammad Shafiq, and Jin-Ghoo Choi. Ontology driven testing strategies for iot applications. *CMC-COMPUTERS MATERIALS & CONTINUA*, 70(3):5855–5869, 2022.
- [IE111] Walaa A. Hassan, Ezzat A. Ahmed, Mohamed A. Moneim, Mohamed S. Shaban, Ahmed M. El-Sherbeeney, Nahid Siddiqui, Jae-Jin Shim, and Mostafa R. Abukhadra. Sulfonation of natural carbonaceous bentonite as a low-cost acidic catalyst for effective transesterification of used sunflower oil into diesel; statistical modeling and kinetic properties. *ACS OMEGA*, 6(46):31260–31271, NOV 23 2021.
- [IE112] Baber Khan, Abdul Jalil, Ahmad Ali, Khaled Alkhaledi, Khizer Mehmood, Khalid Mehmood Cheema, Maria Murad, Hanan Tariq, and Ahmed M. El-Sherbeeney. Multiple cues-based robust visual object tracking method. *ELECTRONICS*, 11(3), FEB 2022.
- [IE113] M. Fakhar-E-Alam, Zahra Shafiq, Arslan Mahmood, M. Atif, Hafeez Anwar, Atif Hanif, Nafeesah Yaqub, W. A. Farooq, Amanullah Fatehmulla, Shafiq Ahmad, Abd Elatty E. Abd Elgawad, K. S. Alimgeer, Tuan Nguyen Gia, and Hijaz Ahmed. Assessment of green and chemically synthesized copper oxide nanoparticles against hepatocellular carcinoma. *JOURNAL OF KING SAUD UNIVERSITY SCIENCE*, 33(8), DEC 2021.
- [IE114] Sheeba Razzaq, Amil Roohani Dar, Munam Ali Shah, Hasan Ali Khattak, Ejaz Ahmed, Ahmed M. El-Sherbeeney, Seongkwan Mark Lee, Khaled Alkhaledi, and Hafiz Tayyab Rauf. Multi-factor rear-end collision avoidance in connected autonomous vehicles. *APPLIED SCIENCES-BASEL*, 12(3), FEB 2022.
- [IE115] Aqib Mashood Khan, Saqib Anwar, Abdullah Alfaify, Muhammad Jamil, Shubham Sharma, Muhammad Umar Farooq, Waqas Khaliq, and Asif Iqbal. Comparison of machinability and economic aspects in turning of haynes-25 alloy under novel hybrid cryogenic-In oils-on-water approach. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 120(1-2):427–445, MAY 2022.
- [IE116] Rashid Ahmed Khan, Shoeb Azam Farooqui, Mohammad Irfan Sarwar, Seerin Ahmad, Mohd Tariq, Adil Sarwar, Mohammad Zaid, Shafiq Ahmad, and Adamali Shah Noor Mohamed. Archimedes optimization algorithm based selective harmonic elimination in a cascaded h-bridge multilevel inverter. *SUSTAINABILITY*, 14(1), JAN 2022.

MECHANICAL ENGINEERING

Publications

- [ME1] Hany S. Abdo, Asiful H. Seikh, Ahmed Fouly, and Faraz H. Hashmi. Controlling atmospheric corrosion of weathering steel using anodic polarization protection technique. *PROCESSES*, 9(8), AUG 2021.
- [ME2] Abdullah Alabdulkarem and Zeyad Almutairi. Experimental investigation of an air-conditioner performance and chemical compositions of differently sourced r410a and r22 refrigerants. *INTERNATIONAL JOURNAL OF THERMOPHYSICS*, 43(9), SEP 2022.
- [ME3] Zakariya Kaneesamkandi and Ateekh Ur Rehman. Optimum and sustainable cooling technology selection for different climatic conditions. *ENERGIES*, 14(19), OCT 2021.
- [ME4] Hamad F. Alharbi, Yassir A. Bahri, and El-Sayed M. Sherif. Influence of zirconium on the corrosion passivation of titanium in simulated body fluid. *CRYSTALS*, 11(11), NOV 2021.
- [ME5] Hany S. Abdo, Asiful H. Seikh, Hamad F. Alharbi, Jabair Ali Mohammed, Mahmoud S. Soliman, Ahmed Fouly, and Sameh A. Ragab. Tribo-behavior and corrosion properties of welded 304l and 316l stainless steel. *COATINGS*, 11(12), DEC 2021.
- [ME6] A. Najib, J. Orfi, H. Alansary, and E. Ali. Application of the buckingham π theorem to model the multiple effect vacuum membrane distillation. *JOURNAL OF THERMAL SCIENCE AND ENGINEERING APPLICATIONS*, 14(3), MAR 1 2022.
- [ME7] Redhwan Almuzaiqer, Mohamed ElSayed Ali, and Khaled Al-Salem. Effect of the aspect ratio and tilt angle on the free convection heat transfer coefficient inside al2o3-water-filled square cuboid enclosures. *NANOMATERIALS*, 12(3), FEB 2022.
- [ME8] Hany S. Abdo, Asiful H. Seikh, Ubair Abdus Samad, Ahmed Fouly, and Jabair Ali Mohammed. Electrochemical corrosion behavior of laser welded 2205 duplex stainless-steel in artificial seawater environment under different acidity and alkalinity conditions. *CRYSTALS*, 11(9), SEP 2021.
- [ME9] Hany S. Abdo, Asiful H. Seikh, Ahmed Fouly, and Sameh A. Ragab. Synergistic strengthening effect of reinforcing spark plasma sintered al-zn-tic nanocomposites with tic nanoparticles. *CRYSTALS*, 11(8), AUG 2021.
- [ME10] Abdullah Alabdulkarem, Mohammad Alhojailan, and Saad Alabdulkarim. Comprehensive investigation of factors influencing university students' academic performance in saudi arabia. *EDUCATION SCIENCES*, 11(8), AUG 2021.
- [ME11] Redhwan Almuzaiqer, Mohamed Elsayed Ali, and Khaled Al-Salem. Tilt angle's effects on free convection heat transfer coefficient inside a water-filled rectangular parallelepiped enclosure. *PROCESSES*, 10(2), FEB 2022.
- [ME12] Zakariya Kaneesamkandi, Abdulaziz Almujaheed, and Basharat Salim. Selection of an appropriate solar thermal technology for solar vapor absorption cooling-an madm approach. *ENERGIES*, 15(5), MAR 2022.

- [ME13] Muhammad Farzik Ijaz, Mahmoud S. Soliman, Ahmed S. Alasmari, Adel T. Abbas, and Faraz Hussain Hashmi. Comparison of mechanical and microstructural properties of as-cast al-cu-mg-ag alloys: Room temperature vs. high temperature. *CRYSTALS*, 11(11), NOV 2021.
- [ME14] Emad Ali, Jamel Orfi, and Abdullah Najib. Effects of forced input on the performance of direct contact membrane distillation. *DESALINATION AND WATER TREATMENT*, 246:68–81, JAN 2022.
- [ME15] M. Ali, R. Almuzaiqer, K. Al-Salem, A. Alabdulkarem, and A. Nuhait. New novel thermal insulation and sound-absorbing materials from discarded facemasks of covid-19 pandemic. *SCIENTIFIC REPORTS*, 11(1), DEC 1 2021.
- [ME16] Ibrahim A. Alnaser, Mohammed Yunus, Rami Alfattani, and Turki Alamro. Evaluation of tribological aspects of al-si 12 alloy and their metal matrix hybrid composites produced by liquid-metal forging method. *JOURNAL OF MATERIALS AND ENGINEERING STRUCTURES*, 8(4):443–457, 2021.
- [ME17] Rami Alfattani, Mohammed Yunus, Turki Alamro, and Ibrahim A. Alnaser. Multiresponse optimization of linkage parameters of a compliant mechanism using hybrid genetic algorithm-based swarm intelligence. *COMPUTATIONAL INTELLIGENCE AND NEUROSCIENCE*, 2021, DEC 24 2021.
- [ME18] M. AbdulRaouf, E. AlBahkali, S. Parvez, A. Alnhdi, M. Souli, and T. AlBahkali. On the investigation of the effect of tower and hub exclusion on the numerical results of a horizontal axis wind turbine. *INTERNATIONAL JOURNAL OF MULTIPHYSICS*, 16(2):147–174, 2022.
- [ME19] Abdullah Najib, Hany Al-Ansary, Jamel Orfi, Emad Ali, and Fahad Awjah Almeahmadi. Performance comparison of cross- and forward-flow configurations for multiple-effect vacuum membrane distillation. *MEMBRANES*, 12(5), MAY 2022.
- [ME20] Turki Alamro, Mohammed Yunus, Rami Alfattani, and Ibrahim A. Alnaser. Effect of part build orientations and sliding wear factors on tribological characteristics of fdm processed parts. *ARCHIVE OF MECHANICAL ENGINEERING*, 68(3):321–336, 2021.
- [ME21] Salah Ud-Din Khan, Irfan Wazeer, Zeyad Almutairi, and Meshari Alanazi. Techno-economic analysis of solar photovoltaic powered electrical energy storage (ees) system. *ALEXANDRIA ENGINEERING JOURNAL*, 61(9):6739–6753, SEP 2022.
- [ME22] Salah Ud-Din Khan, Zeyad Almutairi, and Meshari Alanazi. Techno-economic assessment of fuel cycle facility of system integrated modular advanced reactor (smart). *SUSTAINABILITY*, 13(21), NOV 2021.
- [ME23] Ibrahim A. Alnaser, Mohammed Yunus, Rami Alfattani, and Turki Alamro. High-temperature corrosion of aps- and hvof-coated nickel-based super alloy under air oxidation and melted salt domains. *MATERIALS*, 14(18), SEP 2021.
- [ME24] S. Sivakumar, Nazir Ahmad Mala, Khalid Mujasam Batoo, and Muhammad Farzik Ijaz. Conserved crystal phase and morphology: Electrochemical supremacy of copper (cu) and iron (fe) dual-doped nickel oxide and its supercapacitor applications. *INORGANIC CHEMISTRY COMMUNICATIONS*, 134, DEC 2021.

- [ME25] Mabrook S. Amer, Prabhakarn Arunachalam, Abdulaziz M. Alsalman, Abdullah M. Al-Mayouf, Zeyad A. Almutairi, Saba A. Aladeemy, and Mahmoud Hezam. Facile synthesis of amorphous nickel iron borate grown on carbon paper as stable electrode materials for promoted electrocatalytic urea oxidation. *CATALYSIS TODAY*, 397(SI):197–204, AUG 1 2022.
- [ME26] Emad Ali, Jamel Orfi, Hany AlAnsary, Sofiane Soukane, Harun Elcik, Alla Alpatova, and Noreddine Ghaffour. Cost analysis of multiple effect evaporation and membrane distillation hybrid desalination system. *DESALINATION*, 517, DEC 1 2021.
- [ME27] Philips O. Agboola, Imran Shakir, Zeyad Ammar Almutairi, and Sahar Saad Shar. Hydrothermal synthesis of cu-doped Co_2O_3 as high performance binder free electrode material for supercapacitors applications. *CERAMICS INTERNATIONAL*, 48(6):8509–8516, MAR 15 2022.
- [ME28] Salah Ud-Din Khan, Irfan Wazeer, Zeyad Almutairi, and Shahab Ud-Din Khan. Technical assessment of 10 mw solar thermal plant using nano-fluids and molten salts: a case study of saudi arabia. *APPLIED NANOSCIENCE*, 12(11, SI):3621–3628, NOV 2022.
- [ME29] Saud M. Almotairy, El-Sayed M. Sherif, Nabeel H. Alharthi, Hany S. Abdo, Hamad F. Alharbi, and Monis Luqman. Influence of milling route on the corrosion passivation of al-2%sic nanocomposites in chloride solutions. *CRYSTALS*, 11(10), OCT 2021.
- [ME30] Singh Sonu Kumar, Rakesh Kumar Singh, P. K. Verma, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Aniket Manash. Tuning of structural, elastic, luminescence, magnetic, and multiferroic properties of rare earth Ce^{3+} substituted strontium hexaferrite ceramic magnetic nanomaterials for its industrial applications. *APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING*, 127(10), OCT 2021.
- [ME31] Abdul Majid, Alia Jabeen, Salah Ud-Din Khan, and Zeyad Almutairi. On the prospects of layeredness in tantalum pentoxide. *MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS*, 272, OCT 2021.
- [ME32] Ahmed Fouly, A. Nabhan, and A. H. Badran. Mechanical and tribological characteristics of pmma reinforced by natural materials. *EGYPTIAN JOURNAL OF CHEMISTRY*, 65(4):543–553, APR 2022.
- [ME33] Magdy M. El Rayes, El-Sayed M. Sherif, and Hany S. Abdo. Comparative study into microstructural and mechanical characterization of hvof-wc-based coatings. *CRYSTALS*, 12(7), JUL 2022.
- [ME34] Imran Shakir, Zeyad Almutairi, Sahar Saad Shar, and Ayman Nafady. Fabrication of a flower-like $\text{Cu}(\text{OH})_2$ nanoarchitecture and its composite with cnts for use as a supercapacitor electrode. *CERAMICS INTERNATIONAL*, 48(8):11278–11285, APR 15 2022.
- [ME35] Asiful H. Seikh, Hossam Halfa, and Mahmoud S. Soliman. Evaluation of strength and microstructural properties of heat treated high-molybdenum content maraging steel. *CRYSTALS*, 11(12), DEC 2021.

- [ME36] Hossam Halfa, Asiful H. Seikh, and Mahmoud S. Soliman. Effect of heat treatment on tensile properties and microstructure of co-free, low ni-10 mo-1.2 ti maraging steel. *MATERIALS*, 15(6), MAR 2022.
- [ME37] Imran Shakir, Zeyad Almutairi, Sahar Saad Shar, and Ayman Nafady. Fabrication of feo(oh)/cnts composite based electrode with self-supporting and flexible design for foldable hybrid capacitors. *CERAMICS INTERNATIONAL*, 47(24):34881–34890, DEC 15 2021.
- [ME38] Rami Alfattani, Mudasir Akbar Shah, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Ibrahim A. Alnaser. Bio-char characterization produced from walnut shell biomass through slow pyrolysis: Sustainable for soil amendment and an alternate bio-fuel. *ENERGIES*, 15(1), JAN 2022.
- [ME39] Zeyad A. Haidar, Mamdooh Al-Saud, Jamel Orfi, and Hany Al-Ansary. Reverse osmosis desalination plants energy consumption management and optimization for improving power systems voltage stability with pv generation resources. *ENERGIES*, 14(22), NOV 2021.
- [ME40] Mahmoud Badawy Elsheniti, Mostafa M. Dawood, Ahmed H. Abdelaziz, and Mohamed Elhelw. Thermo-economic study on the use of desiccant-packed aluminum-foam heat exchangers in a new air-handling unit for high moisture-removal. *CASE STUDIES IN THERMAL ENGINEERING*, 33, MAY 2022.
- [ME41] Imran Shakir, Zeyad Almutairi, and Sahar Saad Shar. Hydrothermally prepared binary metal hydroxide electrode with a rational design and an innovative structure for electrochemical capacitors. *CERAMICS INTERNATIONAL*, 48(4):4424–4432, FEB 15 2022.
- [ME42] Philips O. Agboola, Imran Shakir, Zeyad Ammar Almutairi, Sahar Saad Shar, and Mohamed F. Aly Aboud. Carbon nanotubes fabricated mn+2 doped cos2 composite-decorated on nickel foam as hybrid electrode material for supercapacitor applications. *PHYSICA B-CONDENSED MATTER*, 644, NOV 1 2022.
- [ME43] Bel Abbes Bachir Bouiadjra, S. M. A. K. Mohammed, Faycal Benyahia, and Abdulmohsen Albedah. Fatigue behavior of al 7075-t6 plates repaired with composite patch under the effect of overload. *METALS*, 11(12), DEC 2021.
- [ME44] Adel T. Abbas, Essam A. Al Bahkali, Saeed M. Alqahtani, Elshaimaa Abdelnasser, Noha Naeim, and Ahmed Elkaseer. Fundamental investigation into tool wear and surface quality in high-speed machining of ti6al4v alloy. *MATERIALS*, 14(23), DEC 2021.
- [ME45] Kaleem Ahmad, Zeyad Almutairi, Redhwan Almuzaiqer, Abdulaziz AlHazaa, and Chunlei Wan. Processing and thermal properties of srtio3/ti3alc2 ceramic nanocomposites. *CERAMICS INTERNATIONAL*, 48(13):18739–18744, JUL 1 2022.
- [ME46] Ahmed Fouly, Hany S. Abdo, Asiful H. Seikh, Khalid Alluhydan, Hend I. Alkhamash, Ibrahim A. Alnaser, and Mohamed S. Abdo. Evaluation of mechanical and tribological properties of corn cob-reinforced epoxy-based composites-theoretical and experimental study. *POLYMERS*, 13(24), DEC 2021.

- [ME47] Abdelrahman El-Leathy, Hany Al-Ansary, Syed Noman Danish, Anas Alsuhaibani, and Abdulelah Alswaiyd. An investigation of the optimum solar flux distribution on a large-scale particle heating receiver. *FRONTIERS IN ENERGY RESEARCH*, 10, FEB 18 2022.
- [ME48] Mahmoud Badawy Elsheniti, Mohamed Shaaban Eissa, Hany Al-Ansary, Jamel Orfi, Osama Elsamni, and Abdelrahman El-Leathy. Examination of using aluminum-foam/finned-tube beds packed with maxsorb iii for adsorption ice production system. *ENERGIES*, 15(8), APR 2022.
- [ME49] Imran Shakir, Zeyad Almutairi, and Sahar Saad Shar. Fabrication of nanostructured iron-cobalt layered double hydroxide: An innovative approach for the facile synthesis. *JOURNAL OF SAUDI CHEMICAL SOCIETY*, 26(4), JUL 2022.
- [ME50] A. H. Badran, Turki Alamro, Rabeea W. Bazuhair, Ahmed Ali Gad El-Mawla, S. Z. El-Adben, and Ahmed Fouly. Investigation of the mechanical behavior of synthesized al6061/tio₂ microcomposites using an innovative stir casting method. *NANO-MATERIALS*, 12(10), MAY 2022.
- [ME51] Mohamed Shaaban, Mahmoud Badawy Elsheniti, Ahmed Rezk, Mohamed A. Elhelw, and Osama A. Elsamni. Performance investigation of adsorption cooling and desalination systems employing thermally enhanced copper foamed bed coated with sapo-34 and cpo-27(ni). *APPLIED THERMAL ENGINEERING*, 205, MAR 25 2022.
- [ME52] Rahul Kalia, Ankush Chauhan, Ritesh Verma, Mansi Sharma, Khalid Mujasam Batoo, Rajesh Kumar, Sajjad Hussain, Suresh Ghotekar, and Muhammad Farzik Ijaz. Photocatalytic degradation properties of li-cr ions substituted cofe₂o₄ nanoparticles for wastewater treatment application. *PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE*, 219(8), APR 2022.
- [ME53] Mahmoud Badawy Elsheniti, Mohamed Shaaban Eissa, Hany Al-Ansary, Jamel Orfi, Abdelrahman El-Leathy, and Osama Elsamni. Using a combination of activated carbon and graphene nanoparticles in a consolidated form for adsorption ice maker: A system-level modeling. *APPLIED SCIENCES-BASEL*, 12(15), AUG 2022.
- [ME54] Shahid Parvez, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Dan Dobrota. Modeling of melt flow and heat transfer in stationary gas tungsten arc welding with vertical and tilted torches. *MATERIALS*, 14(22), NOV 2021.
- [ME55] Sahil Kashyap, Zeyad Almutairi, Ning Qin, Pei Zhao, Sanjeev Bedi, David Johnson, and Carolyn L. Ren. Effects of surfactant size and concentration on the internal flow fields of moving slug and disk-like droplets via μ -piv. *CHEMICAL ENGINEERING SCIENCE*, 255, JUN 29 2022.
- [ME56] Shaker Alaqel, Nader S. Saleh, Rageh Saeed, Eldwin Djajadiwinata, Muhammad Sarfraz, Abdulelah Alswaiyd, Hany Al-Ansary, Obida Zeitoun, Syed Danish, Zeyad Al-Suhaibani, Abdelrahman El-Leathy, Sheldon Jeter, and Ahmad Khayyat. Particle-to-fluid direct-contact counter-flow heat exchanger: Simple-models validation and integration with a particle-based central tower system. *CASE STUDIES IN THERMAL ENGINEERING*, 33, MAY 2022.

- [ME57] Himanshu Singh, Tabish Alam, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Dheeraj Sagar. Experimental investigation of heat transfer augmentation due to obstacles mounted in solar air heater duct. *EXPERIMENTAL HEAT TRANSFER*, 2022 AUG 14 2022.
- [ME58] Chiebuka T. Christopher, Ahmed M. R. Fath Elbab, Christian O. Osueke, Bernard W. Ikua, Daniel N. Sila, and Ahmed Fouly. A piezoresistive dual-tip stiffness tactile sensor for mango ripeness assessment. *COGENT ENGINEERING*, 9(1), DEC 31 2022.
- [ME59] Ibrahim Albaik, Mahmoud Badawy Elsheniti, Raya Al-Dadah, Saad Mahmoud, and Ismail Solmaz. Numerical and experimental investigation of multiple heat exchanger modules in cooling and desalination adsorption system using metal organic framework. *ENERGY CONVERSION AND MANAGEMENT*, 251, JAN 1 2022.
- [ME60] Shaker Alaqel, Nader S. Saleh, Rageh S. Saeed, Eldwin Djajadiwinata, Abdulelah Alswaiyd, Muhammad Sarfraz, Hany Al-Ansary, Abdelrahman El-Leathy, Zeyad Al-Suhaibani, Syed Danish, Sheldon Jeter, and Zeyad Almutairi. An experimental demonstration of the effective application of thermal energy storage in a particle-based csp system. *SUSTAINABILITY*, 14(9), MAY 2022.
- [ME61] Rageh S. Saeed, Abdulelah Alswaiyd, Nader S. Saleh, Shaker Alaqel, Eldwin Djajadiwinata, Abdelrahman El-Leathy, Syed Noman Danish, Hany Al-Ansary, Sheldon Jeter, Zeyad Al-Suhaibani, and Zeyad Almutairi. Characterization of low-cost particulates used as energy storage and heat-transfer medium in concentrated solar power systems. *MATERIALS*, 15(8), APR 2022.
- [ME62] Nader S. Saleh, Shaker Alaqel, Eldwin Djajadiwinata, Rageh S. Saeed, Zeyad Al-Suhaibani, Obida Zeitoun, Hany Al-Ansary, Abdulelah Alswaiyd, Abdelrahman El-Leathy, Syed Danish, Sheldon Jeter, Ashley Byman, Neville Jordison, and David Moon. Experimental investigation of a moving packed-bed heat exchanger suitable for concentrating solar power applications. *APPLIED SCIENCES-BASEL*, 12(8), APR 2022.
- [ME63] Adel T. Abbas, Abdulhamid A. Al-Abduljabbar, Ibrahim A. Alnaser, Mohamed F. Aly, Islam H. Abdelgalielel, and Ahmed Elkaseer. A closer look at precision hard turning of aisi4340: Multi-objective optimization for simultaneous low surface roughness and high productivity. *MATERIALS*, 15(6), MAR 2022.
- [ME64] Zhendong Mao, Zhiwen Wang, Taifeng Shi, Peng-an Zong, Jia Liang, Zhenguo Liu, Peng Zhang, Yujia Huang, Yi Han, Kaleem Ahmad, Zeyad Almutairi, and Chunlei Wan. Sandwiched graphene/bi2te3/graphene thermoelectric film with exceptional figure of merit for flexibility. *ADVANCED MATERIALS INTERFACES*, 9(17), JUN 2022.
- [ME65] Aditya Vatsa, Tabish Alam, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Dan Dobrota. Performance of microchannel heat sink made of silicon material with the two-sided wedge. *MATERIALS*, 15(14), JUL 2022.
- [ME66] Karmveer, Naveen Kumar Gupta, Md Irfanul Haque Siddiqui, Dan Dobrota, Tabish Alam, Masood Ashraf Ali, and Jamel Orfi. The effect of roughness in absorbing materials on solar air heater performance. *MATERIALS*, 15(9), MAY 2022.

- [ME67] Tabish Alam, Md Irfanul Haque Siddiqui, Hassan Alshehri, Masood Ashraf Ali, Paolo Blecich, and Kushagra Saurabh. Exergy-based thermo-hydraulic performance of roughened absorber in solar air heater duct. *APPLIED SCIENCES-BASEL*, 12(3), FEB 2022.
- [ME68] Ibrahim Albaik, Yassir A. Alamri, Mahmoud B. Elsheniti, Raya Al-Dadah, Saad Mahmoud, and Mohamed A. Ismail. Assessment of a novel multi-generation solar cpv/t system combining adsorption and organic rankine cycle subsystems. *SOLAR ENERGY*, 236:455–472, APR 1 2022.
- [ME69] Kiran Shahapurkar, Venkatesh Chenrayan, Manzoore Elahi M. Soudagar, Irfan Anjum Badruddin, Pavan Shahapurkar, Ashraf Elfakhany, M. A. Mujtaba, Md Irfanul Haque Siddiqui, Masood Ashraf Ali, and Teuku Meurah Indra Mahlia. Leverage of environmental pollutant crump rubber on the dry sliding wear response of epoxy composites. *POLYMERS*, 13(17), SEP 2021.
- [ME70] Jayachandra S. Yaradoddi, Nagaraj R. Banapurmath, Sharanabasava V. Ganachari, Manzoore Elahi M. Soudagar, Ashok M. Sajjan, Shrinidhi Kamat, M. A. Mujtaba, Ashok S. Shettar, Ali E. Anqi, Mohammad Reza Safaei, Ashraf Elfakhany, Md Irfanul Haque Siddiqui, and Masood Ashraf Ali. Bio-based material from fruit waste of orange peel for industrial applications. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 17:3186–3197, MAR-APR 2022.
- [ME71] Keerthi N. Kumar, N. R. Banapurmath, T. K. Chandrashekar, G. S. Jatadhara, Manzoore Elahi M. Soudagar, Ali E. Anqi, M. A. Mujtaba, Marjan Goodarzi, Ashraf Elfakhany, Md Irfanul Haque Siddiqui, and Masood Ashraf Ali. Effect of parameters behavior of simarouba methyl ester operated diesel engine. *ENERGIES*, 14(16), AUG 2021.
- [ME72] Syed Noeman Taqui, C. S. Mohan, Mohammad Shahab Goodarzi, Mohamed Abdelghany Elkotb, Bibi Ahmadi Khatoon, Manzoore Elahi M. Soudagar, Isa Baba Koki, Ashraf Elfakhany, Amany Salah Khalifa, Masood Ashraf Ali, Zaphar Saifullah, Md Irfanul Haque Siddiqui, Mohammad Reza Safaei, and C. Ahamed Saleel. Sustainable adsorption method for the remediation of crystal violet dye using nutraceutical industrial fenugreek seed spent. *APPLIED SCIENCES-BASEL*, 11(16), AUG 2021.
- [ME73] Shareefraza J. Ukkund, Prasad Puthiyillam, Ali E. Anqi, Syed Noeman Taqui, Masood Ashraf Ali, Usman Taqui Syed, Mohammed N. Alghamdi, Md Irfanul Haque Siddiqui, Hashim M. Alshehri, Mohammad Reza Safaei, Rayees Afzal Mir, Ashraf Elfakhany, Emad M. Eed, Marjan Goodarzi, and Manzoore Elahi M. Soudagar. A recent study on remediation of direct blue 15 dye using halloysite nanotubes. *APPLIED SCIENCES-BASEL*, 11(17), SEP 2021.
- [ME74] Shareefraza J. Ukkund, Prasad Puthiyillam, Hashim M. Alshehri, Marjan Goodarzi, Syed Noeman Taqui, Ali E. Anqi, Mohammad Reza Safaei, Masood Ashraf Ali, Usman Taqui Syed, Rayees Afzal Mir, Ashraf Elfakhany, Emad M. Eed, Md Irfanul Haque Siddiqui, Imran Mokashi, and Manzoore Elahi M. Soudagar. Adsorption method for the remediation of brilliant green dye using halloysite nanotube: Isotherm, kinetic and modeling studies. *APPLIED SCIENCES-BASEL*, 11(17), SEP 2021.

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Publications

- [PE1] Mohammed Hail Hakimi, Shadi A. Saeed, Ameen A. Al-Muntaser, Mikhail A. Varfolomeev, Richard Djimasbe, Aref Lashin, Nura Abdulmumini Yelwa, and Muneer A. Suwaid. The origins of paraffinic oils collected from oilfields in the western siberian basin, russia: implications from geochemical and physical characteristics. *JOURNAL OF PETROLEUM EXPLORATION AND PRODUCTION TECHNOLOGY*, 12(1):35–49, JAN 2022.
- [PE2] Adeeb Ahmed, Samina Jahandad, Mohammed Hail Hakimi, Abbas F. Gharib, Saqib Mehmood, Ali Y. Kahal, Muhammad Asif Khan, Muhammad Nofal Munir, and Aref Lashin. Organic matter characteristics and conventional oil potentials of shales from the early jurassic datta formation in the upper indus basin, northern pakistan. *JOURNAL OF ASIAN EARTH SCIENCES*, 224, FEB 2022.
- [PE3] Faisal K. Zaidi, Aref Lashin, Essam Aboud, Nassir Al Arifi, Abdulaziz Al-Bassam, Emad Al-Homadhi, and Mohamed Abu Anbar. Silica geothermometry and multi indices approach to characterize groundwater from midyan region in northwestern saudi arabia. *JOURNAL OF AFRICAN EARTH SCIENCES*, 192, AUG 2022.
- [PE4] Mona G. Safa, Bassem S. Nabawy, Ahmed M. K. Basal, Mohammad A. Omran, and Aref Lashin. Implementation of a petrographical and petrophysical workflow protocol for studying the impact of heterogeneity on the rock typing and reservoir quality of reefal limestone: A case study on the nullipore carbonates in the gulf of suez. *ACTA GEOLOGICA SINICA-ENGLISH EDITION*, 95(5):1746–1762, OCT 2021.
- [PE5] Elkhedr Ibrahim, Mohamed Arfaoui, Saad Mogren, Saleh Qaysi, Aref Lashin, and Hussain Alfaifi. Disposition of magmatic eruptions and fault distribution in northwestern saudi arabia using pseudo-depth slice magnetic anomaly. *JOURNAL OF GEOPHYSICS AND ENGINEERING*, 18(4):463–481, AUG 2021.
- [PE6] Mohammed Hail Hakimi, Abbas F. Gharib, Mohammad Alqudah, Adeeb Ahmed, Baleid Ali Hatem, Khairul Azlan Mustapha, Nor Syazwani Zainal Abidin, Aref Lashin, Nura Abdulmumini Yelwa, and Abdullah M. Alqubalee. Geochemistry and organofacies characteristics of organic-rich chalky marl deposits, northern jordan: Insights into type ii-s source rock. *JOURNAL OF ASIAN EARTH SCIENCES*, 225, MAR 2022.

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