



# SCIENTIFIC PUBLICATION REPORT 2023

Scientific Publication Report 2023  
College of Engineering  
King Saud University

## MESSAGE

Quality research is a priority for our college of engineering and the university. It is encouraging to find a considerable improvement in the publication of research papers by our faculty members in peer-reviewed journals of high repute listed in the Web of Science. I am very optimistic that it will further accelerate in the days to come. 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 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.

published a total of 664 papers in peer-reviewed journals of high repute during the academic year of 1444 Hijri (2022-2023). On average, 30% of the papers were published in journals ranked in the highest quartile (Q1) based on the web-of-science classification, and 55% were in the subsequent quartile (Q2). This high percentage of publications in the best quartiles 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's staff and faculty on these accomplishments and hope that there will be many more achievements in the coming years in research and innovation that are relevant to the needs of industry and society.

**Dr. Majid Altamimi**

Dean, College of Engineering

## CONTENTS

Message	2
Introduction	4
Summary of Publications	5
College of Engineering	6
Department of Chemical Engineering	8
Department of Civil Engineering	10
Department of Electrical Engineering	12
Department of Industrial Engineering	14
Department of Mechanical Engineering	16
Department of Petroleum and gas Engineering	18
Team and Contact Information	20
Appendix A: Department Wise List of Published Papers	21

## INTRODUCTION

This report covers all the research articles published by the College of Engineering faculty and staff in the journals that are indexed in the web-of-science (WoS) database within an indexing period starting from the 1st of September 2022 till the 31st of August 2023, covering the academic year 1444 Hijri.

After browsing the details of articles and the journals where they were published within the stated timeframe, the journal quartile and the topic classification were recorded for each publication. For the College of Engineering as well as each department individually, two 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) Classification of Published Papers by WoS Meso-Topic

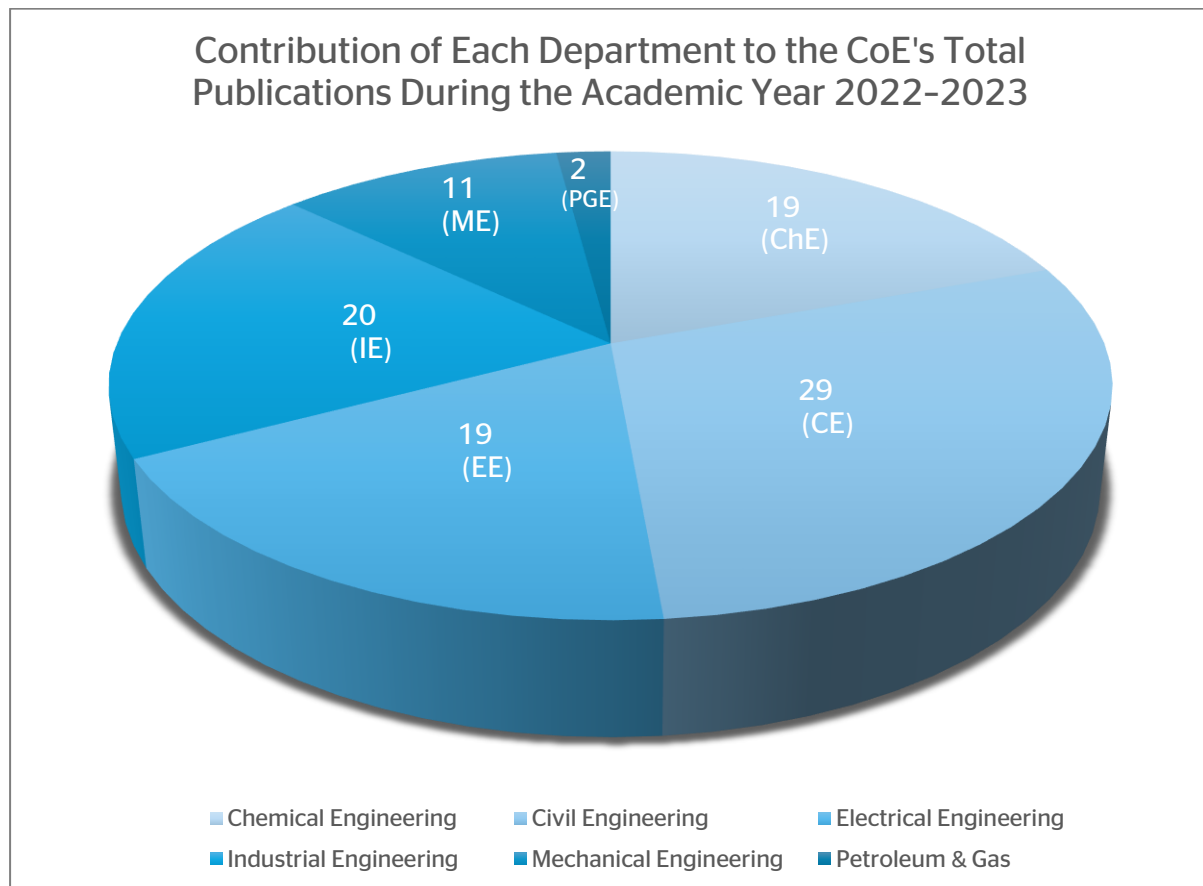
WoS citation topics are algorithmically derived citation clusters. Within WoS, these clusters are organized into three levels of hierarchy. This analysis focuses on the mid-level hierarchy known as the meso-topic classification. By applying this classification to the published papers of each department, 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 in Appendix A of this document.

A Summary of Research Articles Published in the Academic Year 2022-2023 by different departments in the College of Engineering

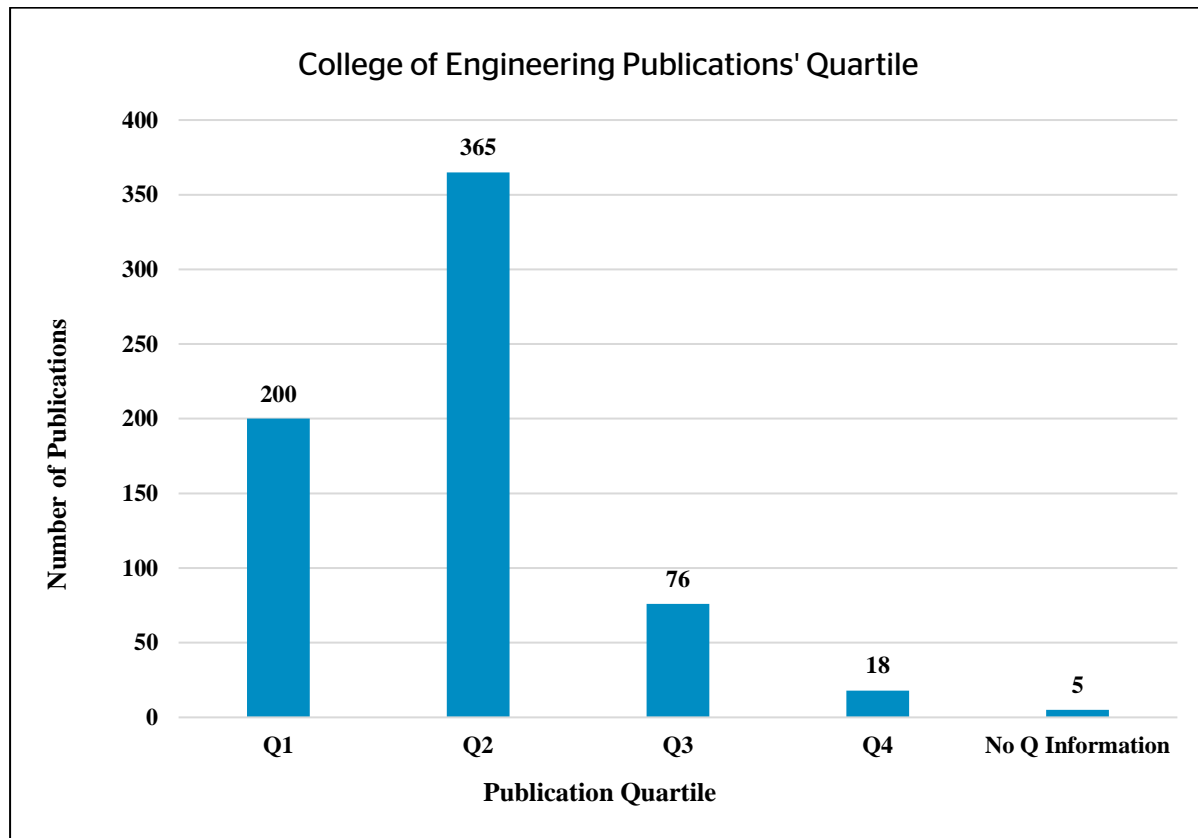
Department	Number of Publications
Chemical Engineering	131
Civil Engineering	197
Electrical Engineering	126
Industrial Engineering	134
Mechanical Engineering	73
Petroleum & Natrual Gas Engineering	14

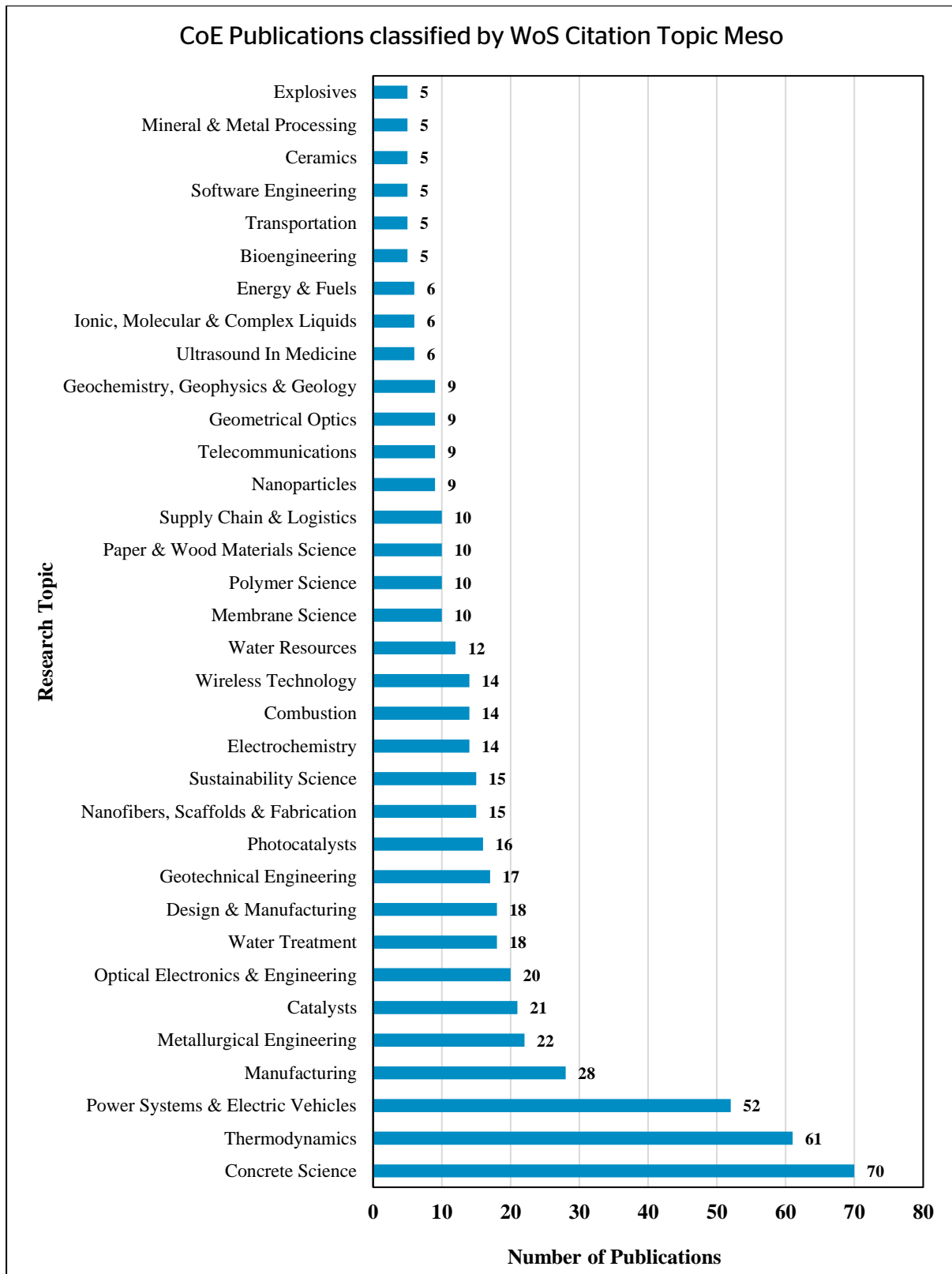
**Note:** Eleven of the publications in this table were published as collaborative works among the college's different departments; as a result, they have been included in the list of two departments based on the affiliations of the collaborating authors.



## COLLEGE OF ENGINEERING

The College of Engineering has published a total of 664 journal articles. Approximately 30% of those articles were published in Q1-ranked journals, while 55% were published in Q2-ranked journals. The top three research topic focus areas were: Concrete Science, Thermodynamics and Power Systems and Electric Vehicles.

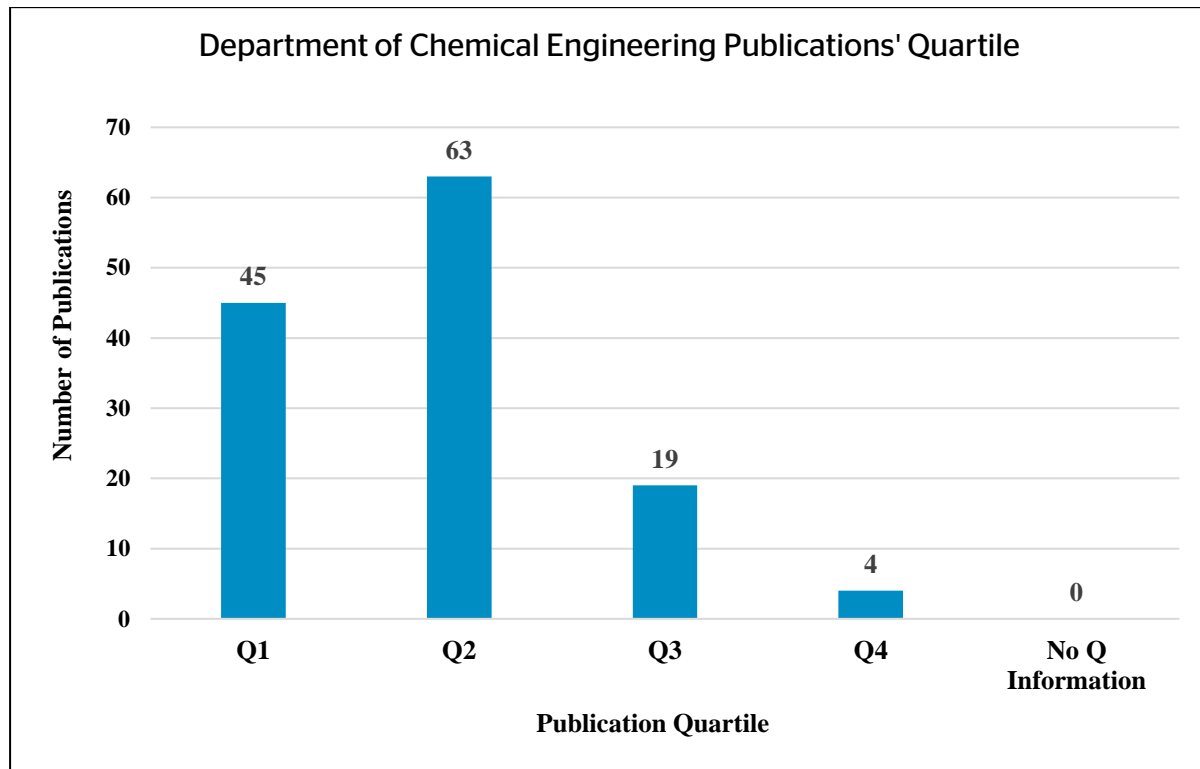




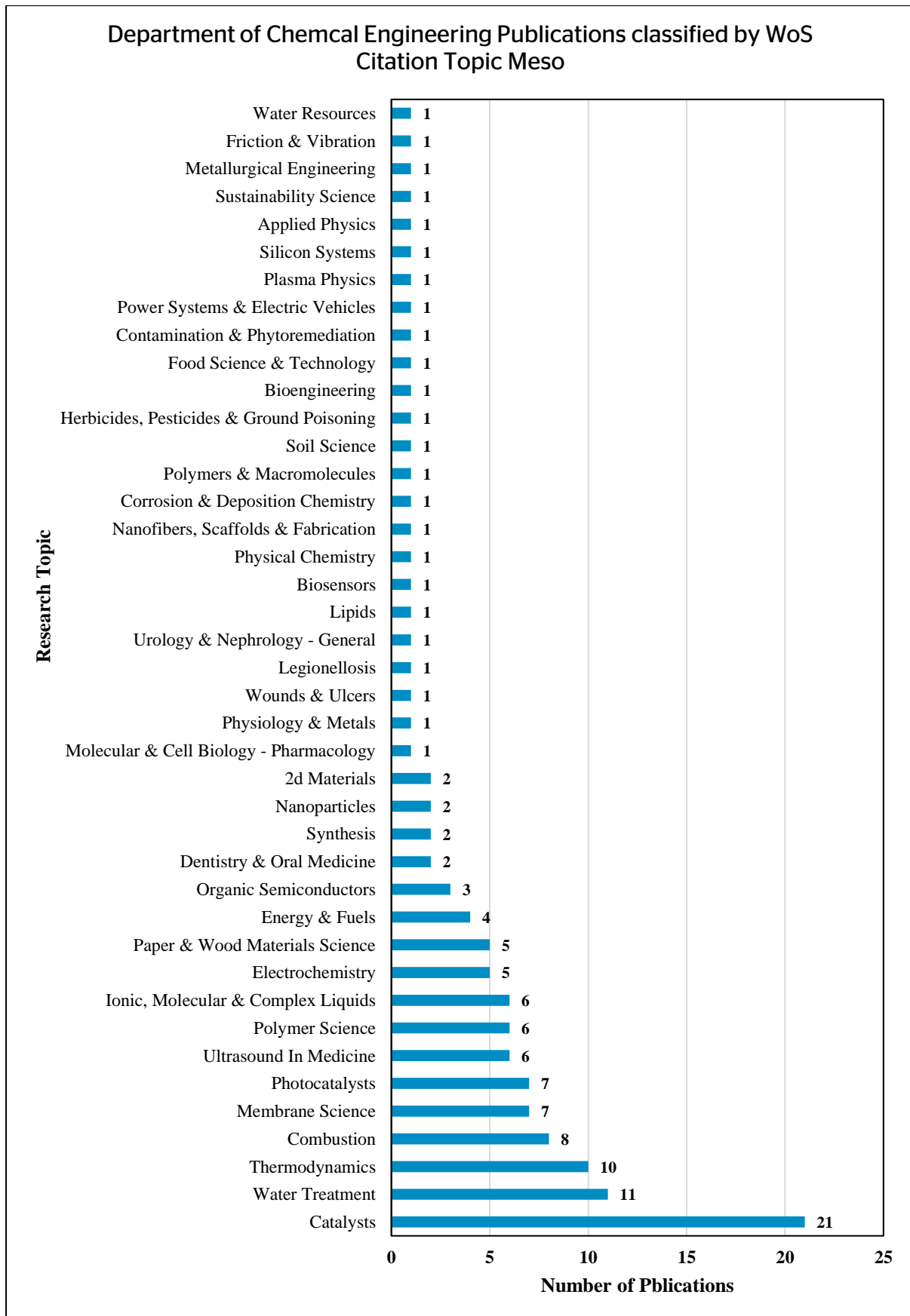
**Note:** Other than those on this list of research topics here, there are another 66 topics where 113 more research articles were published, bringing the total number of publications by CoE to 664.

## DEPARTMENT OF CHEMICAL ENGINEERING

The Department of Chemical Engineering has published a total of 131 journal articles. Approximately 34.3% of those articles were published in Q1-ranked journals, while 48% were published in Q2-ranked journals. The top three research focus areas were Catalysts, Water Treatment, and Thermodynamics.

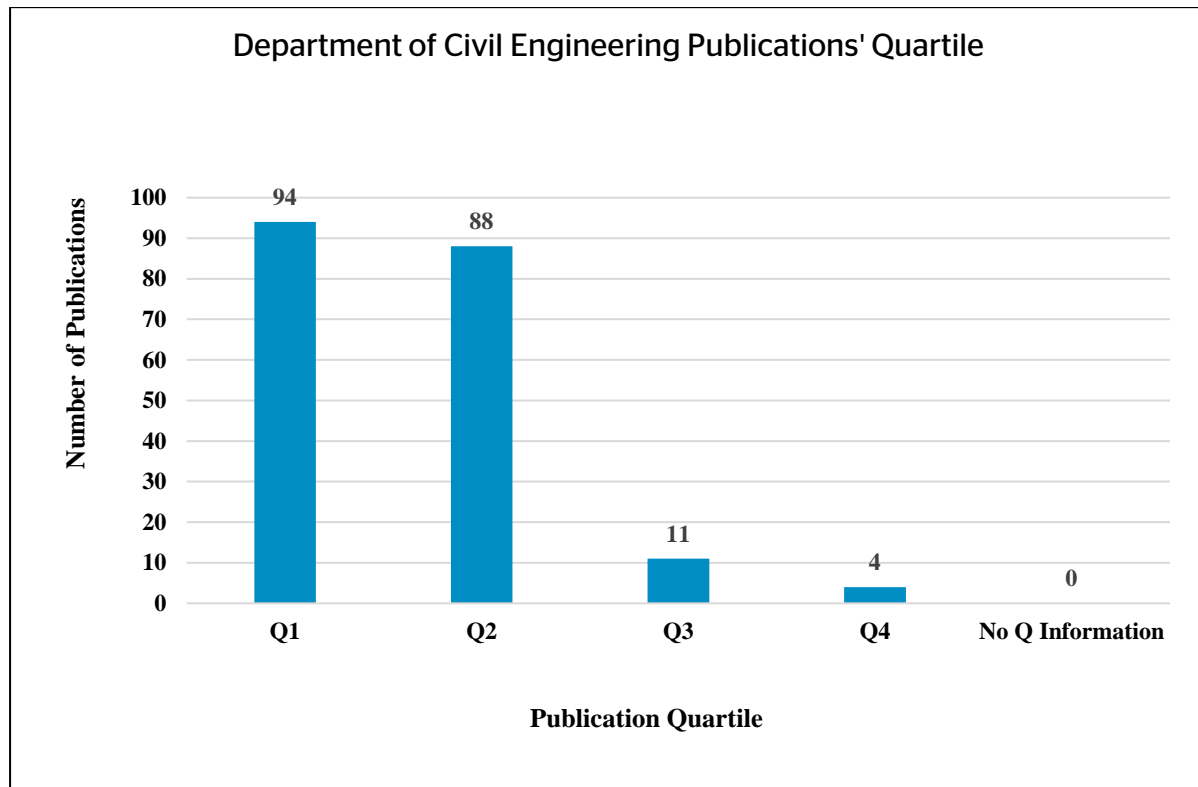


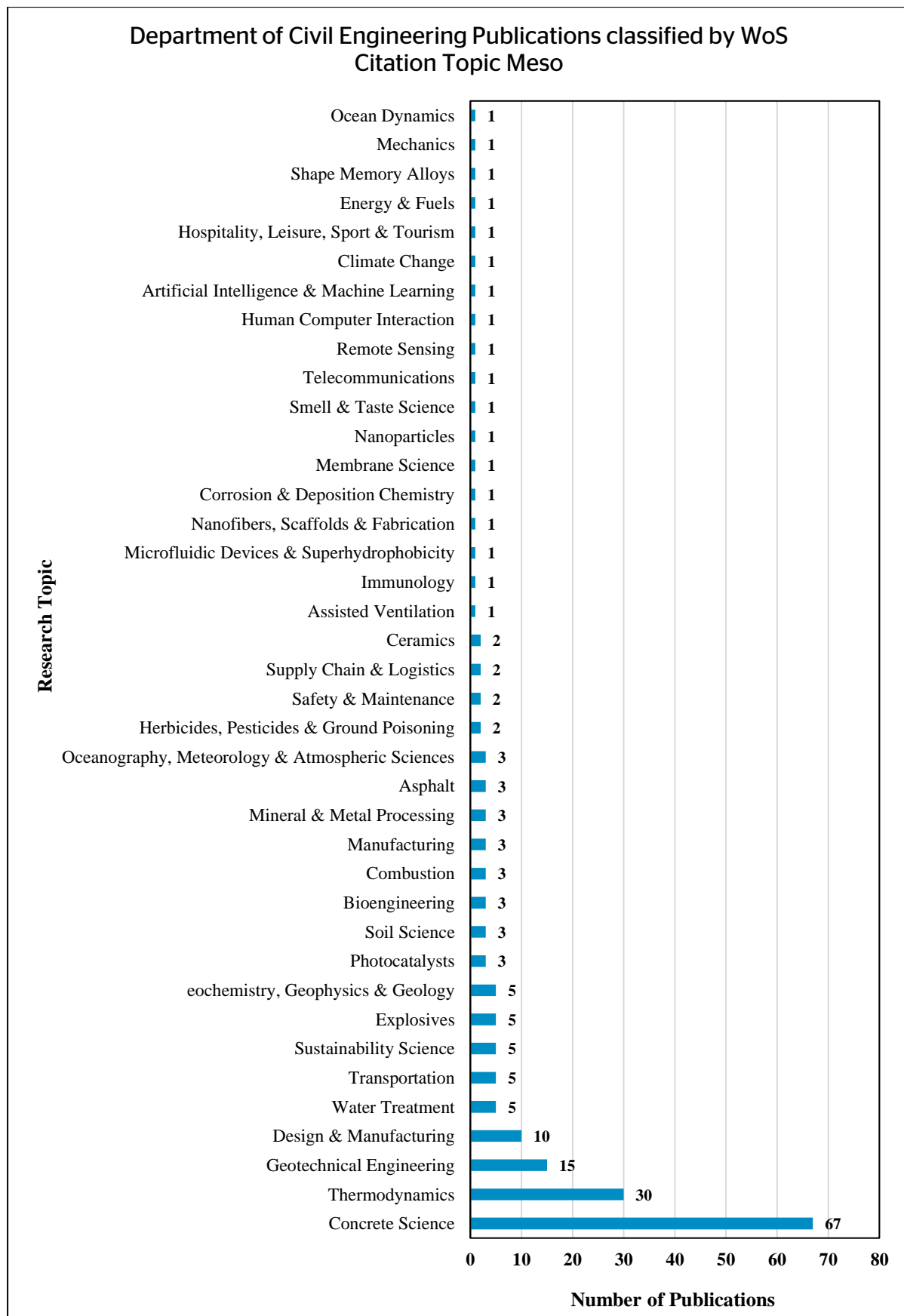




## DEPARTMENT OF CIVIL ENGINEERING

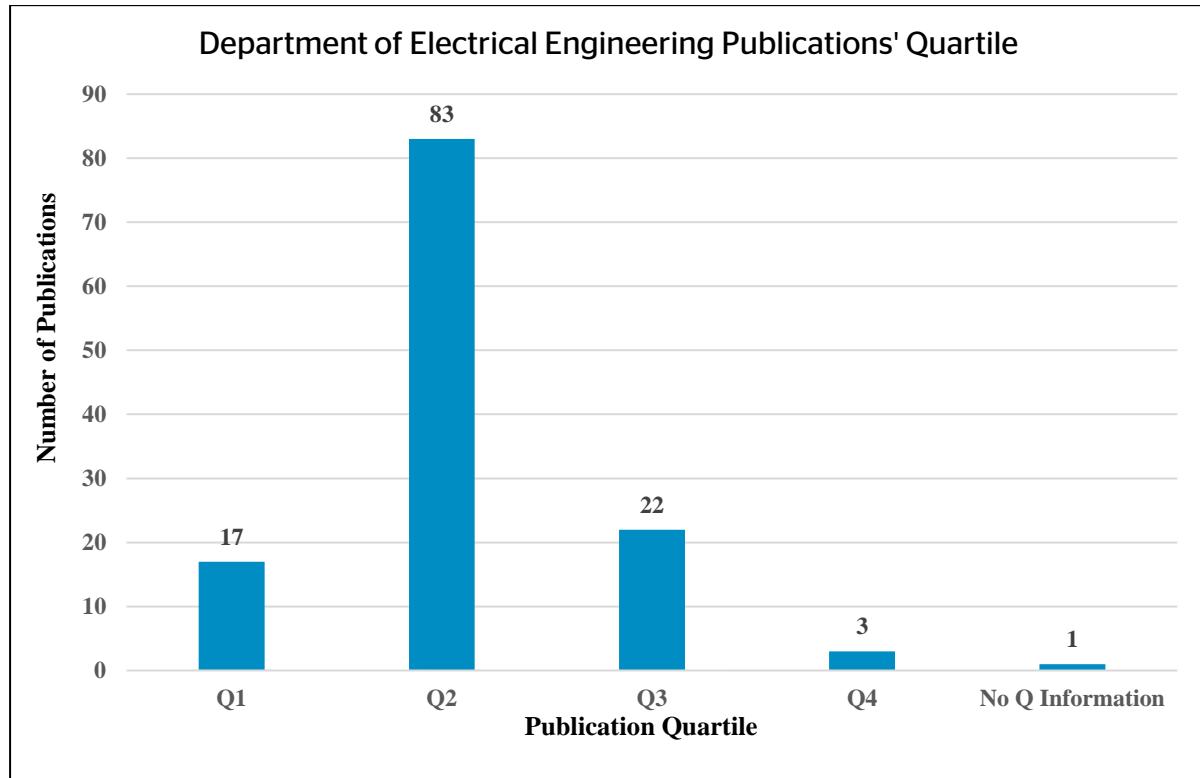
The Department of Civil Engineering has published a total of 197 journal articles. Approximately 47.7% of those articles were published in Q1-ranked journals, while 44.7% were published in Q2-ranked journals. The top research focus areas were Concrete Science, Thermodynamics and Geotechnical Engineering.

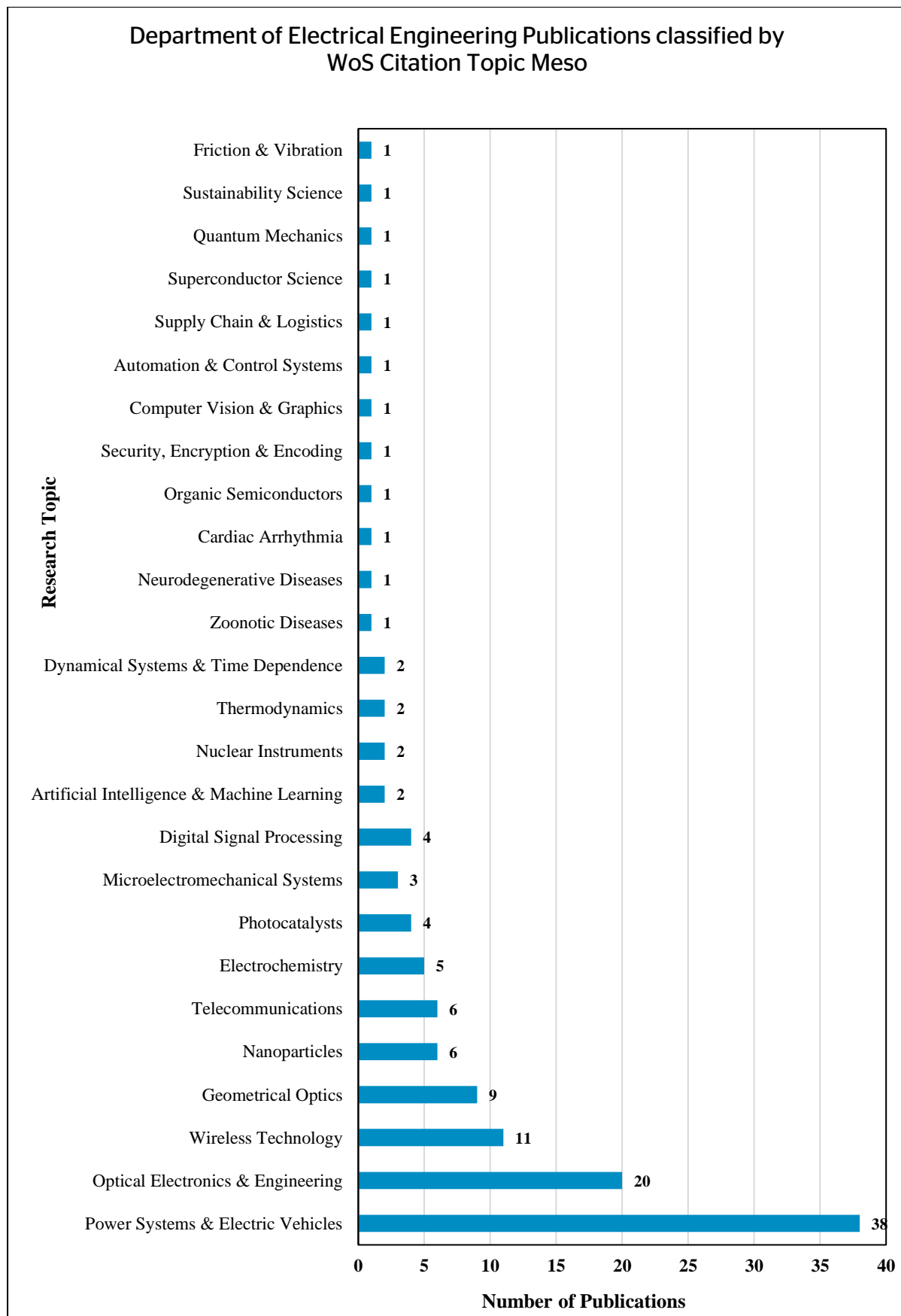




## DEPARTMENT OF ELECTRICAL ENGINEERING

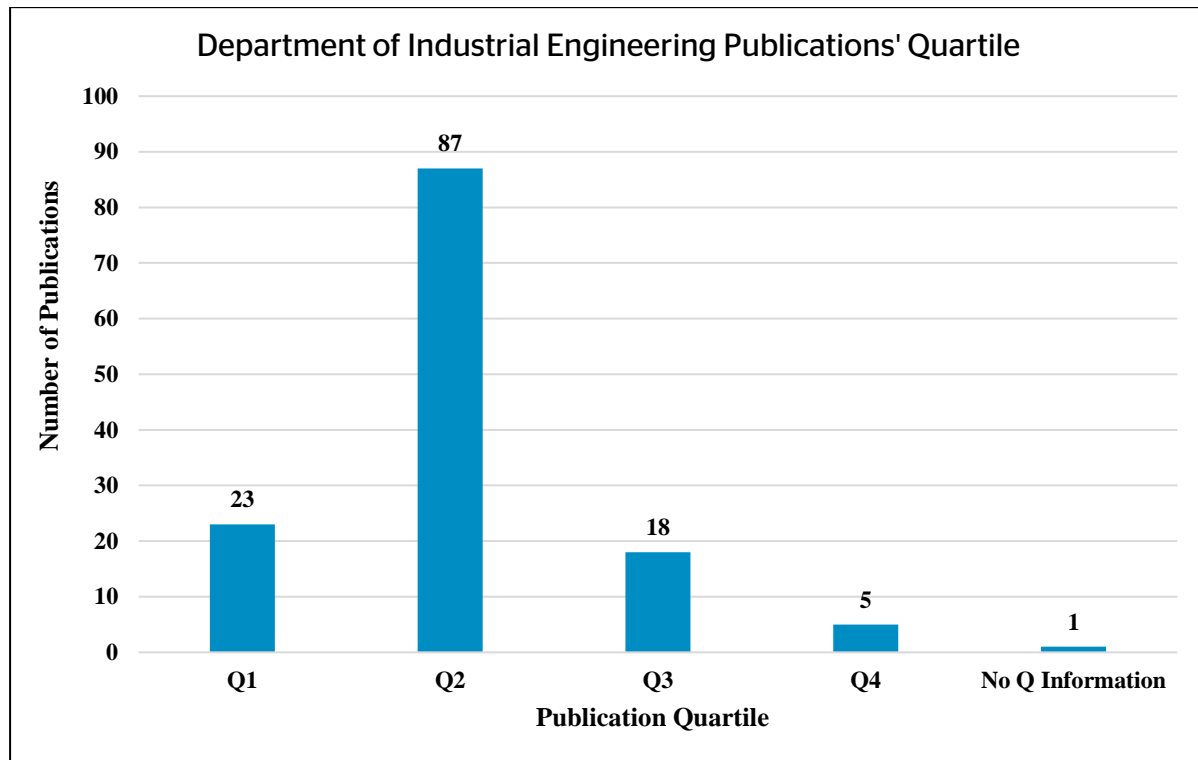
The Department of Electrical Engineering has published a total of 126 journal articles. Approximately 13.5% of those articles were published in Q1-ranked journals, while 65.9% were published in Q2-ranked journals. The top three research focus areas were: Power Systems and Electric Vehicles, Optical Electronics and Engineering and Wireless Technology.

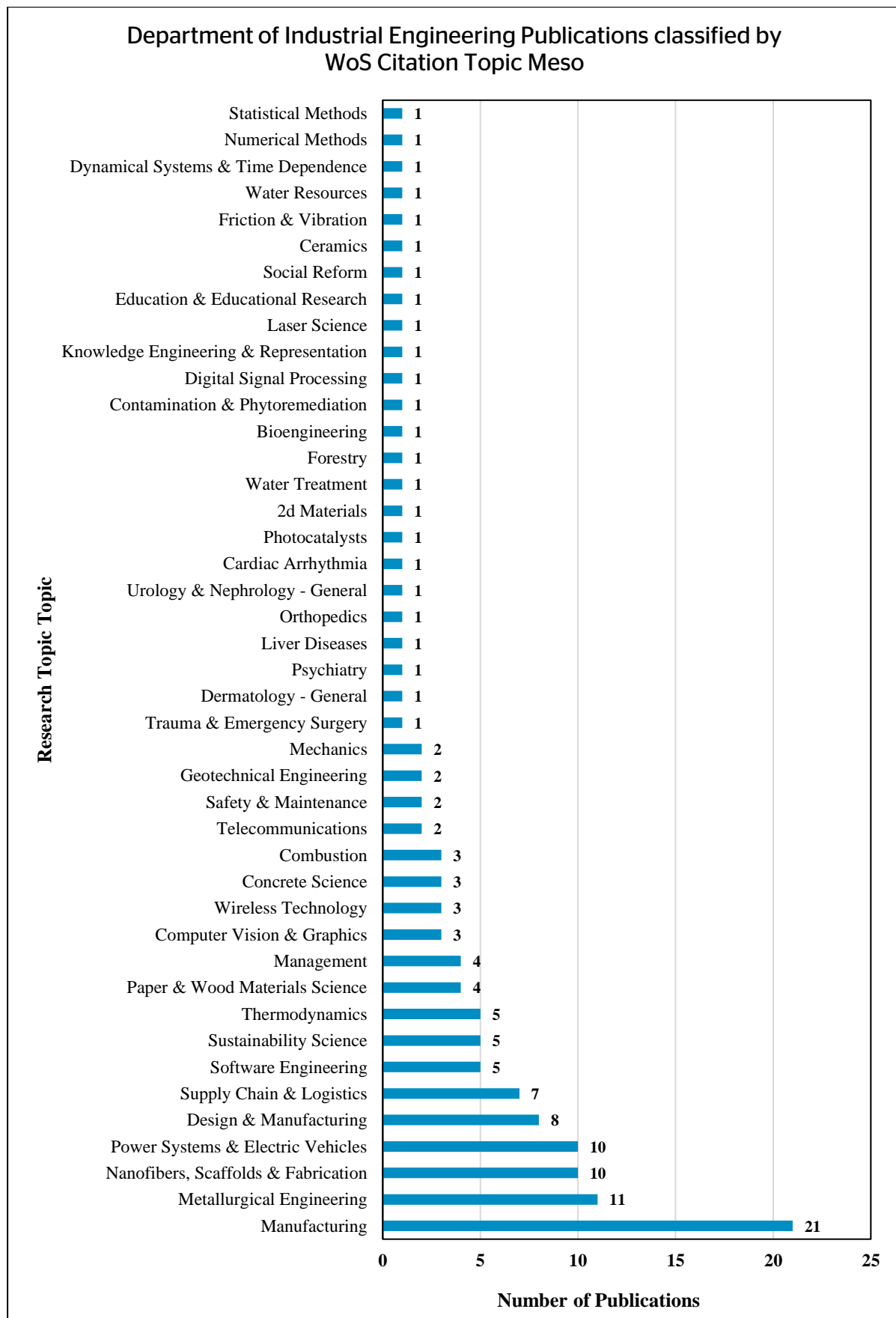




## DEPARTMENT OF INDUSTRIAL ENGINEERING

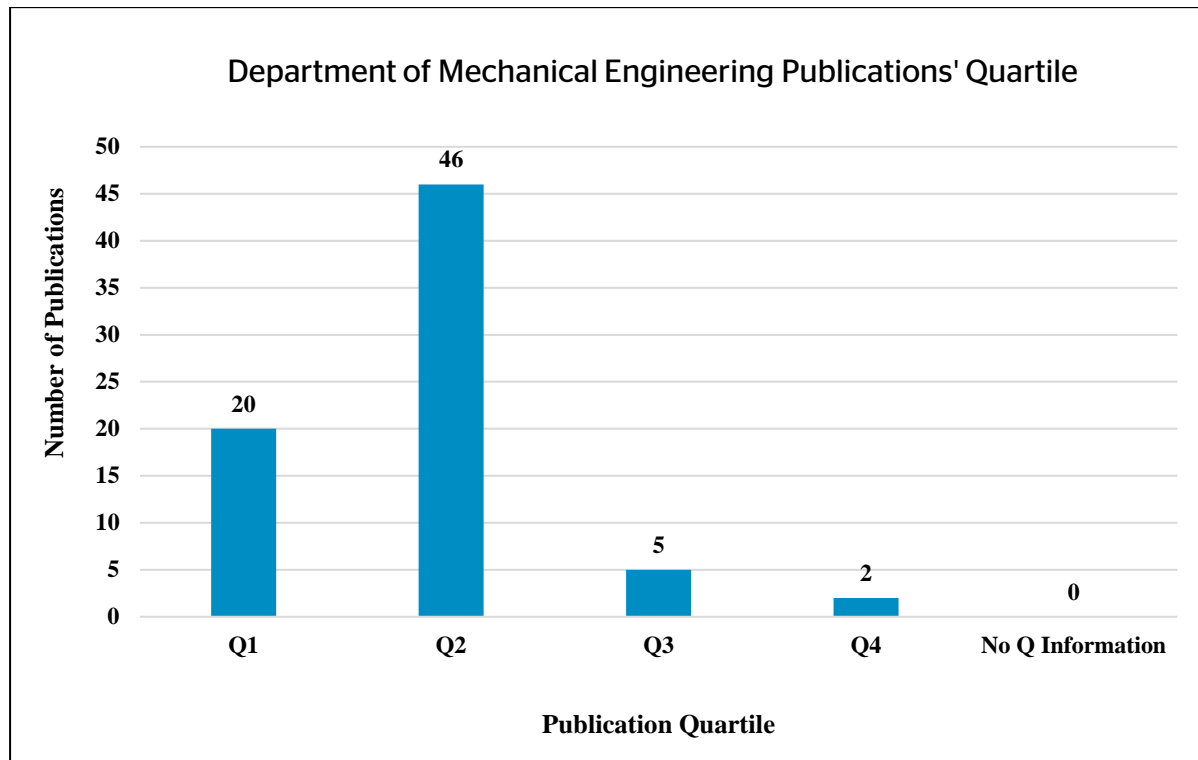
The Department of Industrial Engineering has published a total of 134 journal articles. Approximately 17.2% of those articles were published in Q1-ranked journals, while 65% were published in Q2-ranked journals. The top three research focus areas were: Manufacturing, Metallurgical Engineering, Nanofibers, Scaffolds, and Fabrication.



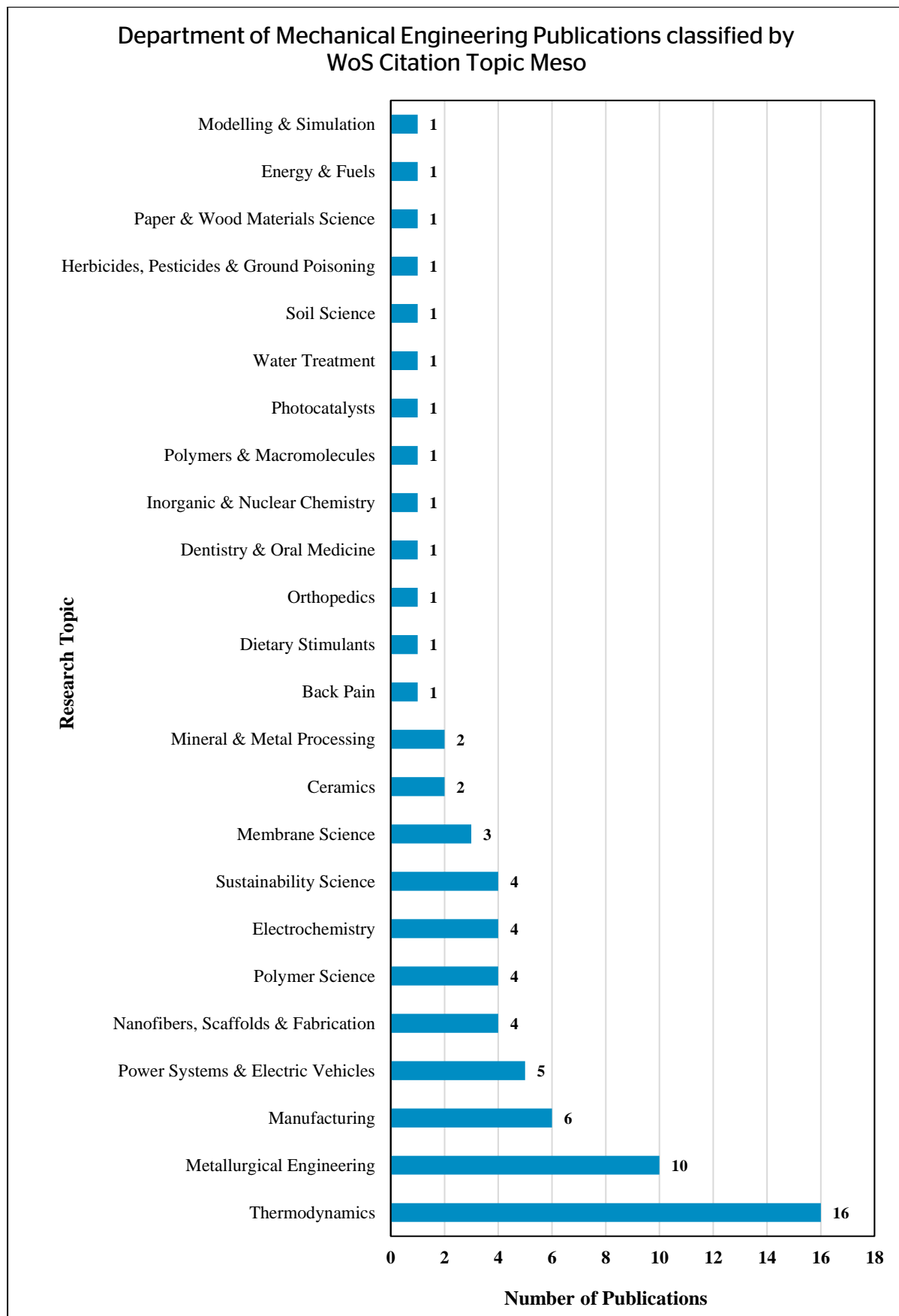


## DEPARTMENT OF MECHANICAL ENGINEERING

The Department of Mechanical Engineering has published a total of 73 journal articles. Approximately 27.4% of those articles were published in Q1-ranked journals, while 63% were published in Q2-ranked journals. The top three research focus areas were: Thermodynamics, Metallurgical Engineering and Manufacturing.

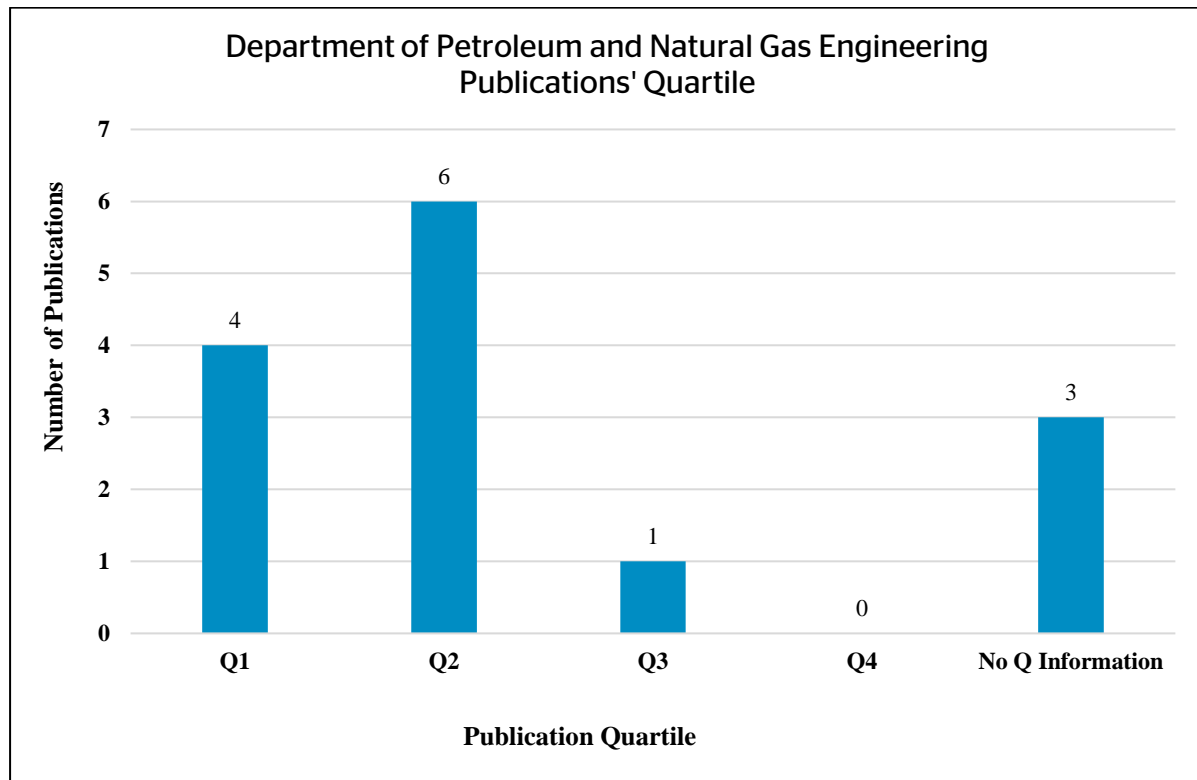


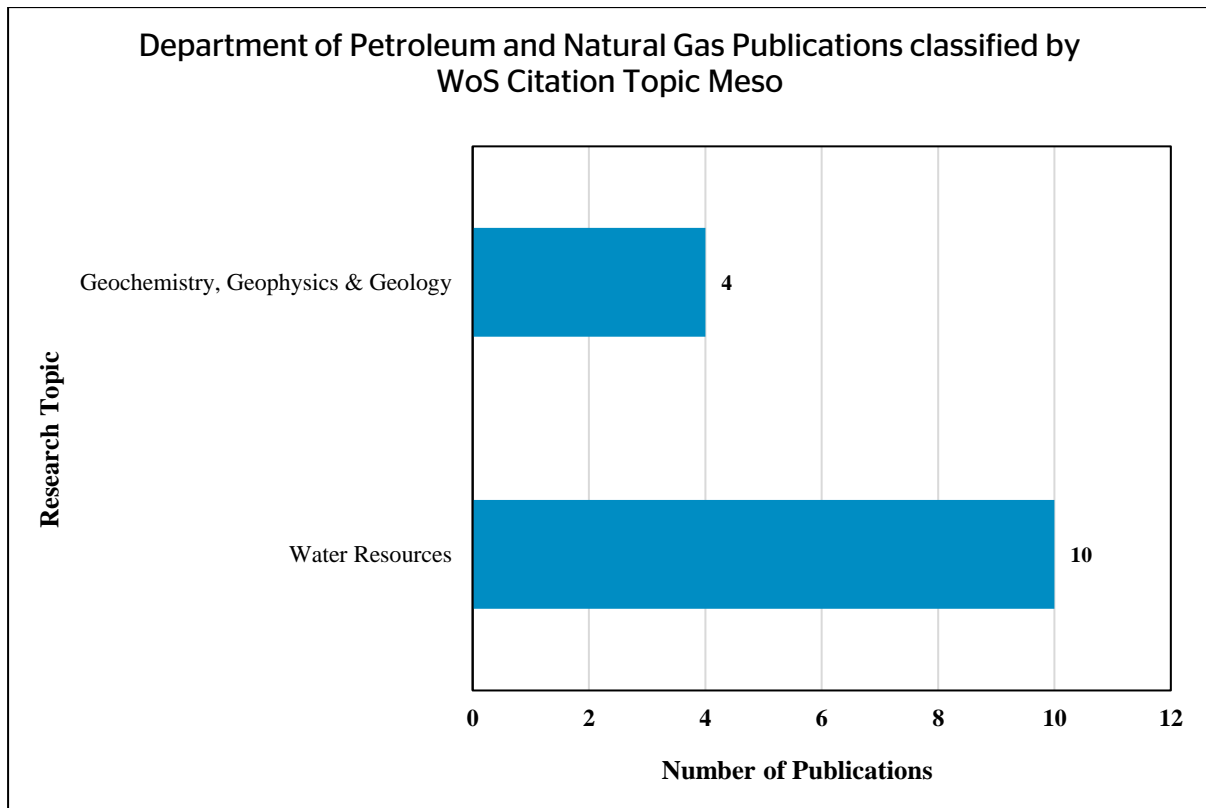




## DEPARTMENT OF PETROLEUM AND NATURAL GAS ENGINEERING

The Department of Petroleum and Natural Gas Engineering has published a total of 14 journal articles. Approximately 28.6% of those articles were published in Q1-ranked journals, while 42.8% were published in Q2-ranked journals. The research topics are classified under Water Resources, Geochemistry, Geophysics, and Geology.





## TEAM INFORMATION



Dr. Majid Altamimi  
Dean, College of Engineering



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



Dr. Osamah Abdullah Alsalman  
Coordinator, CoE Scientific  
Research Unit



Dr. Mohammed S. Al Alshaykh  
Ex-Coordinator, CoE Scientific  
Research Unit



Eng. Shamshad Alam  
Member, CoE Scientific  
Research Unit

## APPENDIX A: DEPARTMENT WISE LIST OF PUBLISHED PAPERS

### Appendix Table of Contents

---

Chemical Engineering Department	22
Civil Engineering Department	38
Electrical Engineering Department	60
Industrial Engineering Department	74
Mechanical Engineering Department	89
Petroleum and Gas Engineering Department	98

# CHEMICAL ENGINEERING

## PUBLICATIONS

- [ChE1] Fahad S. Al-Mubaddel, F. M. Allehiyany, Taher A. Nofal, Mohammad Mahtab Alam, Aatif Ali, and Joshua Kiddy K. Asamoah. Rheological model for generalized energy and mass transfer through hybrid nanofluid flow comprised of magnetized cobalt ferrite nanoparticles. *JOURNAL OF NANOMATERIALS*, 2022, APR 23 2022.
- [ChE2] Fekri Abdulrageb Ahmed Ali, Javed Alam, Arun Kumar Shukla, Zeyad A. Almutairi, and Mansour Alhoshan. Assessing the properties of thin-film nanocomposite membrane embedded with go nanosheets using the dspm-de model. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 19:74-90, JUL-AUG 2022.
- [ChE3] Ibrahim A. Alsayer, Ali A. Merdaw, and Ibrahim S. Al-Mutaz. etransfer of ions in forward osmosis process using reverse osmosis rejects as draw solution and industrial wastewater as feed water. *DESALINATION AND WATER TREATMENT*, 261:1-10, JUN 2022.
- [ChE4] Mayankkumar L. Chaudhary, Ahmed S. Al-Fatesh, Rawesh Kumar, Mahmud S. Lanre, Francesco Frusteri, Salwa B. AlReshaidan, Ahmed A. Ibrahim, Ahmed E. Abasaeed, and Anis H. Fakeeha. Promotional effect of addition of ceria over yttria-zirconia supported ni based catalyst system for hydrogen production through dry reforming of methane. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 47(48):20838- 20850, JUN 5 2022.
- [ChE5] Emad Ali. Novel structures of direct contact membrane distillation for brackish water desalination using distributed feed flow. *DESALINATION*, 540, OCT 15 2022.
- [ChE6] Basheer A. Alshammari, Asma M. Alenad, Fahad S. Al-Mubaddel, Abdullah G. Alharbi, Abdulaziz Salem Al-shehri, Hanan A. Albalwi, Fehaid M. Alsuabie, Hassan Fouad, and Abdel-Hamid I. Mourad. Impact of hybrid fillers on the properties of high density polyethylene based composites. *POLYMERS*, 14(16), AUG 2022.
- [ChE7] Vijayanandh Raja, Raj Kumar Gnanasekaran, Abdul Razak Kaladgi, Parvathy Rajendran, Sher Afghan Khan, and Mohammad Asif. Multi-disciplinary computational investigations on asymmetrical failure factors of disc brakes for various cfrp materials: A validated approach. *SYMMETRY-BASEL*, 14(8), AUG 2022.
- [ChE8] Ali Alrahlah, Rawaiz Khan, Fahim Vohra, Ibrahim M. Alqahtani, Adel A. Alruhaymi, Sajjad Haider, Abdel-Basit Al-Odayni, Waseem Sharaf Saeed, H. C. Ananda Murthy, and Leonel S. Bautista. Influence of the physical inclusion of zro2/tio2 nanoparticles on physical, mechanical, and morphological characteristics of pmma-based interim restorative material. *BIOMED RESEARCH INTERNATIONAL*, 2022, AUG 19 2022.
- [ChE9] Mohammad Jawaid, Lau Kia Kian, Salman Alamery, Naheed Saba, Hassan Fouad, Othman Y. Alothman, and M. Sain. Development and characterization of fire retardant nanofiller from date palm biomass. *BIOMASS CONVERSION AND BIOREFINERY*, 2022 AUG 26 2022.

- [ChE10] Aissa Dehane, Slimane Merouani, Atef Chibani, Oualid Hamdaoui, Kyuichi Yasui, and Muthupandian Ashokkumar. Estimation of the number density of active cavitation bubbles in a sono-irradiated aqueous solution using a thermodynamic approach. *ULTRASONICS*, 126, DEC 2022.
- [ChE11] Aissa Dehane, Slimane Merouani, Atef Chibani, Oualid Hamdaoui, and Muthupandian Ashokkumar. Influence of processing conditions on hydrogen sonoproduction from methanol sono-conversion: A numerical investigation with a validated model. *CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION*, 179, SEP 2022.
- [ChE12] Abdulrahman A. Al-Rabiah, Abdullah E. Alqahtani, Rayan K. Al Darwish, and Abdulaziz S. Bin Naqyah. Novel process for butyl acetate production via membrane reactor: A comparative study with the conventional and reactive distillation processes. *PROCESSES*, 10(9), SEP 2022.
- [ChE13] Ravindra Kumar Gupta, Hamid Shaikh, Ahamad Imran, Idriss Bedja, and Abdullah Saleh Aldwayyan. Structural, thermal, and electrical properties of poly(ethylene oxide)-tetramethyl succinonitrile blend for redox mediators. *POLYMERS*, 14(18), SEP 2022.
- [ChE14] Fahad Awjah Almeahmadi, Abdullah Najib, Emad Ali, Hany Al-Ansary, and Jamel Orfi. Sustainable approach of generating water and energy: Techno-economic analysis of a hybrid solar photoactive thermal system coupled with direct contact membrane distillation for water purification and electricity generation. *APPLIED SCIENCES- BASEL*, 12(18), SEP 2022.
- [ChE15] Salwa Bader Alreshaidan, Ahmed A. Ibrahim, Anis H. Fakeeha, Abdulaziz M. Almutlaq, Fekri Abdulraqeb Ahmed Ali, and Ahmed S. Al-Fatesh. Effect of modified alumina support on the performance of ni-based catalysts for co2 reforming of methane. *CATALYSTS*, 12(9), SEP 2022.
- [ChE16] Hammad Ahmad Jan, Igor Surina, Akhtar Zaman, Ahmed S. Al-Fatesh, Fazli Rahim, and Raja L. Al-Otaibi. Synthesis of biodiesel from ricinus communis l. seed oil, a promising non-edible feedstock using calcium oxide nanoparticles as a catalyst. *ENERGIES*, 15(17), SEP 2022.
- [ChE17] Basheer A. Alshammari, Othman Y. Alothman, Abdullah Alhamidi, Mohammad Jawaid, and Hamid M. Shaikh. Effect of accelerated weathering on the thermal, tensile, and morphological characteristics of polypropylene/date nanofiller composites. *MATERIALS*, 15(17), SEP 2022.
- [ChE18] Nadia Akram, Muhammad Usman, Sajjad Haider, Muhammad Saeed Akhtar, and Kashmala Gul. Impact of diisocyanates on morphological and in vitro biological efficacy of eco-friendly castor-oil-based water-borne polyurethane dispersions. *POLYMERS*, 14(17), SEP 2022.
- [ChE19] Emad Ali, Jamel Orfi, Hany AlAnsary, Ahmad S. Alsaadi, and Noredine Ghaffour. Novel multistage flash reversal concept: Modelling and analysis. *APPLIED*



THERMAL ENGINEERING, 217, NOV 25 2022.

- [ChE20] Ahmed I. Osman, Ahmed M. Elgarahy, Neha Mehta, Ala'a H. Al-Muhtaseb, Ahmed S. Al-Fatesh, and David W. Rooney. Facile synthesis and life cycle assessment of highly active magnetic sorbent composite derived from mixed plastic and biomass waste for water remediation. ACS SUSTAINABLE CHEMISTRY & ENGINEERING, 2022 SEP 7 2022.
- [ChE21] J. C. Umavathi, D. G. Prakasha, Yousef M. Alanazi, Maha M. A. Lashin, Fahad S. AlMubaddel, Raman Kumar, and R. J. Punith Gowda. Magnetohydrodynamic squeezing casson nanofluid flow between parallel convectively heated disks. INTERNATIONAL JOURNAL OF MODERN PHYSICS B, 37(04), FEB 10 2023.
- [ChE22] Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, and Muthupandian Ashokkumar. The use of reactive oxygen species as a probe for determining the size distribution of active bubbles in sonicated aqueous solution: Impact of dissolved rare gases. CHEMISTRY AFRICA-A JOURNAL OF THE TUNISIAN CHEMICAL SOCIETY, 5(6, SI):2115-2129, DEC 2022.
- [ChE23] Irfan Wazeer, Haneef F. Hizaddin, Mohd A. Hashim, and Mohamed K. Hadj-Kali. An overview about the extraction of heavy metals and other critical pollutants from contaminated water via hydrophobic deep eutectic solvents. JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, 10(6), DEC 2022.
- [ChE24] Ahmed S. Al-Fatesh, Jumika Golaviya, Vijay Kumar Shrivastava, Ahmed Aidid Ibrahim, Ahmed I. Osman, Anis Hamza Fakeeha, Ahmed Elhag Abasaeed, Abdulaziz A. Bagabas, Mahmud S. Lanre, Rawesh Kumar, Abrar Hussain, and Kuen-Song Lin. A highly active and cost-effective tungsten modified ni-based catalyst for the production of hydrogen via methane dry reforming. CATALYSIS COMMUNICATIONS, 171, NOV 2022.
- [ChE25] Saman Hanif, Mabkhoot Alsaiari, Mushtaq Ahmad, Shazia Sultana, Muhammad Zafar, Rozina, Farid A. Harraz, Abdulrahman Faraj Alharbi, Abdulaziz A. M. Abahussain, and Zubair Ahmad. Membrane reactor based synthesis of biodiesel from toona ciliata seed oil using barium oxide nano catalyst. CHEMOSPHERE, 308(3), DEC 2022.
- [ChE26] Lau Kia Kian, Mohammad Jawaid, Mohamed H. Mahmoud, Naheed Saba, Hassan Fouad, Othman Y. Allothman, and Ashok Vaseashta. Characterization and fabrication of poly(butylene adipate-co-terephthalate)/nanocrystalline cellulose composite membranes for heavy metal ion separation. JOURNAL OF APPLIED POLYMER SCIENCE, 139(45), DEC 5 2022.
- [ChE27] Lau Kia Kian, Mohammad Jawaid, Mohamed H. Mahmoud, Naheed Saba, Hassan Fouad, Othman Y. Allothman, and Zoheb Karim. Pbat/pbs blends membranes filled with nanocrystalline cellulose for heavy metal ion separation. JOURNAL OF POLYMERS AND THE ENVIRONMENT, 30(12):5263-5273, DEC 2022.

- [ChE28] Abdulaziz A. M. Abahussain, S. Z. J. Zaidi, M. H. Nazir, M. Raza, and S. Hassan. A dft study of graphene as a drug carrier for gemcitabine anticancer drug. *JOURNAL OF NEW MATERIALS FOR ELECTROCHEMICAL SYSTEMS*, 25(4):234-239, OCT 2022.
- [ChE29] Emad Ali and Abdelbasset Bessadok-Jemai. Analysis of zero liquid disposal plant using electrodialysis integrated with electrolyzer for hydrogen fuel production. *DESALINATION AND WATER TREATMENT*, 272:88-107, OCT 2022.
- [ChE30] Abdulrahman A. Al-Rabiah, Abdulaziz M. Almutlaq, Omar S. Bashth, Taher M. Alyasser, Fayez A. Alshehri, Mohammed S. Alofai, and Abdulelah S. Alshehri. An intensified green process for the coproduction of dmc and dmo by the oxidative carbonylation of methanol. *PROCESSES*, 10(10), OCT 2022.
- [ChE31] Abdulrahman A. Al-Rabiah, Raed R. Alkathiri, and Abdulaziz A. Bagabas. Process development for methyl isobutyl ketone production using the low-pressure one-step gas-phase selective hydrogenation of acetone. *PROCESSES*, 10(10), OCT 2022.
- [ChE32] Abdulrahman A. Al-Rabiah, Ismail Boz, Vagif M. Akhmedov, Mohamed Mokhtar M. Mostafa, and Abdulaziz A. Bagabas. Highly selective gas-phase catalytic hydrogenation of acetone to isopropyl alcohol. *CATALYSTS*, 12(10), OCT 2022.
- [ChE33] Oualid Hamdaoui, Slimane Merouani, Hadjer C. Benmahmoud, Meriem Ait Idir, Hamza Ferkous, and Abdulaziz Alghyamah. Ultrasound/chlorine: A novel synergistic sono-hybrid process for allura red ac degradation. *CATALYSTS*, 12(10), OCT 2022.
- [ChE34] Hammad Ahmad Jan, Igor Surina, Ahmed S. Al-Fatesh, Abdulaziz M. Almutlaq, Sher Wali, and Anton Lisy. Biodiesel synthesis from milk thistle (*silybum marianum* (L.) gaertn.) seed oil using zno nanoparticles as a catalyst. *ENERGIES*, 15(20), OCT 2022.
- [ChE35] Yasser M. Alessi and Abdulrahman A. Al-Rabiah. A feasibility study of utilizing nuclear energy for an existing med-tvc desalination plant. *APPLIED SCIENCES-BASEL*, 12(19), OCT 2022.
- [ChE36] Ahmed Halilu, Mohamed Kamel Hadj-Kali, Mohd Ali Hashim, Rozita Yusoff, and Mohamed Kheireddine Aroua. Bifunctional ionic deep eutectic electrolytes for co2 electroreduction. *ACS OMEGA*, 7(42):37764-37773, OCT 25 2022.
- [ChE37] Promy Virk, Manal A. Awad, Mai Elobeid, Khalid M. O. Ortashi, Nada M. Merghani, and Manal F. El-Khadragy. Anti-proliferative and biocidal effect of watermelon (*citrullus lanatus*) seed extract and its nanoformulation. *MATERIALS LETTERS*, 325, OCT 15 2022.
- [ChE38] Mansour Alhoshan, Arun Kumar Shukla, Turki Hussain Mana, Fekri Abdulraqeb Ahmed Ali, and Javed Alam. An evolving mof thin-film nanocomposite tubular ceramic membrane for desalination pretreatment. *JOURNAL OF*

INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 33(2):337-352, FEB 2023.

- [ChE39] Abdulaziz A. M. Abahussain, Abdulrahman F. Alharbi, M. H. Nazir, and S. Z. J. Zaidi. Anodic generation of hydrogen peroxide by using manganese(iii) oxide based catalyst. INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, 17(11), NOV 2022.
- [ChE40] K. Senthilkumar, M. Chandrasekar, Othman Y. Alothman, Hassan Fouad, M. Jawaid, and M. A. Azeem. Flexural, impact and dynamic mechanical analysis of hybrid composites: Olive tree leaves powder/pineapple leaf fibre/epoxy matrix. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 21:4241-4252, NOV-DEC 2022.
- [ChE41] Meriem Bendjama, Oualid Hamdaoui, Hamza Ferkous, and Abdulaziz Alghyamah. Degradation of safranin o in water by uv/tio<sub>2</sub>/io<sub>4</sub><sup>-</sup> process: Effect of operating conditions and mineralization. CATALYSTS, 12(11), NOV 2022.
- [ChE42] Mohamed K. Hadj-Kali, Lahssen El Blidi, Sarwono Mulyono, Irfan Wazeer, Emad Ali, and Jagan Rallapalli. Deep eutectic solvents for the separation of toluene/1-hexene via liquid-liquid extraction. SEPARATIONS, 9(11), NOV 2022.
- [ChE43] Mustafa Zakiedin, Mansour Alhoshan, Maher M. Alrashed, and Lahssen El Blidi. Preparation and characterization of polyanhydride terminated with oleic acid extracted from olive mills waste. POLYMERS, 14(22), NOV 2022.
- [ChE44] Abdulrahman A. Al-Rabiah, Rayan K. Al Darwish, Abdullah E. Alqahtani, Diego Morais Chaves, and Marcio J. da Silva. Production of biofuel additives using catalytic bioglycerol etherification: Kinetic modelling and reactive distillation design. CATALYSTS, 12(11), NOV 2022.
- [ChE45] Abdulrahman A. Al-Rabiah, Jiyad N. Al-Dawsari, Abdelhamid M. Ajbar, Rayan K. Al Darwish, and Omar Y. Abdelaziz. Development of a biomass gasification process for the coproduction of methanol and power from red sea microalgae. ENERGIES, 15(21), NOV 2022.
- [ChE46] Hanee F. Hizaddin, Irfan Wazeer, Nur Afrina Muhammad Huzaimi, Lahssen El Blidi, Mohd Ali Hashim, Jean-Marc Leveque, and Mohamed K. Hadj-Kali. Extraction of phenolic compound from model pyrolysis oil using deep eutectic solvents: Computational screening and experimental validation. SEPARATIONS, 9(11), NOV 2022.
- [ChE47] Anis Hamza Fakeeha, Rutu Patel, Nissrine El Hassan, Salma A. Al-Zahrani, Abdulrhman S. Al-Awadi, Leone Frusteri, Hossein Bayahia, Abdulrahman I. Alharth, Ahmed Sadeq Al-Fatesh, and Rawesh Kumar. Holmium promoted yttria-zirconia supported ni catalyst for h<sub>2</sub> production via dry reforming of methane. INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 47(90):38242-38257, NOV 9 2022.
- [ChE48] Ni Luh Wulan Septiani, Ganes Shukri, Adhitya Gandaryus Saputro, Nugraha,

Mohammad Rezaul Karim, Fahad Al-Mubaddel, Andri Hardiansyah, Yusuke Yamauchi, Yusuf Valentino Kaneti, and Brian Yulianto. Palm sugar-induced formation of hexagonal tungsten oxide with nanorod-assembled three-dimensional hierarchical frameworks for nitrogen dioxide sensing. *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*, 10(46):15035–15045, NOV 21 2022.

- [ChE49] Ahmed Sadeq Al-Fatesh, Ahmed A. Ibrahim, Anis H. Fakeeha, Fahad Albaqi, Khalid Anojaidi, Ibrahim Albinali, Ahmed E. Abasaheed, Francesco Frusteri, Sofiu L. Mahmud, Jihad K. Abu-Dahrieh, and Abdulaziz A. Bagabas. Effect of holmium oxide loading on nickel catalyst supported on yttria-stabilized zirconia in methane dry reforming. *ACS OMEGA*, 7(48):43700–43709, DEC 6 2022.
- [ChE50] Muhammad Umar Aslam Khan, Wafa Shamsan Al-Arjan, Nureddin Ashammakhi, Sajjad Haider, Rashid Amin, and Anwarul Hasan. Multifunctional bioactive scaffolds from arx-g-(zn@rgo)-hap for bone tissue engineering: In vitro antibacterial, antitumor, and biocompatibility evaluations. *ACS APPLIED BIO MATERIALS*, 5(11):5445–5456, NOV 21 2022.
- [ChE51] Mohd Aizad Ahmad, Zulki fli Abdul Rashid, Ateyah Awad Alzahrani, and Mohanad El-Harbawi. Safety assessment: predicting fatality rates in methanol plant incidents. *HELIYON*, 8(11), NOV 2022.
- [ChE52] Bushra Zafar, Syed Salman Shafqat, Muhammad Nadeem Zafar, Sajjad Haider, Sajjad Hussain Sumrra, Muhammad Zubair, Norah Alwadai, Fwzah H. Alshammari, Amani Saleh Almuslem, and Muhammad Saeed Akhtar. Nahco<sub>3</sub> assisted multifunctional co<sub>3</sub>o<sub>4</sub>, cuo and mn<sub>2</sub>o<sub>3</sub> nanoparticles for tartrazine removal from synthetic wastewater and biological activities. *MATERIALS TODAY COMMUNICATIONS*, 33, DEC 2022.
- [ChE53] Khalid M. M. Abed, Adeeb Hayyan, Amal A. M. Elgharbawy, Hanee F. F. Hizaddin, Mohd Ali Hashim, Hassimi Abu Hasan, Mahar Diana Hamid, Fathiah M. M. Zuki, Jihad Saleh, and Ahmad G. H. Aldaihani. Palm raceme as a promising biomass precursor for activated carbon to promote lipase activity with the aid of eutectic solvents. *MOLECULES*, 27(24), DEC 2022.
- [ChE54] Aissa Dehane, Slimane Merouani, and Oualid Hamdaoui. The effect of liquid temperature on bubble-size distribution in the presence of power ultrasound and carbon tetrachloride. *APPLIED WATER SCIENCE*, 12(12), DEC 2022.
- [ChE55] Hafeez Ullah Khan, Samar Aziz, Safirah Maheen, Ikramullah Khan, Mehwish Andleeb, Hina Younis, Sajjad Haider, Adnan Haider, Muhammad Saeed Akhtar, and Syed Salman Shafqat. Superporous acrylic acid and hpmc hydrogels of mefenamic acid: Formulation, characterization and optimization by central composite design. *FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY*, 10, DEC 15 2022.
- [ChE56] Ahmed S. Al-Fatesh, Samsudeen O. Kasim, Ahmed A. Ibrahim, Ahmed Osman, I, Ahmed E. Abasaheed, Hanan Atia, Udo Armbruster, Leone Frusteri, Abdulrahman bin Jumrah, Yousef Mohammed Alanazi, and Anis H. Fakeeha. Greenhouse gases utilization via catalytic reforming with sc promoted ni/sba-15. *FUEL*, 330, DEC 15

2022.

- [ChE57] Tamrin Nuge, Adeeb Hayyan, Amal A. M. Elgharbawy, Hamzah Mohd. Salleh, Yap Jun Yong, Ainul F. Kamarudin, Hanee F. Hizaddin, Yumi Zuhani Has-Yun Hashim, Xiaoling Liu, Jehad Saleh, Jamal Ibrahim Daoud, Abdullah S. M. Aljohani, Fahad A. Alhumaydhi, M. Y. Zulkifli, Mohd Roslan Mohd Nor, and Waleed Al Abdulmonem. Enhanced large-scale production of recombinant phytase in *e. coli* dh5 a: Medium components optimization and thermodynamic studies. *JOURNAL OF MOLECULAR LIQUIDS*, 370, JAN 15 2023.
- [ChE58] Ouahid Ben Ghanem, Maisara Shahrom Raja Shahrom, Syed Nasir Shah, Mohamed Ibrahim Abdul Mutalib, Jean-Marc Leveque, Zahoor Ullah, Mohanad El-Harbawi, and Mohamad Sahban Alnarabiji. Greener approach for the separation of naphthenic acid from model oil using pyrrolidinium-based amino acid ionic liquids. *FUEL*, 337, APR 1 2023.
- [ChE59] Syed Sadiq Ali, Agus Arsad, Kenneth L. L. Roberts, and Mohammad Asif. Effect of inlet flow strategies on the dynamics of pulsed fluidized bed of nanopowder. *NANOMATERIALS*, 13(2), JAN 2023.
- [ChE60] Radwa A. El-Salamony, Ahmed S. Al-Fatesh, Kenit Acharya, Abdulaziz A. M. Abahussain, Abdulaziz Bagabas, Nadavala Siva Kumar, Ahmed A. Ibrahim, Wasim Ullah Khan, and Rawesh Kumar. Carbon dioxide valorization into methane using samarium oxide-supported monometallic and bimetallic catalysts. *CATALYSTS*, 13(1), JAN 2023.
- [ChE61] Muhammad Omer Aijaz, Seong Baek Yang, Mohammad Rezaul Karim, Ibrahim Abdullah Alnaser, Abdulelah Dhaifallah Alahmari, Fahad S. Almubaddel, and Abdulaziz K. Assaifan. Preparation and characterization of electrospun poly(lactic acid)/poly(ethylene glycol)-b-poly(propylene glycol)-b-poly(ethylene glycol)/silicon dioxide nanofibrous adsorbents for selective copper (ii) ions removal from wastewater. *MEMBRANES*, 13(1), JAN 2023.
- [ChE62] Somali Dhal, Abdullah Alhamidi, Saeed M. Al-Zahrani, Arfat Anis, and Kunal Pal. The influence of emulsifiers on the physiochemical behavior of soy wax/rice bran oil-based oleogels and their application in nutraceutical delivery. *GELS*, 9(1), JAN 2023.
- [ChE63] Mahmoud B. Elsheniti, Saad Zaheer, Obida Zeitoun, Hassan Alshehri, Abdulrahman AlRabiah, and Zeyad Almutairi. Experimental evaluation of a solar low-concentration photovoltaic/thermal system combined with a phase change material cooling technique. *APPLIED SCIENCES-BASEL*, 13(1), JAN 2023.
- [ChE64] Viet Thanh Hau Pham, Thanh Kieu Trinh, Hamid M. Shaikh, Saeed M. AlZahrani, Abdullah Alhamidi, Sami Bin Dahman, Mohaseen S. Tamboli, and Nguyen Tam Nguyen Truong. Controlling of conductivity and morphological properties of hole-transport layer using ionic liquid for vacuum-free planar hybrid solar cells. *ENERGIES*, 16(1), JAN 2023.
- [ChE65] Abdul Majid, Amber Batool, Qurat-ul-Ain Sandhu, Mohammad Alkhedher, Sajjad Haider, and Muhammad Saeed Akhtar. A td-dft study of optical properties of tiso4

clusters. OPTICAL AND QUANTUM ELECTRONICS, 55(1), JAN 2023.

- [ChE66] Awatif A. Hendi, Meznah M. Alanazi, Wadha Alharbi, Taghreed Ali, Manal A. Awad, Khalid M. Ortashi, Haia Aldosari, Fatimah S. Alfaifi, Rabia Qindeel, Gul Naz, and Tarfa H. Alsheddi. Dye-sensitized solar cells constructed using titanium oxide nanoparticles and green dyes as photosensitizers. JOURNAL OF KING SAUD UNIVERSITY SCIENCE, 35(3), APR 2023.
- [ChE67] Nissrine El Hassan, Karam Jabbour, Anis H. Fakeeha, Yara Nasr, Muhammad A. Naeem, Salwa Bader Alreshaidan, and Ahmed S. Al-Fatesh. Production of carbon nanomaterials and syngas from biogas reforming and decomposition on one-pot mesoporous nickel alumina catalysts. ALEXANDRIA ENGINEERING JOURNAL, 63:143- 155, JAN 15 2023.
- [ChE68] Hamid Shaikh, Othman Y. Alothman, Basheer A. Alshammari, and Mohammad Jawaid. Dynamic and thermo-mechanical properties of polypropylene reinforced with date palm nano filler. JOURNAL OF KING SAUD UNIVERSITY SCIENCE, 35(3), APR 2023.
- [ChE69] Mohamed Larbi Djaballah, Aouattef Belghit, Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, and Muthapandian Ashokkumar. Radicals ( $\bullet\text{oh}$ ,  $\text{cl}\bullet$ ,  $\text{clo}\bullet$  and  $\text{cl}_2\bullet$ ) concentration profiles in the intensified degradation of reactive green 12 by uv/chlorine process: Chemical kinetic analysis using a validated model. JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, 439, MAY 1 2023.
- [ChE70] Mahmoud Badawy Elsheniti, Abdulrahman AlRabiah, Hany Al-Ansary, Zeyad Almutairi, Jamel Orfi, and Abdelrahman El-Leathy. Performance assessment of an ice-production hybrid solar cpv/t system combining both adsorption and vapor- compression refrigeration systems. SUSTAINABILITY, 15(4), FEB 2023.
- [ChE71] Meriem Bendjama, Oualid Hamdaoui, Hamza Ferkous, and Abdulaziz Alghyamah. Removal of safranin o from water by uv/tio<sub>2</sub>/io<sub>3</sub>- advanced oxidation process: Parametric study and impact of inorganic ions and humic acid. CATALYSTS, 13(2), FEB 2023.
- [ChE72] Mohanad El-Harbawi, Saeed Alhawtali, Abdulrhman S. Al-Awadi, Lahssen El Blidi, Maher M. Alrashed, Abdulrahman Alzobidi, and Chun-Yang Yin. Synthesis of carbon microspheres from inedible crystallized date palm molasses: Influence of temperature and reaction time. MATERIALS, 16(4), FEB 2023.
- [ChE73] Abdullah Alrashidi, Anas M. El-Sherif, Jahir Ahmed, M. Faisal, Mabkhoot Alsaiari, Jari S. Algethami, Mohamed I. Moustafa, Abdulaziz A. M. Abahussain, and Farid A. Harraz. A sensitive hydroquinone amperometric sensor based on a novel palladium nanoparticle/porous silicon/polypyrrole-carbon black nanocomposite. BIOSENSORS- BASEL, 13(2), FEB 2023.
- [ChE74] Salwa B. B. Alreshaidan, Ahmed Al-Fatesh, Mahmud S. S. Lanre, Yousef M. M. Alanazi, Ahmed A. A. Ibrahim, Anis H. H. Fakeeha, Fahad Albaqi, Khalid Anojaidi, and Abdulaziz Bagabas. Effect of adding gadolinium oxide promoter on nickel

catalyst over yttrium-zirconium oxide support for dry reforming of methane. MATERIALS, 16(3), FEB 2023.

- [ChE75] Jehad Saleh, Ahmed Sadeq Al-Fatesh, Ahmed Aidid Ibrahim, Francesco Frusteri, Ahmed Elhag Abasaeed, Anis Hamza Fakeeha, Fahad Albaqi, Khalid Anojaidi, Salwa B. B. Alreshaidan, Ibrahim Albinali, Abdulrahman A. A. Al-Rabiah, and Abdulaziz Bagabas. Stability and activity of rhodium promoted nickel-based catalysts in dry reforming of methane. NANOMATERIALS, 13(3), FEB 2023.
- [ChE76] Jehad Saleh, Sajjad Haider, Muhammad Saeed Akhtar, Muhammad Saqib, Muqadas Javed, Sayed Elshahat, and Ghulam Mustafa Kamal. Energy level prediction of organic semiconductors for photodetectors and mining of a photovoltaic database to search for new building units. MOLECULES, 28(3), FEB 2023.
- [ChE77] Promy Virk, Manal A. Awad, Sarah Saleh Abdu-llah Alsaif, Awatif A. Hendi, Mai Elobeid, Khalid Ortashi, Rabia Qindeel, Manal F. El-Khadragy, Hany M. Yehia, Mohamed Ferkry Serag El-din, and Hatem Ali Salama. Green synthesis of moringa oleifera leaf nanoparticles and an assessment of their therapeutic potential. JOURNAL OF KING SAUD UNIVERSITY SCIENCE, 35(3), APR 2023.
- [ChE78] Ahmed E. Abasaeed, Mahmud L. Sofiu, Kenit Acharya, Ahmed I. Osman, Anis H. Fakeeha, Raja Lafi AL-Otaibi, Ahmed A. Ibrahim, Abdulrhman S. Al-Awadi, Hossein Bayahia, Salma A. Al-Zahrani, Rawesh Kumar, and Ahmed Sadeq Al-Fatesh. The influence of ni stability, redox, and lattice oxygen capacity on catalytic hydrogen production via methane dry reforming in innovative metal oxide systems. ENERGY SCIENCE & ENGINEERING, 11(4):1436-1450, APR 2023.
- [ChE79] Maan Hayyan, Adeeb Hayyan, Asyraf Danial M. Hafizi, Wan Jeffrey Basirun, Andrew T. H. Yeow, M. Zulhaziman M. Salleh, Hens Saputra, Jehad Saleh, Khaled H. Alkandari, Mohd Ali Hashim, and Mohammed A. Alsaadi. Phosphonium-based deep eutectic solvents: Physicochemical properties and application in zn-air battery. CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, 185, MAR 2023.
- [ChE80] Emad Ali, Mohamed K. Hadj-Kali, Salim Mokraoui, Rawaiz Khan, Meshal Aldawsari, and Mourad Boumaza. Exergy analysis of a conceptual co2 capture process with an amine-based des. GREEN PROCESSING AND SYNTHESIS, 12(1), FEB 16 2023.
- [ChE81] Othman Y. Alothman, Sameer Awad, Ramengmawii Siakeng, Eman M. Khalaf, Hassan Fouad, Nasser Abd M. El-salam, Faraz Ahmed, and M. Jawaid. Fabrication and characterization of polylactic acid/natural fiber extruded composites. POLYMER ENGINEERING AND SCIENCE, 63(4):1234-1245, APR 2023.
- [ChE82] M. Chandra Sekhar, Nadavala Siva Kumar, Mohammad Asif, Surya Veerendra Prabhakar Vattikuti, and Jaesool Shim. Enhancing electrochemical performance with gc3n4/ceo2 binary electrode material. MOLECULES, 28(6), MAR 2023.
- [ChE83] Somali Dhal, Arfat Anis, Hamid M. Shaikh, Abdullah Alhamidi, and Kunal Pal. Effect

of mixing time on properties of whole wheat flour-based cookie doughs and cookies. *FOODS*, 12(5), MAR 2023.

- [ChE84] Intissar Gasmi, Oualid Hamdaoui, Hamza Ferkous, and Abdulaziz Alghyamah. Sonochemical advanced oxidation process for the degradation of furosemide in water: Effects of sonication's conditions and scavengers. *ULTRASONICS SONOCHEMISTRY*, 95, MAY 2023.
- [ChE85] Ahmed Sadeq Al-Fatesh, Ahmed Aidid Ibrahim, Ahmed I. Osman, Fahad Albaqi, Rasheed Arasheed, Frusteri Francesco, Todaro Serena, Khalid Anojaid, Mahmud Sofiu Lanre, Ahmed Elhag Abasaheed, Anis Hamza Fakeeha, Abdulaziz Bentalib, and Abdulaziz Bagabas. Optimizing barium promoter for nickel catalyst supported on yttrium-stabilized zirconia in dry reforming of methane. *ENERGY SCIENCE & ENGINEERING*, 11(6):2066–2080, JUN 2023.
- [ChE86] Hossein Bayahia, Anis H. Fakeeha, Salma A. Al-Zahrani, Salwa B. Alreshaidan, Abdulrhman S. Al-Awadi, Mohammed F. Alotibi, Rawesh Kumar, and Ahmed S. AlFatesh. Cox-free h<sub>2</sub> production via catalytic decomposition of ch<sub>4</sub> over Fe supported on tungsten oxide-activated carbon catalyst: Effect of tungsten loading. *ARABIAN JOURNAL OF CHEMISTRY*, 16(6), JUN 2023.
- [ChE87] Promy Virk, Manal A. Awad, Meznah M. Alanazi, Awatif A. Hendi, Mai Elobeid, Khalid M. Ortashi, Albandari W. Alrowaily, Taghreed Bahlool, and Fatma Aouaini. Putative anti-proliferative effect of indian mustard (*brassica juncea*) seed and its nano-formulation. *GREEN PROCESSING AND SYNTHESIS*, 12(1), MAR 18 2023.
- [ChE88] Aissa Dehane, Boumediene Haddad, Slimane Merouani, and Oualid Hamdaoui. The impact of methanol mass transport on its conversion for the production of hydrogen and oxygenated reactive species in sono-irradiated aqueous solution. *ULTRASONICS SONOCHEMISTRY*, 95, MAY 2023.
- [ChE89] L. F. Arenas, B. Miranda-Alcantara, N. Kaishubayeva, A. A. M. Abahussain, F. F. Rivera, C. Ponce de Leon, and F. C. Walsh. Nickel-coated 3d-printed titanium electrodes for electrochemical flow reactors. *TRANSACTIONS OF THE INSTITUTE OF METAL FINISHING*, 101(3):119–125, MAY 4 2023.
- [ChE90] Lamia Ouettar, El-Khamssa Guechi, Oualid Hamdaoui, Nadia Fertikh, Fethi Saoudi, and Abudulaziz Alghyamah. Biosorption of triphenyl methane dyes (malachite green and crystal violet) from aqueous media by alfa (*stipa tenacissima* L.) leaf powder. *MOLECULES*, 28(8), APR 2023.
- [ChE91] Aissa Dehane, Slimane Merouani, Oualid Hamdaoui, Kyuichi Yasui, and Muthupandian Ashokkumar. A hydrogen-based technique for determining the number density of acoustic microreactors (active bubbles) in sonicated solutions. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 48(36):13430–13441, APR 29 2023.
- [ChE92] I. Neelakanta Reddy, Bhargav Akkinapally, Nadavala Siva Kumar, Mohammad Asif, Jaesool Shim, and Cheolho Bai. SnO<sub>2</sub> nanoparticles anchored on carbon spheres for enhanced charge generation and potentiodynamic effects. *JOURNAL OF ELECTROANALYTICAL CHEMISTRY*, 937, MAY 15 2023.



- [ChE93] Salim Mokraoui, Ahmed Halilu, Mohd Ali Hashim, and Mohamed Kamel Hadj-Kali. Modeling and simulation of biomass anaerobic digestion for high biogas yield and co<sub>2</sub> mineralization. *MATERIALS FOR RENEWABLE AND SUSTAINABLE ENERGY*, 12(2):105-116, AUG 2023.
- [ChE94] T. Sathish, Uemit Agbulut, Santhi M. George, K. Ramesh, R. Saravanan, Kenneth L. Roberts, Prabhakar Sharma, Mohammad Asif, and Anh Tuan Hoang. Waste to fuel: Synergetic effect of hybrid nanoparticle usage for the improvement of ci engine characteristics fuelled with waste fish oils. *ENERGY*, 275, JUL 15 2023.
- [ChE95] Anis H. H. Fakeeha, Yousef A. A. Al-Baqmaa, Ahmed A. A. Ibrahim, Fahad S. S. Almubaddel, Mohammed F. F. Alotibi, Abdulaziz Bentalib, Ahmed E. E. Abasaheed, Ateyah A. A. Al-Zahrani, Yahya Ahmed Mohammed, and Ahmed S. S. Al-Fatesh. Fe-promoted alumina-supported ni catalyst stabilized by zirconia for methane dry reforming. *CATALYSTS*, 13(5), APR 27 2023.
- [ChE96] Ahmed Al-Fatesh, Kenit Acharya, Ahmed I. Osman, Ghzzai Almutairi, Anis Hamza Fakeeha, Ahmed Elhag Abasaheed, Yousef A. Al-Baqmaa, and Rawesh Kumar. Kinetic study of zirconia-alumina-supported ni-fe catalyst for dry reforming of methane: Impact of partial pressure and reaction temperature. *INTERNATIONAL JOURNAL OF CHEMICAL ENGINEERING*, 2023, MAY 11 2023.
- [ChE97] Arularasu Sivalingam, Elumalai Perumal Venkatesan, Kenneth L. L. Roberts, and Mohammad Asif. Potential effect of lemon peel oil with novel eco-friendly and biodegradable emulsion in un-modified diesel engine. *ACS OMEGA*, 8(21):18566- 18581, MAY 18 2023.
- [ChE98] Mohammed Owais Ahmed Sajjad, T. Sathish, R. Saravanan, Mohammad Asif, Emanoil Linul, and Umit Agbulut. Combustion, performance and emission discussion of soapberry seed oil methyl ester blends and exhaust gas recirculation in common rail direct fuel injection system. *ENERGY*, 278, SEP 1 2023.
- [ChE99] Salma A. Al-Zahrani, Ahmed S. Al-Fatesh, Marie-Nour Kaydouh, Ahmed Al Otaibi, Frusteri Francesco, Anis H. Fakeeha, and Nissrine El Hassan. High carbon-resistant nickel supported on yttria- zirconia catalysts for syngas production by dry reforming of methane: The promoting effect of cesium. *ALEXANDRIA ENGINEERING JOURNAL*, 74:371-386, JUL 1 2023.
- [ChE100] Abdelhamid Ajbar, Bilal Lamrani, and Emad Ali. Dynamic investigation of a coupled parabolic trough collector-phase change material tank for solar cooling process in arid climates. *ENERGIES*, 16(10), MAY 22 2023.
- [ChE101] N. Yoganandhan, P. Tamizhdurai, C. Kavitha, V. L. Mangesh, Nadavala Siva Kumar, Ahmed S. Al-Fatesh, R. Kumaran, and Praveen Kumar Basivi. Tio<sub>2</sub>/so<sub>4</sub>/ni@sba-15 catalysts for the selective oxidation of veratryl alcohol to veratraldehyde in a continuous reactor. *MOLECULAR CATALYSIS*, 546, JUL 15 2023.
- [ChE102] Nadavala Siva Kumar, Mohammad Asif, Anesh Manjaly Poullose, Ebrahim H. AlGhurabi, Shaddad S. Alhamedi, and Janardhan Reddy Koduru. Preparation, characterization, and chemically modified date palm fiber waste biomass for

enhanced phenol removal from an aqueous environment. MATERIALS, 16(11), MAY 30 2023.

- [ChE103] Amanullah Fatehmulla, Belqes A. A. Shamsan, Ahmed M. M. El-Naggar, Abdullah M. M. Aldhafiri, Nilam Qureshi, Taesung Kim, Muhammad Atif, Asif Mahmood, and Mohammad Asif. Physical characteristics, blue-green band emission and photocatalytic activity of au-decorated zno quantum dots-based thick films prepared using the doctor blade technique. MOLECULES, 28(12), JUN 2023.
- [ChE104] Abdulsalam Abdulaziz Al-Tamimi, Mehdi Tlija, Mustufa Haider Abidi, Arfat Anis, and Abd Elaty E. Abd Elgawad. Material extrusion of multi-polymer structures utilizing design and shrinkage behaviors: A design of experiment study. POLYMERS, 15(12), JUN 2023.
- [ChE105] Hana Bouchoucha, Salim Bekkouche, Slimane Merouani, Aissa Dehane, and Oualid Hamdaoui. Solar chlorine activation for efficient rhodamine b removal in strong basic ph: Processing conditions, radicals probing, and tio<sub>2</sub> nanocatalyst effect. CATALYSTS, 13(6), JUN 2023.
- [ChE106] Ali Alrahlah, Rawaiz Khan, Abdel-Basit Al-Odayni, Waseem Sharaf Saeed, Leonel S. Bautista, Sajjad Haider, Merry Angelyn Tan De Vera, and Abdulrahman Alshabib. Fabrication of novel pre-polymerized bisgma/silica nanocomposites: Physiomechanical considerations. JOURNAL OF FUNCTIONAL BIOMATERIALS, 14(6), JUN 2023.
- [ChE107] Emad Ali, Jamel Orfi, Hany AlAnsary, Ahmad S. S. Alsaadi, Noreddine Ghaffour, and Mohammed Khennich. Improved modelling and simulation of once-through and reverse multi-stage flash desalination configurations. CANADIAN JOURNAL OF CHEMICAL ENGINEERING, 101(12):7173-7190, DEC 2023.
- [ChE108] Nadia Parveen, N. U. Rehman, Nisar Hussain, Abdul Majid, Mohammad Alkhedher, Sajjad Haider, and Muhammad Saeed Akhtar. Structural, optical and morphological investigations of silver nanoparticles prepared via microplasma glow discharge. OPTICAL AND QUANTUM ELECTRONICS, 55(6), JUN 2023.
- [ChE109] Rab Nawaz, Sajjad Haider, Muzammil Anjum, Vipin Kumar Oad, Adnan Haider, Rawaiz Khan, Muhammad Aqif, Tahir Hanif, and Nasruulah Khan. Optimized photodegradation of palm oil agroindustry waste effluent using multivalent manganese- modified black titanium dioxide. ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, 30(31):77850-77874, JUL 2023.
- [ChE110] Anis H. Fakeeha, Ahmed S. Al-Fatesh, Vijay Kumar Srivastava, Ahmed A. Ibrahim, Abdulaziz A. M. Abahussain, Jihad K. Abu-Dahrieh, Mohammed F. Alotibi, and Rawesh Kumar. Hydrogen production from gadolinium-promoted yttrium-zirconium- supported ni catalysts through dry methane reforming. ACS OMEGA, 8(24):22108- 22120, JUN 8 2023.
- [ChE111] Khalida Naseem, Muhammad Arif, Aneela Anwar, Sajjad Haider, and Muhammad Saeed Akhtar. Investigating adsorptive potential of raphanus caudatus leaves biomass for methyl orange dye: isotherm and kinetic study. ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF

RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS, 237(8):1183-1205, AUG 28 2023.

- [ChE112] Hamza Ferkous, Oualid Hamdaoui, and Christian Petrier. Sonochemical formation of peroxyxynitrite in water: Impact of ultrasonic frequency and power. *ULTRASONICS SONOCHEMISTRY*, 98, AUG 2023.
- [ChE113] Atef Chibani, Aissa Dehane, Slimane Merouani, and Oualid Hamdaoui. Phase change material (pcm)-based thermal storage system for managing the sonochemical reactor heat: Thermodynamic analysis of the liquid height impact. *ULTRASONICS SONOCHEMISTRY*, 98, AUG 2023.
- [ChE114] Manal A. A. Awad, Meznah M. M. Alanazi, Awatif A. Hendi, Promy Virk, Albandari W. W. Alrowaily, Taghreed Bahloul, Fatimah Al-Abbas, Fatma Aouaini, and Khalid M. O. Ortashi. Synthesis of nano-crystalline whiskers of cheese and their efficacy against cadmium toxicity. *CRYSTALS*, 13(7), JUL 2023.
- [ChE115] Saeed Alhawtali, Mohanad El-Harbawi, Abdulrhman S. Al-Awadi, Lahssen El Blidi, Maher M. Alrashed, and Chun-Yang Yin. Enhanced adsorption of methylene blue using phosphoric acid-activated hydrothermal carbon microspheres synthesized from a variety of palm-based biowastes. *COATINGS*, 13(7), JUL 2023.
- [ChE116] Ubair Abdus Samad, Mohammad Asif Alam, Hany S. Abdo, Arfat Anis, and Saeed M. Al-Zahrani. Synergistic effect of nanoparticles: Enhanced mechanical and corrosion protection properties of epoxy coatings incorporated with sio<sub>2</sub> and zro<sub>2</sub>. *POLYMERS*, 15(14), JUL 2023.
- [ChE117] Arfat Anis, Manawwer Alam, Abdullah Alhamidi, Ravindra Kumar Gupta, Mohammad Tariq, and Saeed M. Al-Zahrani. Studies on polybenzimidazole and methanesulfonate protic-ionic-liquids-based composite polymer electrolyte membranes. *POLYMERS*, 15(13), JUL 2023.
- [ChE118] Mohammad Asif Alam, Ubair Abdus Samad, Arfat Anis, El-Sayed M. Sherif, Hany S. S. Abdo, and Saeed M. M. Al-Zahrani. The effect of zirconia nanoparticles on thermal, mechanical, and corrosion behavior of nanocomposite epoxy coatings on steel substrates. *MATERIALS*, 16(13), JUL 2023.
- [ChE119] K. Balamurugan, Vigneshwaran Shanmugam, Geetha Palani, R. Sundarakanna T. Sathish, Emanoil Linul, Sher Afghan Khan, and Mohammad Asif. Effect of tic/rha on solid particle erosion of al6061 hybrid composites fabricated through a 2-step ultrasonic-assisted stir casting process. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 25:4888-4900, JUL-AUG 2023.
- [ChE120] Hammad Ahmad Jan, Ahmed I. Osman, Ahmed S. Al-Fatesh, Ghzzai Almutairi, Igor Surina, Raja Lafi Al-Otaibi, Nabil Al-Zaqri, Rawesh Kumar, and David W. Rooney. Biodiesel production from sisymbrium irio as a potential novel biomass waste feedstock using homemade titania catalyst. *SCIENTIFIC REPORTS*, 13(1), JUL 12 2023.
- [ChE121] Alia Jabeen, Abdul Majid, Mohammad Alkhedher, Sajjad Haider, and

Muhammad Saeed Akhtar. Impacts of structural downscaling of inorganic molecular crystals-a dft study of sb<sub>2</sub>o<sub>3</sub>. MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, 166, NOV 1 2023.

- [ChE122] Ahmed S. S. Al-Fatesh, Kenit Acharya, Ahmed I. I. Osman, Anish H. H. Fakeeha, Ahmed A. A. Ibrahim, Abdulaziz A. M. Abahussain, Abdulaziz Bagabas, Ahmed E. E. Abasaeed, and Rawesh Kumar. Rh promoted ni over yttria-zirconia supported catalyst for hydrogen-rich syngas production through dry reforming of methane. ENERGY SCIENCE & ENGINEERING, 11(9):3265-3275, SEP 2023.
- [ChE123] Radwa A. El-Salamony, Kenit Acharya, Ahmed S. Al-Fatesh, Ahmed I. Osman, Salwa B. Alreshaidan, Nadavala Siva Kumar, Hamid Ahmed, and Rawesh Kumar. Enhanced direct methanation of co<sub>2</sub> using ni-based catalysts supported on zro<sub>2</sub>, ceo<sub>2</sub>-zro<sub>2</sub>, and la<sub>2</sub>o<sub>3</sub>-zro<sub>2</sub>: The effect of support material on the reducible ni-interacted species and catalytic activity. MOLECULAR CATALYSIS, 547, AUG 2023.
- [ChE124] Ruihong Zhang, Tayyaba Mubashir, Muhammad Sulaman, Najam Ul Hassan, Sajjad Haider, and Mudassir Hussain Tahir. Rational polymer design for organic solar cells through similarity index-based data mining. COMPUTATIONAL AND THEORETICAL CHEMISTRY, 1227, SEP 2023.
- [ChE125] Yasir Arafat, Yijun Zhong, Muhammad R. Azhar, Mohammad Asif, Moses O. Tade, and Zongping Shao. Conife-layered double hydroxide decorated co-n-c network as a robust bi-functional oxygen electrocatalyst for zinc-air batteries. ECOMAT, 2023 JUL 21 2023.
- [ChE126] Emad Ali, Abdullah Najib, Jamel Orfi, and Fahad Awjah Almeahmadi. Improved model structure of direct contact membrane distillation for saline water purification. CHEMICAL ENGINEERING COMMUNICATIONS, 2023 JUL 31 2023.
- [ChE127] Erdem Cuce, Pinar Mert Cuce, Emre Alvur, Yusuf Nadir Yilmaz, Shaik Saboor, Ilker Ustabas, Emanoil Linul, and Mohammad Asif. Experimental performance assessment of a novel insulation plaster as an energy-efficient retrofit solution for external walls: A key building material towards low/zero carbon buildings. CASE STUDIES IN THERMAL ENGINEERING, 49, SEP 2023.
- [ChE128] Babasaheb Ingale, Digambar Nadargi, Jyoti Nadargi, Rangrao Suryawanshi, Hamid Shaikh, Mohammad Asif Alam, Mohaseen S. S. Tamboli, and Sharad S. S. Suryavanshi. Evaluation of structural, magnetic, and electromagnetic properties of co<sub>2</sub><sup>+</sup> substituted nicuzn ferrites. ACS OMEGA, 8(33):30508-30518, AUG 8 2023.
- [ChE129] Abdul Majid, Bazgha Khadim, Mohammad Alkhedher, Sajjad Haider, and Muhammad Saeed Akhtar. Modeling of inert gas sensors using first principles methods. IEEE SENSORS JOURNAL, 23(16):18118-18124, AUG 15 2023.
- [ChE130] Sajjad Haider, Rab Nawaz, Muzammil Anjum, Tahir Haneef, Vipin Kumar Oad, Salah Uddinkhan, Rawaiz Khan, and Muhammad Aqif. Property-performance relationship of core-shell structured black tio<sub>2</sub> photocatalyst for environmental remediation. FRONTIERS OF ENVIRONMENTAL SCIENCE & ENGINEERING, 17(9),

SEP 2023.

[ChE131] Adil Mubeen, Abdul Majid, Mohammad Alkhedher, Sajjad Haider, and Muhammad Saeed Akhtar. First principles investigations on electronic and magnetic properties of fe: Sno monolayer. OPTICAL AND QUANTUM ELECTRONICS, 55(10), OCT 2023.

# CIVIL ENGINEERING

## PUBLICATIONS

- [CE1] Hamdy A. Abdel-Gawwad, Aya H. Mohammed, Mohamed A. Arif, Hamada Shoukry, Aref A. Abadel, Hussein Al-Kroom, Pawel Sikora, and Mohamed Abd Elrahman. Role of magnesium chloride in the performance and phase composition of lead glass sludge foam. *MATERIALS LETTERS*, 320, AUG 1 2022.
- [CE2] Amir Detho, Zawawi Daud, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojjil, Abdulrhman Alali, Mohd Fadhil Md Din, Mohd Arif Rosli, Asif Ali Memon, Halizah Awang, and Mohd Baharudin Ridzuan. Adsorption of chemical oxygen demand and ammoniacal nitrogen removal from leachate using seafood waste (green mussel shell) as low-cost adsorbent. *DESALINATION AND WATER TREATMENT*, 260:102-110, JUN 2022.
- [CE3] Naif Alsanabani, Ahmed Alnuaim, Abdulhafiz Alshenawy, and Wagdi Hamid. Behaviour of foundation rested on finite saturated salt-encrusted flat soil (sabkha) improved by cement addition under repeated loading. *GEOTECHNICAL ENGINEERING*, 53(2):1-7, JUN 2022.
- [CE4] Abdulaziz Alsaif and Yousef R. Alharbi. Strength, durability and shrinkage behaviours of steel fiber reinforced rubberized concrete. *CONSTRUCTION AND BUILDING MATERIALS*, 345, AUG 22 2022.
- [CE5] I. M. Navaneeth, Suhas Poojary, A. Chandrashekar, Abdul Razak, Nasim Hasan, and Abdulaziz Ibrahim Almohana. Damped free vibration analysis of woven glass fiberreinforced epoxy composite laminates. *ADVANCES IN MATERIALS SCIENCE AND ENGINEERING*, 2022, JUL 7 2022.
- [CE6] Ahmed Abdulrhman Al-Othman, Parminder Kaur, Monzur A. Imteaz, Mahmoud Ezzeldin Hashem Ibrahim, Mika Sillanpaa, and Mohab Amin Mohamed Kamal. Modified bio-electrocoagulation system to treat the municipal wastewater for irrigation purposes. *CHEMOSPHERE*, 307(1), NOV 2022.
- [CE7] Tao Hai, Hayder A. Dhahad, El-Awady Attia, Banar Fareed Ibrahim, Abdullah Mohamed, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Babak Farhang. Proposal 3e analysis and multi-objective optimization of a new biomass-based energy system based on the organic cycle and ejector for the generation of sustainable power, heat, and cold. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 53(B), OCT 2022.
- [CE8] Tao Hai, Hayder A. Dhahad, El-Awady Attia, Zahriladha Zakaria, Shima Rashidi, Pradeep Kumar Singh, Mohamed A. Shamseldin, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Babak Farhang, and Yan Cao. Design, modeling and multi-objective techno-economic optimization of an integrated supercritical brayton cycle with solar power tower for efficient hydrogen production. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 53(B), OCT 2022.

- [CE9] Tao Hai, Hayder A. Dhahad, Pradeep Kumar Singh, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, El-Awady Attia, Mohamed A. Shamseldin, and Ahmed Najat Ahmed. Innovative proposal of energy scheme based on biogas from digester for producing clean and sustainable electricity, cooling and heating: Proposal and multi-criteria optimization. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 53(B), OCT 2022.
- [CE10] Tao Hai, Hayder A. Dhahad, Jincheng Zhou, El-Awady Attia, Teeba Ismail Kh, Mohamed A. Shamseldin, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. The novel integration of biomass gasification plant to generate efficient power, and the waste recovery to generate cooling and freshwater: A demonstration of 4e analysis and multi-criteria optimization. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 53(C), OCT 2022.
- [CE11] Xiaocui Yang, Sattam Fahad Almojjil, Yang Yang, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Ali A. Rajhi, Sagr Alamri, Farah Qasim, Yi Ren, Zhongfeng Zhang, Amir Raise, and Ali E. Anqi. The effect of using phase change materials in the walls of a building on the amount of carbon dioxide production and reducing fuel consumption. JOURNAL OF BUILDING ENGINEERING, 59, NOV 1 2022.
- [CE12] Raja Rizwan Hussain, Abdulrahman M. Alhozaimy, and Abdulaziz Al-Negheimish. Effect of curing compounds on the quality of passive layer development under varying oxygen concentration for rc structures in the course of early curing of concrete. CONSTRUCTION AND BUILDING MATERIALS, 350, OCT 3 2022.
- [CE13] Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Rishabh Chaturvedi, Sadok Mehrez, Abdullah Mohamed, Shima Rashidi, and Yan Cao. A novel g-c3n4-nanosheets/ni3v2o8 n-p heterojunction nanocomposite: A promising photocatalyst with enhanced photocatalytic degradation of tetracycline under visible light irradiation. MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, 152, DEC 2022.
- [CE14] H. Shoukry, Priyadharshini Perumal, Aref Abadel, Hussam Alghamdi, Mohammed Alamri, and Hamdy A. Abdel-Gawwad. Performance of limestone-calcined clay cement mortar incorporating high volume ferrochrome waste slag aggregate. CONSTRUCTION AND BUILDING MATERIALS, 350, OCT 3 2022.
- [CE15] Amir Detho, Aftab Hameed Memon, Abdulrhman Fahmi Alali, Abdulaziz Ibrahim Almohana, Sattam Fahad Almojjil, Asif Ali Memon, Mohd Arif Rosli, and Mohd Fadhil Md Din. Ammoniacal nitrogen, chemical oxygen demand, and color reduction in rubber processing industry effluent using zeolite. DESALINATION AND WATER TREATMENT, 270:185-193, SEP 2022.
- [CE16] Asad Elmagarhe, Qing Lu, Mohammad Alharthai, Mohammed Alamri, and Ahmed Elnihum. Performance of porous asphalt mixtures containing recycled concrete aggregate and fly ash. MATERIALS, 15(18), SEP 2022.
- [CE17] Saleh M. Alsultan, Fahad K. Alqahtani, and Khalid F. Alkahtani. Health and safety in temporary work zone road construction project in saudi arabia: Risks and



- solutions. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, 19(17), SEP 2022.
- [CE18] Endre Harsanyi, Bashar Bashir, Firas Alsilibe, Muhammad Farhan Ul Moazzam, Tamas Ratonyi, Abdullah Alsalman, Adrienn Szeles, Aniko Nyeki, Istvan Takacs, and Safwan Mohammed. Predicting modified fournier index by using artificial neural network in central europe. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH, 19(17), SEP 2022.
- [CE19] Abdulaziz Ibrahim Almohana, Sattam Fahad Almojil, Abdulrhman Fahmi Alali, Ali E. Anqi, Ali A. Rajhi, SAGR Alamri, Hayder A. Dhahad, Ahmed Najat Ahmed, and Abdullah Mohamed. Mathematical simulation and optimization of a waste energy recovery for an internal combustion engine integrated with scco2 cycle and modified kalina cycle. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 54(C), OCT 2022.
- [CE20] Aref A. Abadel, Radhouane Masmoudi, and M. Iqbal Khan. Axial behavior of square and circular concrete columns confined with cfrp sheets under elevated temperatures: Comparison with welded-wire mesh steel confinement. STRUCTURES, 45:126-144, NOV 2022.
- [CE21] Mohammed A. Al-Saawani, Ahmed K. El-Sayed, and Abdulaziz Al-Negheimish, I. Inclined frp u-wrap anchorage for preventing concrete cover separation in frp strengthened rc beams. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, 48(4):4879-4892, APR 2023.
- [CE22] Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Ali A. Rajhi, SAGR Alamri, Ali E. Anqi, Abdulrhman Fahmi Alali, Kamal Sharma, Abdullah Mohamed, Mohamed A. Shamseldin, and Azheen Ghafour Mohammed. Using solar energy and phase change materials to supply energy to a building to reduce environmental pollution. JOURNAL OF BUILDING ENGINEERING, 61, DEC 1 2022.
- [CE23] Anwar Khursheed, Muntjeer Ali, Faris Mohammad A. Munshi, Abdulrhman Fahmi Alali, Mohab Amin Kamal, Abdulaziz Ibrahim Almohana, Omar Alrehaili, Rubia Z. Gaur, Vinay Kumar Tyagi, Abid Ali Khan, and Gaurav Goel. Enhanced combined assimilative and bound phosphorus uptake in concurrence with nitrate removal in pre-anoxic cyclic sequencing batch reactor. ENVIRONMENTAL TECHNOLOGY & INNOVATION, 28, NOV 2022.
- [CE24] Abdulaziz Ibrahim Almohana, Sattam Fahad Almojil, Mohab Amin Kamal, Abdulrhman Fahmi Alali, Mehnaz Kamal, Samah Elsayed Alkhatib, Bassem F. Felemban, and Mohammed Algarni. Theoretical investigation on optimization of biodiesel production using waste cooking oil: Machine learning modeling and experimental validation. ENERGY REPORTS, 8:11938-11951, NOV 2022.
- [CE25] Alaa Mohsen, Mohamed Kohail, Aref A. Abadel, Yousef R. Alharbi, Moncef L. Nehdi, and M. Ramadan. Correlation between porous structure analysis, mechanical efficiency and gamma-ray attenuation power for hydrothermally treated slag-glass waste-based geopolymer. CASE STUDIES IN CONSTRUCTION MATERIALS, 17, DEC 2022.

- [CE26] Minglong Zhang, Ying Liu, Sattam Fahad Almojil, Ali A. Rajhi, Sagr Alamri, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Ali E. Anqi, Zhenzhong Tang, and Teeba Ismail Kh. The effect of using phase change materials in solar panel cooling to provide green and sustainable energy of a building. *JOURNAL OF BUILDING ENGINEERING*, 57, OCT 1 2022.
- [CE27] Abdulaziz Alsaif and Mohammad Alshannag. Flexural behavior of portland cement mortars reinforced with hybrid blends of recycled waste fibers. *SUSTAINABILITY*, 14(20), OCT 2022.
- [CE28] Ahmed M. Al-Mahbashi, Muawia Dafalla, and Mosleh Al-Shamrani. Long-term performance of liners subjected to freeze-thaw cycles. *WATER*, 14(20), OCT 2022.
- [CE29] Gudla Amulya, Arif Ali Baig Moghal, B. Munwar Basha, and Abdullah Almajed. Coupled effect of granite sand and calcium lignosulphonate on the strength behavior of cohesive soil. *BUILDINGS*, 12(10), OCT 2022.
- [CE30] Ibrahim M. H. Alshaikh, Aref A. Abadel, Khaled Sennah, Moncef L. Nehdi, Rabin Tuladhar, and Mohammed Alamri. Progressive collapse resistance of rc beam-slab substructures made with rubberized concrete. *BUILDINGS*, 12(10), OCT 2022.
- [CE31] Abdullah H. Alsabhan, Md Rehan Sadique, Ali S. Alqarni, Shamshad Alam, and Wonho Suh. Behavior of sedimentary rock tunnel against rigid projectile impact. *APPLIED SCIENCES-BASEL*, 12(19), OCT 2022.
- [CE32] Yousef R. Alharbi and Aref A. Abadel. Engineering properties of high-volume fly ash modified cement incorporated with bottle glass waste nanoparticles. *SUSTAINABILITY*, 14(19), OCT 2022.
- [CE33] Tao Hai, Kosar Hikmat Hama Aziz, Jincheng Zhou, Hayder A. Dhahad, Kamal Sharma, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Teeba Ismail Kh, Sadok Mehrez, and Anas Abdelrahman. -neural network-based optimization of hydrogen fuel production energy system with proton exchange electrolyzer supported nanomaterial. *FUEL*, 332(1), JAN 15 2023.
- [CE34] Abdulrahman Albidah, Mohammed Alghannam, Hussam Alghamdi, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Influence of ggbfs and silica fume on characteristics of alkali-activated metakaolin-based concrete. *EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING*, 27(10):3260-3283, JUL 27 2023.
- [CE35] Abdulrhman Fahmi Alali, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Ali E. Anqi, Ali A. Rajhi, Sagr Alamri, and Hayder A. Dhahad. Hydroxyapatite@mnfe composite as a reusable sorbent for removal of Nile blue dye and Cr(VI) from polluted water. *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 30(7):18419-18437, FEB 2023.
- [CE36] Fahad K. Alqahtani, Mohamed A. Sherif, Amr M. Ghanem, and Ibrahim S. Abotaleb. Assessment of sustainable green lightweight concrete incorporated in

new construction technologies. KSCE JOURNAL OF CIVIL ENGINEERING, 26(12):4942-4959, DEC 2022.

- [CE37] Raja Rizwan Hussain, Abdulrahman M. Alhozaimy, and Abdulaziz Al-Negheimish. Role of scoria natural pozzolan in the passive film development for steel rebars in chloride-contaminated concrete environment. CONSTRUCTION AND BUILDING MATERIALS, 357, NOV 28 2022.
- [CE38] Tao Hai, Hayder A. Dhahad, Kamal Sharma, Sadok Mehrez, Anas Abdelrahman, Sattam Fahad Almojl, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Azheen Ghafour Mohammed. Dynamic simulation and 3e optimization with an environmental assessment of an efficient energy plant for generation of fresh water by humidification-dehumidification technology and green power and h2. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 54, DEC 2022.
- [CE39] Abdulaziz Alsaif, Abdulrahman Albidah, Aref Abadel, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Behavior of ternary blended cementitious rubberized mixes reinforced with recycled tires steel fibers under different types of impact loads. STRUCTURES, 45:2292-2305, NOV 2022.
- [CE40] Tao Hai, Hayder A. Dhahad, Jincheng Zhou, Anas Abdelrahman, Sattam Fahad Almojl, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Teeba Ismail Kh, Kamal Sharma, Masood Ashraf Ali, and Khaled Twfiq Almoalimi. Implementation of artificial neural network in a building benefits from radiant floor heating/cooling enhanced by phase change materials. ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 146:66-79, JAN 2023.
- [CE41] Sawaira, Mabkhoot Alsaieri, Mushtaq Ahmad, Mamoona Munir, Muhammad Zafar, Shazia Sultana, Sumreen Dawood, Abdulaziz Ibrahim Almohana, M. H. AlMarzouki Hassan, Abdulrahman Faraj Alharbi, and Zubair Ahmad. Efficient application of newly synthesized green bi2o3 nanoparticles for sustainable biodiesel production via membrane reactor. CHEMOSPHERE, 310, JAN 2023.
- [CE42] Ahmed M. Alnuaim, Naif M. Alsanabani, Abdulhafiz O. Alshenawy, and Omar S. Baghabra Al-Amoudi. Vibrating behavior of foundations resting on salt-encrusted flat (sabkha) soil improved using cement. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, 48(4):5243-5266, APR 2023.
- [CE43] Tao Hai, Hayder A. Dhahad, Masood Ashraf Ali, Vishal Goyal, Sattam Fahad Almojl, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, and Farah Qasim Ahmed Alyousuf. Utilization of machine learning and neural networks to optimize the enclosure angle, magnetic field, and radiation parameter for mixed convection of hybrid nanofluid flow next to assess environmental impact. ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 146:252-262, JAN 2023.
- [CE44] Muawia Dafalla, Abdullah Shaker, and Mosleh Al-Shamrani. Use of the dynamic cone penetrometer in compacted clay-sand layers. APPLIED SCIENCES-BASEL, 12(22), NOV 2022.
- [CE45] Husain Abbas, Nadeem Siddiqui, Tarek Almusallam, Aref Abadel, and Yousef

- AlSalloum. Prediction of ballistic limit of strengthened reinforced concrete slabs using quasi-static punching test. *BUILDINGS*, 12(11), NOV 2022.
- [CE46] Ahmed Alnuaim, Ahmed M. Al-Mahbashi, and Muawia Dafalla. Utilizing tunnel boring machine (tbn)-crushed limestone as a construction material. *MATERIALS*, 15(21), NOV 2022.
- [CE47] Hani Alanazi, Oussama Elalaoui, Musa Adamu, Saleh O. Alaswad, Yasser E. Ibrahim, Aref A. Abadel, and Abdulrahman Fahad Al Fuhaid. Mechanical and microstructural properties of ultra-high performance concrete with lightweight aggregates. *BUILDINGS*, 12(11), NOV 2022.
- [CE48] Ahmed Altouma, Vladimir Krepl, Bashar Bashir, and Hussein Bachir. Impact of economic growth, agriculture, and primary energy consumption on carbon dioxide emissions in the czech republic. *ENERGIES*, 15(21), NOV 2022.
- [CE49] Rashid Maqbool, Mohammed Rayan Saiba, Ayman Altuwaim, Yahya Rashid, and Saleha Ashfaq. The influence of industrial attitudes and behaviours in adopting sustainable construction practices. *SUSTAINABLE DEVELOPMENT*, 31(2):893-907, APR 2023.
- [CE50] Mansour AlOtaibi, Khaled El-Rayes, and Ayman Altuwaim. Optimal planning of renovation work in leased buildings under integrated project delivery method. *JOURNAL OF MANAGEMENT IN ENGINEERING*, 38(6), NOV 1 2022.
- [CE51] Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, El-Awady Attia, Kamal Sharma, Mohamed A. Shamseldin, Azheen Ghafour Mohammed, and Yan Cao. Oxygen vacancy and p-n heterojunction in a g-c<sub>3</sub>n<sub>4</sub> nanosheet/cufeo<sub>2</sub> nanocomposite for enhanced photocatalytic n<sub>2</sub> fixation to nh<sub>3</sub> under ambient conditions. *NEW JOURNAL OF CHEMISTRY*, 46(45):21625-21639, NOV 21 2022.
- [CE52] Sattam Fahad Almojil, Masood Ashraf Ali, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, Sultan Althahban, Kamal Sharma, and Ahmed Najat Ahmed. Constructing a zno/cuco<sub>2</sub>o<sub>4</sub> p-n heterojunction photocatalyst for efficiently hexavalent chromium-phenol detoxification and nitrogen fixation. *JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS*, 172, JAN 2023.
- [CE53] Hussein Elsanadedy, Halil Sezen, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Progressive collapse risk of steel framed building considering column buckling. *ENGINEERING SCIENCE AND TECHNOLOGY-AN INTERNATIONAL JOURNAL-JESTECH*, 35, NOV 2022.
- [CE54] M. Iqbal Khan, S. Umer Sial, Galal Fares, Mohamed ElGawady, Shehab Mourad, and Yousef Alharbi. Flexural performance of beams strengthened with a strain-hardening cementitious composite overlay. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 17, DEC 2022.
- [CE55] Jincheng Zhou, Tao Hai, Masood Ashraf Ali, Mohamed A. Shamseldin, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Waste

- heat recovery of a wind turbine for poly-generation purpose: Feasibility analysis, environmental impact assessment, and parametric optimization. *ENERGY*, 263(D), JAN 15 2023.
- [CE56] Fouad Ismail Ismail, Nasir Shafiq, Yassir M. Abbas, Naraindas Bheel, Omrane Benjeddou, Mahmood Ahmad, Mohanad Muayad Sabri, and El Sayed Ateya. Behavioral assessment of graphene nanoplatelets reinforced concrete beams by experimental, statistical, and analytical methods. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 17, DEC 2022.
- [CE57] Ahmed M. Al-Mahbashi and Mosleh Al-Shamrani. Long-term and immediate effects of freeze-thaw cycles on the resilient modulus of treated expansive subgrades. *ROAD MATERIALS AND PAVEMENT DESIGN*, 24(10):2411-2424, OCT 3 2023.
- [CE58] Tao Hai, Masood Ashraf Ali, Rishabh Chaturvedi, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, Farah Qasim Ahmed Alyousuf, and Mohamed A. Shamseldin. A low-temperature driven organic rankine cycle for waste heat recovery from a geothermal driven kalina cycle: 4e analysis and optimization based on artificial intelligence. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 55, FEB 2023.
- [CE59] Dan Wang, Hayder A. Dhahad, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Kamal Sharma, and Mohamed A. Shamseldin. Two-phase simulation and environmental consideration of thermo-hydraulic behavior and entropy production of water/tio<sub>2</sub>-swcnt hybrid nanofluid in a u-shaped heat exchanger equipped with needle fins of different sizes. *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*, 146:928-938, JAN 2023.
- [CE60] Tao Hai, Masood Ashraf Ali, Jincheng Zhou, Hayder A. Dhahad, Vishal Goyal, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, and Ahmed Najat Ahmed. Feasibility and environmental assessments of a biomass gasification-based cycle next to optimization of its performance using artificial intelligence machine learning methods. *FUEL*, 334(1), FEB 15 2023.
- [CE61] Abdulrahman S. Albidah. Shear behaviour of metakaolin-fly ash based geopolymers concrete deep beams. *ENGINEERING STRUCTURES*, 275(B), JAN 15 2023.
- [CE62] Khalid Al-Gahtani, Abdulah Alsugair, Naif Alsanabani, Abdulmajeed Alabduljabbar, and Bader Almutairi. Forecasting delay-time model for saudi construction projects using dematel-sd technique. *INTERNATIONAL JOURNAL OF CONSTRUCTION MANAGEMENT*, 2022 NOV 28 2022.
- [CE63] Ayoub Al-Zabidi, Mohammed Almannaa, Mohammed Elhenawy, and Anis Gharbi. Statistical modeling of emergency medical services' response and rescue times to road traffic crashes in the kingdom of saudi arabia. *CASE STUDIES ON TRANSPORT POLICY*, 10(4):2563-2575, DEC 2022.
- [CE64] Dan Wang, Masood Ashraf Ali, Kamal Sharma, Sattam Fahad Almojjil, As'ad Alizadeh, Abdulrhman Fahmi Alali, and Abdulaziz Ibrahim Almohana. Multiphase

- numerical simulation of exergy loss and thermo-hydraulic behavior with environmental considerations of a hybrid nanofluid in a shell-and-tube heat exchanger with twisted tape. *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*, 147:1-10, FEB 2023.
- [CE65] Fouad Ismail Ismail, Nasir Shafiq, Yassir M. Abbas, El Sayed Ateya, Muhammad Zahid, Naraindas Bheel, Omrane Benjeddou, and Isyaka Abdulkadir. The behavior of graphene-nanoplatelets-based high-performance concrete under ambient curing. *STRUCTURES*, 47:694-708, JAN 2023.
- [CE66] Mohammed Almannaa, Cat Woodson, Huthaifa Ashqar, and Mohammed Elhenawy. The covid-19 impacts on bikeshare systems in small rural communities: Case study of bikeshare riders in montgomery county, va. *PLOS ONE*, 17(12), DEC 1 2022.
- [CE67] Gift Nxumalo, Bashar Bashir, Karam Alsafadi, Hussein Bachir, Endre Harsanyi, Sana Arshad, and Safwan Mohammed. Meteorological drought variability and its impact on wheat yields across south africa. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*, 19(24), DEC 2022.
- [CE68] Karam Alsafadi, Shuoben Bi, Bashar Bashir, Safwan Mohammed, Saad Sh. Sammen, Abdullah Alsalman, Amit Kumar Srivastava, and Ahmed El Kenawy. Assessment of carbon productivity trends and their resilience to drought disturbances in the middle east based on multi-decadal space-based datasets. *REMOTE SENSING*, 14(24), DEC 2022.
- [CE69] Abdullah M. Alsugair. Cost deviation model of construction projects in saudi arabia using pls-sem. *SUSTAINABILITY*, 14(24), DEC 2022.
- [CE70] Ali S. Alqarni, Abdulrahman Albidah, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Concrete performance produced using recycled construction and byproduct industrial waste coarse aggregates. *MATERIALS*, 15(24), DEC 2022.
- [CE71] Fahad K. Alqahtani, Abdulaziz Alsanad, Ahmed Alsadat, Mohamed Sherif, and Ahmed Gouda Mohamed. Scrutinizing the adoption of integrated project delivery in the kingdom of saudi arabia construction sector. *BUILDINGS*, 12(12), DEC 2022.
- [CE72] Fahad K. Alqahtani. A sustainable alternative for green structural lightweight concrete: Performance evaluation. *MATERIALS*, 15(23), DEC 2022.
- [CE73] Mohammed H. Almannaa, Max G. Bareiss, Luke E. Riexinger, and Feng Guo. Indepth evaluation of association between crash and hand arthritis via naturalistic driving study. *APPLIED SCIENCES-BASEL*, 12(23), DEC 2022.
- [CE74] Mahmoud Elnobi, Bashar Bashir, Abdullah Alsalman, and Hussein Bachir. Geospatial analytics for preliminarily landscape active tectonic assessment of the wadi araba basin, western gulf of suez, egypt. *APPLIED SCIENCES-BASEL*, 12(23), DEC 2022.
- [CE75] Dan Wang, Masood Ashraf Ali, Kamal Sharma, Teeba Ismail Kh., Abdulrhman Fahmi

- Alali, Abdulaziz Ibrahim Almohana, and Sattam Fahad Almojjil. The application of two-phase model to assess the nanofluid entropy generation in serpentine and double- serpentine heatsinks. ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 147:39-50, FEB 2023.
- [CE76] A. Detho, A. I. Almohana, S. F. Almojjil, and A. F. Alali. Equilibrium and kinetics studies on cod and ammoniacal nitrogen using carbon mineral composite: green mussel and zeolite. INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, 2022 DEC 5 2022.
- [CE77] Dan Wang, Hayder A. Dhahad, Masood Ashraf Ali, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, and Kamal Sharma. A comparative numerical analysis and environment assessment to examine hydrothermal behavior of two serpentine heatsink with water/silver nano fluid applying two-phase mixture model. ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 146:966-976, JAN 2023.
- [CE78] Dan Wang, Monika Goyal, Masood Ashraf Ali, Banar Fareed Ibrahim, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Hayder A. Dhahad. Cfd analysis and environmental assessment on the heat transfer and flow of the pure water or water/silver nano fluid coolants in a plate-fin heat sink applying two- phase mixture model. ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 146:977-988, JAN 2023.
- [CE79] Tao Hai, Masood Ashraf Ali, Hayder A. Dhahad, As'ad Alizadeh, Aman Sharma, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Dan Wang. Optimal design and transient simulation next to environmental consideration of net-zero energy buildings with green hydrogen production and energy storage system. FUEL, 336, MAR 15 2023.
- [CE80] Hussein Elsanadedy, Louai Alaoud, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Externally bonded cfrp composites versus steel stirrups for the confinement of substandard lap spliced gfrp bars in rc beams. COMPOSITE STRUCTURES, 306, FEB 15 2023.
- [CE81] Husain Abbas, Hussein Elsanadedy, Louai Alaoud, Tarek Almusallam, and Yousef Al-Salloum. Effect of confining stirrups and bar gap in improving bond behavior of glass fiber reinforced polymer (gfrp) bar lap splices in rc beams. CONSTRUCTION AND BUILDING MATERIALS, 365, FEB 15 2023.
- [CE82] Yassir M. Abbas. Shear behavior of ultra-high-performance reinforced concrete beams-finite element and uncertainty quantification study. STRUCTURES, 47:2365- 2380, JAN 2023.
- [CE83] Jing Luo, Qian Li, Masood Ashraf Ali, As'ad Alizadeh, Amir Raise, Abdulrhman Fahmi Alali, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, and Khaled Twfiq Almoalimi. Experimental investigation of the rheological behaviors of bitumen and stone matrix asphalt mixtures using waste material. CONSTRUCTION AND BUILDING MATERIALS, 365, FEB 15 2023.
- [CE84] Rashid Maqbool, Johnny Rezai Namaghi, Yahya Rashid, and Ayman Altuwaim.

How modern methods of construction would support to meet the sustainable construction 2025 targets, the answer is still unclear. AIN SHAMS ENGINEERING JOURNAL, 14(4), APR 5 2023.

- [CE85] Tao Hai, Jincheng Zhou, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Sadok Mehrez, Abdullah Mohamed, Kamal Sharma, Azheen Ghafour Mohammed, and Khaled Twfiq Almoalimi. Deep learning optimization and techno- environmental analysis of a solar-driven multigeneration system for producing sustainable hydrogen and electricity: A case study of san francisco. INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 48(6):2055-2074, JAN 19 2023.
- [CE86] Abdullah H. Alsabhan, Jibrán Qadri, Md Rehan Sadique, Shamshad Alam, Kahkashan Perveen, and Abobaker Salem Binyahya. Soil stabilization using silicon carbide (sic) nanoparticles: Confirmation using xrd, sem, and ftir. JOURNAL OF CIVIL ENGINEERING AND MANAGEMENT, 29(3):194-201, 2023.
- [CE87] Hussein Elsanadedy, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Performance of concentrically loaded rc wall-like columns upgraded with innovative hybrid nsm/cfrp system. POLYMERS, 15(2), JAN 2023.
- [CE88] Ahmed M. Sayed, Hani Alanazi, Aref A. Abadel, Yousef R. Alharbi, and Mohd F. Shamsudin. Experimental analysis of channel steel member under tension load with damage in the unconnected legs. MATERIALS, 16(2), JAN 2023.
- [CE89] Ahmed R. R. ElQasaby, Fahad K. K. Alqahtani, and Mohammed Alheyf. Automated schedule and cost control using 3d sensing technologies. APPLIED SCIENCES- BASEL, 13(2), JAN 2023.
- [CE90] Husain Abbas, S. M. Ibrahim, Naif Al-Hazmi, Hussein Elsanadedy, Tarek Almusallam, and Yousef Al-Salloum. Axial compression behavior of wall-like reinforced concrete columns retrofitted using different frp schemes. BUILDINGS, 13(1), JAN 2023.
- [CE91] Ahmed K. El-Sayed, Abdulaziz I. Al-Negheimish, Abdulrahman M. Alhozaimy, and Mohammed A. Al-Saawani. Evaluation of web shear design procedures for precast prestressed hollow core slabs. BUILDINGS, 13(1), JAN 2023.
- [CE92] Nadeem Siddiqui, Husain Abbas, Tarek Almusallam, Q. M. Li, and Yousef AlSalloum. Reliability assessment of steel-lined and prestressed frc slabs against projectile impact. APPLIED SCIENCES-BASEL, 13(1), JAN 2023.
- [CE93] Amir Detho, Asif Ali Memon, Aftab Hameed Memon, Abdulaziz Ibrahim Almohana, Zawawi Daud, and Mohd Arif Rosli. Sorption kinetics, isotherm studies and mechanism of removal of organic and inorganic by adsorption onto renewable biomineral. WATER AIR AND SOIL POLLUTION, 234(1), JAN 2023.
- [CE94] Tao Hai, Masood Ashraf Ali, As 'ad Alizadeh, Hayder A. Dhahad, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Vishal Goyal, and Babak Farhang. Second law evaluation and environmental analysis of biomass-fired power plant hybridized with geothermal energy. SUSTAINABLE ENERGY



TECHNOLOGIES AND ASSESSMENTS, 56, MAR 2023.

- [CE95] Omar Alrehaili, Ana S. Fajardo, Sergi Garcia-Segura, and Paul Westerhoff. Microfluidic flow-by reactors minimize energy requirements of electrochemical water treatment without adding supporting electrolytes. SEPARATION AND PURIFICATION TECHNOLOGY, 310, APR 1 2023.
- [CE96] Tao Hai, Masood Ashraf Ali, As'ad Alizadeh, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Bhupendra Singh Chauhan, Abdulrhman Fahmi Alali, and Amir Raise. Optimization next to environmental analysis of harvesting waste heat from a biomass-driven externally-fired gas turbine cycle for sub-zero cooling and production of hydrogen, freshwater, and hot water. APPLIED THERMAL ENGINEERING, 223, MAR 25 2023.
- [CE97] Mohammad Alshannag, Mansur Alshmalani, Abdulaziz Alsaif, and Mahmoud Higazey. Flexural performance of high-strength lightweight concrete beams made with hybrid fibers. CASE STUDIES IN CONSTRUCTION MATERIALS, 18, JUL 2023.
- [CE98] Mohammed Alrubaidi and Aref A. Abadel. Numerical study on upgrading beam-column connections in steel framed buildings for progressive collapse mitigation. STRUCTURES, 48:1576-1597, FEB 2023.
- [CE99] Dan Wang, Hayder A. Dhahad, Masood Ashraf Ali, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Farah Qasim Ahmed Alyousuf, and Khaled Twfiq Almoalimi. Environmental/economic assessment and multi-aspect optimization of a poly-generation system based on waste heat recovery of pem fuel cells. APPLIED THERMAL ENGINEERING, 223, MAR 25 2023.
- [CE100] Husain Abbas, Tarek Almusallam, Aref Abadel, Saleh Alenzi, and Yousef AISalloum. Shear strength of functionally graded self-compacting concrete deep beams reinforced with steel and gfrp bars. CASE STUDIES IN CONSTRUCTION MATERIALS, 18, JUL 2023.
- [CE101] Hong Hu Chu, Abdulaziz Ibrahim Almohana, Ghassan A. QasMarrogy, Sattam Fahad Almojjil, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, and Amir Raise. Experimental investigation of performance properties of asphalt binder and stone matrix asphalt mixture using waste material and warm mix additive. CONSTRUCTION AND BUILDING MATERIALS, 368, MAR 3 2023.
- [CE102] Tarek Almusallam, Husain Abbas, Omar Hodali, Nadeem Siddiqui, and Yousef AISalloum. Behavior of prestressed fiber-reinforced steel-lined concrete slabs under projectile impact. ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING, 23(1), JAN 21 2023.
- [CE103] Mabkhoot Alsaieri, Awais Bokhari, Lai Fatt Chuah, Muhammad Mubashir, Farid A. Harraz, Abdulaziz Ibrahim Almohana, Pau Loke Show, Mukesh Kumar Awasthi, and Moustafa A. Rizk. Synthesis of methyl esters from hippophae rhamnoides via pilot scale hydrodynamic cavitation intensification reactor. RENEWABLE ENERGY, 205:238-247, MAR 2023.

- [CE104] Anwar Khursheed, Faris Mohammad A. Munshi, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Mohab Amin Kamal, Shamshad Alam, Omar Alrehaili, Dar Tafazul Islam, Manish Kumar, Sunita Varjani, A. A. Kazmi, and Vinay Kumar Tyagi. Resolution of conflict of reduced sludge production with ebpr by coupling osa to a2/o process in a pilot scale sbr. CHEMOSPHERE, 318, MAR 2023.
- [CE105] Hussein Elsanadedy, Mohammad Khawaji, Husain Abbas, Tarek Almusallam, and Yousef Al-Salloum. Numerical modeling for assessing progressive collapse risk of rc buildings exposed to blast loads. STRUCTURES, 48:1190-1208, FEB 2023.
- [CE106] Bashar Bashir, Abdullah Alsalman, Hussein Bachir, and Mahmoud Elnobi. Gisanalysis for active tectonics assessment of wadi al-arish, egypt. APPLIED SCIENCES-BASEL, 13(4), FEB 2023.
- [CE107] Aref A. Abadel, Hussam Alghamdi, Yousef R. Alharbi, Mohammed Alamri, Mohammad Khawaji, Mohammed A. M. Abdulaziz, and Moncef L. Nehdi. Investigation of alkali-activated slag-based composite incorporating dehydrated cement powder and red mud. MATERIALS, 16(4), FEB 2023.
- [CE108] Fahad K. Alqahtani and Idrees Zafar. Exploring the effect of different waste fillers in manufactured sustainable plastic aggregates matrix on the structural lightweight green concrete. SUSTAINABILITY, 15(3), FEB 2023.
- [CE109] Mahmoud Masoud, Mohammed Elhenawy, Shi Qiang Liu, Mohammed Almannaa, Sebastien Glaser, and Wael Alhajyaseen. A simulated annealing for optimizing assignment of e-scooters to freelance chargers. SUSTAINABILITY, 15(3), FEB 2023.
- [CE110] Abdulrhman Fahmi Alali, Shu Wang, Zhenduo Zhu, and Joseph Atkinson. Formation of oil-particle aggregates with motor oil and kaolinite clay in cold and warm freshwater. ENVIRONMENTAL SCIENCE-PROCESSES & IMPACTS, 25(3):566-576, MAR 22 2023.
- [CE111] Abdulaziz Ibrahim Almohana, Sattam Fahad Almojil, Abdulrhman Fahmi Alali, and Khaled Twfiq Almoalimi. The elimination and extraction of organosulfur compounds from real water and soil samples using metal organic framework/graphene oxide as a novel and efficient nanocomposite. CHEMOSPHERE, 319, APR 2023.
- [CE112] Tao Hai, Masood Ashraf Ali, As 'ad Alizadeh, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Reduction in environmental co2 by utilization of optimized energy scheme for power and fresh water generations based on different uses of biomass energy. CHEMOSPHERE, 319, APR 2023.
- [CE113] Mohamed Farid Abbas, Abdullah Ali Shaker, and Mosleh A. Al-Shamrani. Hydraulic and volume change behaviors of compacted highly expansive soil under cyclic wetting and drying. JOURNAL OF ROCK MECHANICS AND GEOTECHNICAL ENGINEERING, 15(2):486-499, FEB 2023.
- [CE114] Hussam Alghamdi, H. Shoukry, Aref A. Abadel, and Mohammad Khawaji. Performance assessment of limestone calcined clay cement (lc3)-based

lightweight green mortars incorporating recycled waste aggregate. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 23:2065–2074, MAR-APR 2023.

- [CE115] Aref A. Abadel, Husain Abbas, Ibrahim M. H. Alshaikh, Khaled Sennah, Rabin Tuladhar, Ali Altheeb, and Mohammed Alamri. Experimental study on the effects of external strengthening and elevated temperature on the shear behavior of ultrahigh-performance fiber-reinforced concrete deep beams. STRUCTURES, 49:943– 957, MAR 2023.
- [CE116] M. Ramadan, Mohamed Kohail, Yousef R. Alharbi, Aref A. Abadel, Abobaker S. Binyahya, and Alaa Mohsen. Investigation of autoclave curing impact on the mechanical properties, heavy metal stabilization and anti-microbial activity of the green geopolymeric composite based on received/thermally-treated glass polishing sludge. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 23:2672– 2689, MAR-APR 2023.
- [CE117] Husain Abbas, Mansuer Al-Dabaan, Nadeem Siddiqui, Tarek Almusallam, and Yousef Al-Salloum. Performance of reinforced concrete composite wall systems under projectile impact. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 23:3062–3090, MAR-APR 2023.
- [CE118] Yanfei Xie, Danxia Wang, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Yihui Zhou, and Amir Raise. Cao-mgfe<sub>2</sub>o<sub>4</sub>@k<sub>2</sub>co<sub>3</sub> as a novel and retrievable nanocatalyst for two-step transesterification of used frying oils to biodiesel. PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, 172:195– 210, APR 2023.
- [CE119] Khadija Mawra, Khuram Rashid, Minkwan Ju, Fahad K. Alqahtani, and Idrees Zafar. Thermo-physical and energy performance of building envelope modified by natural fiber through building information modelling. JOURNAL OF BUILDING ENGINEERING, 68, JUN 1 2023.
- [CE120] Joaquin Abellan-Garcia, M. Iqbal Khan, Yassir M. Abbas, Andrea Castro-Cabeza, and Julian Carrillo. Multi-criterion optimization of low-cost, self-compacted and eco-friendly micro-calcium-carbonate- and waste-glass-flour-based ultrahigh-performance concrete. CONSTRUCTION AND BUILDING MATERIALS, 371, MAR 31 2023.
- [CE121] Aref A. Abadel, M. Iqbal Khan, and Radhouane Masmoudi. Influence of elevated temperature on the engineering properties of ultra-high-performance fiber-reinforced concrete. MATERIALS SCIENCE-POLAND, 41(1):140-160, MAR 1 2023.
- [CE122] Deepak Verma, Parveen Berwal, Mohammad Amir Khan, Raied Saad Alharbi, Faisal M. Alfaisal, and Upaka Rathnayake. Design for the prediction of peak outflow of embankment breaching due to overtopping by regression technique and modelling. WATER, 15(6), MAR 2023.
- [CE123] Ahmed M. Al-Mahbashi and Ahmed Alnuaim. Effect of dynamic loads on the long-term efficiency of liner layers. BUILDINGS, 13(3), MAR 2023.

- [CE124] Abdulah M. M. Alsugair, Naif M. M. Alsanabani, and Khalid S. S. Al-Gahtani. Forecasting the final contract cost on the basis of the owner's cost estimation using an artificial neural network. *BUILDINGS*, 13(3), MAR 2023.
- [CE125] Ali Tariq, Babar Ali, Fahim Ullah, and Fahad K. Alqahtani. Reducing falls from heights through bim: A dedicated system for visualizing safety standards. *BUILDINGS*, 13(3), MAR 2023.
- [CE126] Gudla Amulya, Arif Ali Baig Moghal, and Abdullah Almajed. Sustainable binary blending for low-volume roads-reliability-based design approach and carbon footprint analysis. *MATERIALS*, 16(5), MAR 2023.
- [CE127] Yassir M. Abbas, Nasir Shafiq, Galal Fares, Montasir Osman, Mohammad Iqbal Khan, and Jamal M. Khatib. Strength iso-responses of shear-deficient ultra-high performance fiber reinforced concrete beams. *SUSTAINABILITY*, 15(5), MAR 2023.
- [CE128] Fahad K. Alqahtani and Idrees Zafar. Construction of green concrete incorporating fabricated plastic aggregate from waste processing. *SUSTAINABILITY*, 15(5), MAR 2023.
- [CE129] Bashar Bashir. Morphometric parameters and geospatial analysis for flash flood susceptibility assessment: A case study of jeddah city along the red sea coast, saudi arabia. *WATER*, 15(5), MAR 2023.
- [CE130] Ibrahim H. Elsebaie, Atef Q. Kawara, and Ali O. Alnahit. Mapping and assessment of flood risk in the wadi al-lith basin, saudi arabia. *WATER*, 15(5), MAR 2023.
- [CE131] Mohammed Alwalan, Abdullah Almajed, Kehinde Lemboye, and Ahmed Alnuaim. Direct shear characteristics of enzymatically cemented sands. *KSCCE JOURNAL OF CIVIL ENGINEERING*, 27(4):1512-1525, APR 2023.
- [CE132] Jincheng Zhou, Masood Ashraf Ali, As'ad Alizadeh, Pradeep Kumar Singh, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Proposal of a tri-generation system by co-combustion of groundnut shell biomass and synthesis gas exiting from a solid oxide fuel cell: Environmental assessment and multi-objective optimization. *FUEL*, 343, JUL 1 2023.
- [CE133] Dan Wang, Masood Ashraf Ali, As'ad Alizadeh, Sattam Fahad Almojjil, Kamal Sharma, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. The use of machine learning in the analysis of thermal entropy, friction and total entropy in solar desalinated water with the presence of alumina nanoparticles by numerical method. *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS*, 151:216-226, JUN 2023.
- [CE134] M. Iqbal Khan and Yassir M. Abbas. Robust extreme gradient boosting regression model for compressive strength prediction of blast furnace slag and fly ash concrete. *MATERIALS TODAY COMMUNICATIONS*, 35, JUN 2023.
- [CE135] Tao Hai, Masood Ashraf Ali, Hayder A. Dhahad, As 'ad Alizadeh, Kamal Sharma, Sattam Fahad Almojjil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and El-Awady Attia. A novel bi-evaporator cooling system via integration of absorption

- refrigeration cycle for waste energy recovery from an ejector-expansion trans-critical co<sub>2</sub> (eetrcc) cycle: Proposal and optimization with environmental considerations. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 57, JUN 2023.
- [CE136] Mujahed Alsomiri, Zhao Liu, Aref A. Abadel, and Ming Li. Revision and development of material models of ultra-high performance concrete containing coarse aggregate and applications in structural-level flexural response predictions. STRUCTURES, 51:332-350, MAY 2023.
- [CE137] Safwan Mohammed, Ali Jouhra, Glory O. Enaruvbe, Bashar Bashir, Mona Barakat, Firas Alsilibe, Luc Cimusa Kulimushi, Abdullah Alsalman, and Szilard Szabo. Performance evaluation of machine learning algorithms to assess soil erosion in mediterranean farmland: A case-study in syria. LAND DEGRADATION & DEVELOPMENT, 34(10):2896-2911, JUN 2023.
- [CE138] Jincheng Zhou, Masood Ashraf Ali, As'ad Alizadeh, Sattam Fahad Almojjil, Pradeep Kumar Singh, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Numerical investigation, environmental consideration, and the use of machine learning in optimizing the dimensions of a rectangular blade between two blades in the presence of a magnetic field (two-phase method). ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, 149:71-85, APR 2023.
- [CE139] Hussein Elsanadedy, Husain Abbas, Nadeem Siddiqui, Tarek Almusallam, and Yousef Al-Salloum. Hybrid steel/nsm/grfp system versus grfp wrapping for upgrading rc wall-like columns. POLYMERS, 15(8), APR 2023.
- [CE140] Ayman Altuwaim, Abdullah AlTasan, and Abdulmohsen Almohsen. Success criteria for applying construction technologies in residential projects. SUSTAINABILITY, 15(8), APR 2023.
- [CE141] Abdullah Almajed, Muawia Dafalla, and Abdullah A. Shaker. The combined effect of calcium chloride and cement on expansive soil materials. APPLIED SCIENCES-BASEL, 13(8), APR 2023.
- [CE142] Ahsen Maqsoom, Muhammad Zulqarnain, Muhammad Irfan, Fahim Ullah, Fahad K. Alqahtani, and Khurram Iqbal Ahmad Khan. Drivers of, and barriers to, the adoption of mixed reality in the construction industry of developing countries. BUILDINGS, 13(4), APR 2023.
- [CE143] Kehinde Lemboye and Abdullah Almajed. Effect of varying curing conditions on the strength of biopolymer modified sand. POLYMERS, 15(7), APR 2023.
- [CE144] Aref A. Abadel and Hussam Alghamdi. Effect of high volume tile ceramic wastes on resistance of geopolymers mortars to abrasion and freezing-thawing cycles: Experimental and deep learning modelling. CERAMICS INTERNATIONAL, 49(10):15065- 15081, MAY 15 2023.
- [CE145] Yassir M. Abbas and Mohammad Iqbal Khan. Prediction of compressive stress-strain behavior of hybrid steel-polyvinyl-alcohol fiber reinforced concrete response by fuzzy-logic approach. CONSTRUCTION AND BUILDING

MATERIALS, 379, MAY 23 2023.

- [CE146] Joaquin Abellan-Garcia, M. Iqbal Khan, Yassir M. Abbas, Vicente Martinez-Liron, and Juan S. Carvajal-Munoz. The drying shrinkage response of recycled-waste-glass- powder-and calcium-carbonate-based ultrahigh-performance concrete. CONSTRUCTION AND BUILDING MATERIALS, 379, MAY 23 2023.
- [CE147] Tao Hai, Masood Ashraf Ali, As'ad Alizadeh, Jincheng Zhou, Hayder A. Dhahad, Pradeep Kumar Singh, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, and Mohamed Shamseldin. Recurrent neural networks optimization of biomass-based solid oxide fuel cells combined with the hydrogen fuel electrolyzer and reverse osmosis water desalination. FUEL, 346, AUG 15 2023.
- [CE148] Yassir M. Abbas, Galal Fares, and M. Iqbal Khan. Depth-dependent flexural behavior of plain and bar-reinforced ultra-high-performance hybrid fiber-reinforced concrete -analytical, numerical, and uncertainty modeling. STRUCTURES, 52:723-741, JUN 2023.
- [CE149] Mohammed Almannaa, Md Nabil Zawad, May Moshawah, and Haifa Alabduljabbar. Investigating the effect of road condition and vacation on crash severity using machine learning algorithms. INTERNATIONAL JOURNAL OF INJURY CONTROL AND SAFETY PROMOTION, 30(3):392-402, JUL 3 2023.
- [CE150] Tao Hai, A. S. El-Shafay, As'ad Alizadeh, Bhupendra Singh Chauhan, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Combination of a geothermal-driven double-flash cycle and a kalina cycle to devise a polygeneration system: Environmental assessment and optimization. APPLIED THERMAL ENGINEERING, 228, JUN 25 2023.
- [CE151] Joaquin Abellan-Garcia, Jaime Fernandez, M. Iqbal Khan, Yassir M. Abbas, and Julian Carrillo. Uniaxial tensile ductility behavior of ultrahigh-performance concrete based on the mixture design-partial dependence approach. CEMENT & CONCRETE COMPOSITES, 140, JUL 2023.
- [CE152] Mujahid I. Ashqer, Huthaifa I. Ashqar, Mohammed Elhenawy, Mohammed Almannaa, Mohammad A. Aljamal, Hesham A. Rakha, and Marwan Bikdash. Evaluating a signalized intersection performance using unmanned aerial data. TRANSPORTATION LETTERS-THE INTERNATIONAL JOURNAL OF TRANSPORTATION RESEARCH, 2023 APR 21 2023.
- [CE153] Galal Fares, Abdulaziz Alsaif, and Abdulrahman Alhozaimy. Hybridization and cost-performance analysis of waste tire steel fibers into high-volume powdered scoria rocks-based ultra-high performance concrete. JOURNAL OF BUILDING ENGINEERING, 72, AUG 1 2023.
- [CE154] S. M. Jamil Uddin, Alex Albert, Anto Ovid, and Abdullah Alsharif. Leveraging chat-gpt to aid construction hazard recognition and support safety education and training. SUSTAINABILITY, 15(9), APR 24 2023.

- [CE155] Yassir M. Abbas, Galal Fares, and M. Iqbal Khan. Experimental study of depth-dependent flexural behavior of plain and bar-reinforced ultra-high-performance hybrid fiber-reinforced concrete. *STRUCTURES*, 53:432–446, JUL 2023.
- [CE156] Endre Harsanyi, Bashar Bashir, Sana Arshad, Akasairi Ocwa, Attila Vad, Abdullah Alsalman, Istvan Bacskai, Tamas Rationyi, Omar Hijazi, Adrienn Szeles, and Safwan Mohammed. Data mining and machine learning algorithms for optimizing maize yield forecasting in central europe. *AGRONOMY-BASEL*, 13(5), MAY 4 2023.
- [CE157] Karam Alsafadi, Shuoben Bi, Bashar Bashir, Ehsan Sharifi, Abdullah Alsalman, Amit Kumar, and Shamsuddin Shahid. High-resolution precipitation modeling in complex terrains using hybrid interpolation techniques: Incorporating physiographic and modis cloud cover influences. *REMOTE SENSING*, 15(9), MAY 5 2023.
- [CE158] Mohammad Iqbal Khan, Yassir M. Abbas, Galal Fares, and Fahad K. Alqahtani. Strength prediction and optimization for ultrahigh-performance concrete with low- carbon cementitious materials-xg boost model and experimental validation. *CONSTRUCTION AND BUILDING MATERIALS*, 387, JUL 17 2023.
- [CE159] Abdelrahman Khalifa, Bashar Bashir, Abdullah Alsalman, Sambit Prasanajit Naik, and Rosa Nappi. Remotely sensed data, morpho-metric analysis, and integrated method approach for flood risk assessment: Case study of wadi al-arish landscape, sinai, egypt. *WATER*, 15(9), MAY 8 2023.
- [CE160] Aijaz Ahmad Zende, Asif Iqbal. A. Momin, Rajesab B. Khadiranaikar, Abdullah H. Alsabhan, Shamshad Alam, Mohammad Amir Khan, and Mohammad Obaid Qamar. Mechanical properties of high-strength self-compacting concrete. *ACS OMEGA*, 8(20):18000–18008, MAY 9 2023.
- [CE161] Asif Iqbal A. Momin, Aijaz Ahmad Zende, Rajesab B. Khadiranaikar, Abdullah H. Alsabhan, Shamshad Alam, Mohammad Amir Khan, and Mohammad Obaid Qamar. Investigating the flexural behavior of a two-span high-performance concrete beam using experimentally derived stress block parameters. *ACS OMEGA*, 8(20):17992– 17999, MAY 9 2023.
- [CE162] Abdulrhman Fahmi Alali, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Khaled Twfiq Almoalimi. Highly reusable bentonite clay@biochar@fe<sub>3</sub>o<sub>4</sub> nanocomposite for hg(ii) removal from synthetic and real wastewater. *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 30(28):72484–72502, JUN 2023.
- [CE163] Omar Kabbush, Mohammed Almannaa, Saif A. A. Alarifi, and Ali Alghamdi. Assessing the effect of covid-19 on the traffic safety of intercity and major intracity roads in saudi arabia. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 48(10):13553–13571, OCT 2023.
- [CE164] Aref Abadel, Saleh Alenzi, Tarek Almusallam, Husain Abbas, and Yousef AlSalloum. Shear behavior of self-consolidating concrete deep beams reinforced with hybrid of steel and gfrp bars. *AIN SHAMS ENGINEERING JOURNAL*, 14(9), SEP 2023.

- [CE165] Mohammed Salah Nasr, Ali Shubbar, Tameem Mohammed Hashim, and Aref A. Abadel. Properties of a low-carbon binder-based mortar made with waste lcd glass and waste rope (nylon) fibers. *PROCESSES*, 11(5), MAY 17 2023.
- [CE166] Tao Hai, A. S. El-Shafay, As'ad Alizadeh, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, and Abdulrhman Fahmi Alali. Employing a booster/ejector-assisted organic flash cycle to heat recovery of sofc system; exergy- and economic-based optimization. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 48(48):18433- 18453, JUN 5 2023.
- [CE167] Yassir M. Abbas, Galal Fares, and Mohammad Iqbal Khan. Impact of hot weather conditions on the performance of supplementary cementitious materials concrete. *SUSTAINABILITY*, 15(10), MAY 22 2023.
- [CE168] Dan Wang, Sattam Fahad Almojil, Ahmed Najat Ahmed, Rishabh Chaturvedi, and Abdulaziz Ibrahim Almohana. An intelligent design and environmental consideration of a green-building system utilizing biomass and solar having a bidirectional interaction with the grid to achieve a sustainable future. *SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS*, 57, JUN 2023.
- [CE169] Naif M. M. Alsanabani, Khalid S. S. Al-Gahtani, Abdulrahman A. A. Bin Mahmoud, and Saad I. I. Aljadhai. Integrated methods for selecting construction foundation type based on using a value engineering principle. *SUSTAINABILITY*, 15(11), MAY 24 2023.
- [CE170] Wagdi Hamid and Ahmed Alnuaim. Sustainable geopolymerization approach to stabilize sabkha soil. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 24:9030-9044, MAY-JUN 2023.
- [CE171] Jincheng Zhou, Masood Ashraf Ali, Kamal Sharma, As'ad Alizadeh, Sattam Fahad Almojil, Abdulaziz Ibrahim Almohana, Abdulrhman Fahmi Alali, Khaled Twfiq Almoalimi, and Banar Fareed Ibrahim. Improved fish migration optimization method to identify pemfc parameters. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, 48(52):20028-20040, JUN 22 2023.
- [CE172] Galal Fares, Ahmed K. El-Sayed, Abdulrahman M. Alhozaimy, Abdulaziz I. AlNegheimish, and Abdulrahman S. Albidah. Lightweight scc development in a low- carbon cementitious system for structural applications. *MATERIALS*, 16(12), JUN 2023.
- [CE173] Hassan Alassafi, Khalid S. Al-Gahtani, and Abdulmohsen S. Almohsen. Medical gas systems maintainability risks in healthcare facilities: A design optimization approach. *SUSTAINABILITY*, 15(12), JUN 2023.
- [CE174] Sherif El-Habashy, Fahad K. Alqahtani, Mohamed Mekawy, Mohamed Sherif, and Mohamed Badawy. Identification of 4d-bim barriers in offshore construction projects using fuzzy structural equation modeling. *BUILDINGS*, 13(6), JUN 2023.
- [CE175] Joaquin Abellan-Garcia, Jesus Redondo-Mosquera, M. Iqbal Khan, Yassir M. M. Abbas, and Andrea Castro-Cabeza. Development of a novel 124 mpa strength



green reactive powder concrete employing waste glass and locally available cement. ARCHIVES OF CIVIL AND MECHANICAL ENGINEERING, 23(3), JUN 1 2023.

- [CE176] Kehinde Lemboye and Abdullah Almajed. Experimental study on the mechanical properties and durability of sand using a semicrystalline hydrophobic fluoropolymer. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, 48(10):13707-13717, OCT 2023.
- [CE177] M. Iqbal Khan, Yassir M. Abbas, and Galal Fares. Curing-dependent structural behavior of ultra-high-performance hybrid fiber-reinforced concrete beams. STRUCTURES, 54:1440-1451, AUG 2023.
- [CE178] Fahad K. Alqahtani, Mohamed A. Sherif, and Amr M. Ghanem. Green lightweight concrete utilizing sustainable processed recycled plastic aggregates: Technical, economic and environmental assessment. CONSTRUCTION AND BUILDING MATERIALS, 393, AUG 22 2023.
- [CE179] Romana Mariyam Rasheed, Arif Ali Baig Moghal, Sathyanarayanan Rambabu, and Abdullah Almajed. Sustainable assessment and carbon footprint analysis of polysaccharide biopolymer-amended soft soil as an alternate material to canal lining. FRONTIERS IN ENVIRONMENTAL SCIENCE, 11, JUN 15 2023.
- [CE180] Rashid Maqbool, Moneesh Bhuvaneshwaran, Yahya Rashid, Ayman Altuwaim, and Saleha Ashfaq. A decision approach for analysing the role of modern methods, project management and integrated approaches in environmentally sustainable construction projects. KSCE JOURNAL OF CIVIL ENGINEERING, 27(8):3175-3191, AUG 2023.
- [CE181] Aref A. Abadel. Structural performance of strengthening of high-performance geopolymer concrete columns utilizing different confinement materials: Experimental and numerical study. BUILDINGS, 13(7), JUL 2023.
- [CE182] Mahmoud M. Higazey, Mohammad J. Alshannag, and Ali S. Alqarni. Numerical investigation on the performance of exterior beam-column joints reinforced with shape memory alloys. BUILDINGS, 13(7), JUL 2023.
- [CE183] Mohammed Alamri, Qing Lu, Asad Elmagarhe, and Ahmed Elnihum. The effect of incorporating 100% of undiluted and diluted reclaimed epoxy asphalt materials into pervious cement mixes. COATINGS, 13(7), JUL 2023.
- [CE184] M. Iqbal Khan, Sardar Umer Sial, Yassir M. M. Abbas, and Galal Fares. Structural performance improvement of reinforced concrete beams by strain-hardening cementitious composite layers. MATERIALS, 16(14), JUL 2023.
- [CE185] Hussam Alghamdi, Aref A. A. Abadel, Mohammad Khawaji, Mohammed Alamri, and Abdullah Alabdulkarim. Strength performance and microstructures of alkaliactivated metakaolin and ggbfs-based mortars: Role of waste red brick powder incorporation. MINERALS, 13(7), JUL 2023.
- [CE186] Bashar Bashir and Abdullah Als Salman. Geospatial analysis for relative seismic activity assessment: A case study of fatima suture zone in western Saudi Arabia.

SUSTAINABILITY, 15(14), JUL 2023.

- [CE187] Jiwei Sun, Shuoben Bi, Bashar Bashir, Zhangxi Ge, Kexin Wu, Abdullah Alsalman, Brian Odhiambo Ayugi, and Karam Alsafadi. Historical trends and characteristics of meteorological drought based on standardized precipitation index and standardized precipitation evapotranspiration index over the past 70 years in china (1951-2020). SUSTAINABILITY, 15(14), JUL 2023.
- [CE188] Abdullah M. Alsugair, Khalid S. Al-Gahtani, Naif M. Alsanabani, Abdulmajeed A. Alabduljabbar, and Abdulmohsen S. Almohsen. Artificial neural network model to predict final construction contract duration. APPLIED SCIENCES-BASEL, 13(14), JUL 2023.
- [CE189] Aref A. Abadel. Physical, mechanical, and microstructure characteristics of ultra-high-performance concrete containing lightweight aggregates. MATERIALS, 16(13), JUL 2023.
- [CE190] Mohammad Iqbal Khan and Yassir M. Abbas. Behavioral evaluation of strengthened reinforced concrete beams with ultra-ductile fiber-reinforced cementitious composite layers. MATERIALS, 16(13), JUL 2023.
- [CE191] Abdulaziz Ibrahim Almohana, Zainab Ali Bu Sinnah, and Tariq J. Al-Musawi. Combination of cfd and machine learning for improving simulation accuracy in water purification process via porous membranes. JOURNAL OF MOLECULAR LIQUIDS, 386, SEP 15 2023.
- [CE192] Maan Habib, Bashar Bashir, Abdullah Alsalman, and Hussein Bachir. Evaluating the accuracy and effectiveness of machine learning methods for rapidly determining the safety factor of road embankments. MULTIDISCIPLINE MODELING IN MATERIALS AND STRUCTURES, 19(5):966-983, AUG 10 2023.
- [CE193] Alaa Mohsen, Mohamed Kohail, Yousef R. Alharbi, Aref A. Abadel, Ahmed M. Soliman, and M. Ramadan. Bio-mechanical efficacy for slag/fly ash-based geopolymer mingled with mesoporous nio. CASE STUDIES IN CONSTRUCTION MATERIALS, 19, DEC 2023.
- [CE194] Ibrahim M. H. Alshaikh, Aref A. Abadel, Rabin Tuladhar, Ahmed Hasan Alwathaf, and Moncef L. Nehdi. Progressive collapse resistance of post-fire cellular beam-column substructures with various web-opening shapes. STRUCTURES, 55:1874- 1893, SEP 2023.
- [CE195] Ahmed S. Elshimy, Aref A. Abadel, Hussam Alghamdi, Rabin Tuladhar, Tarek M. ElSokkary, Hamdy A. Abdel-Gawwad, and Moaaz K. Seliem. Repurposing carbonate-based waste for producing an innovative binder: optimization and characterization. ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, 30(38):89430-89441, AUG 2023.
- [CE196] Karam Alsafadi, Shuoben Bi, Bashar Bashir, Abdullah Alsalman, and Amit Kumar Srivastava. Future scenarios of bioclimatic viticulture indices in the eastern mediterranean: Insights into sustainable vineyard management in a changing climate. SUSTAINABILITY, 15(15), AUG 2023.

[CE197] Aref A. Abadel, Mohammed Salah Nasr, Ali Shubbar, Tameem Mohammed Hashim, and Rabin Tuladhar. Potential use of rendering mortar waste powder as a cement replacement material: Fresh, mechanical, durability and microstructural properties. SUSTAINABILITY, 15(15), AUG 2023.

# ELECTRICAL ENGINEERING

## PUBLICATIONS

- [EE1] Ziyad N. Alotaibi, Saeed A. Khouli, Ahmed B. Ibrahim, Muhammad Alrabeiah, Amr M. Ragheb, Ahmed S. Almairan, and Saleh A. Alshebeili. Sky imager data reduction using autoencoder and internet of things computing. *IEEE ACCESS*, 10:111232-111240, 2022.
- [EE2] Khalil AlSharabi, Yasser Bin Salamah, Akram M. Abdurraqeeb, Majid Aljalal, and Fahd A. Alturki. Eeg signal processing for alzheimer's disorders using discrete wavelet transform and machine learning approaches. *IEEE ACCESS*, 10:89781-89797, 2022.
- [EE3] M. S. Salman Baig, A. F. Abas, M. T. Alresheedi, and M. A. Mahdi. Time domain diversity combining with delay-and-advanced operation in two layered asymmetrically clipped optical ofdm system. *OPTICAL AND QUANTUM ELECTRONICS*, 54(7), JUL 2022.
- [EE4] Ayad G. Baziyad, Adnan S. Nouh, Irfan Ahmad, and Abdulaziz Alkuhayli. Application of least-squares support-vector machine based on hysteresis operators and particle swarm optimization for modeling and control of hysteresis in piezoelectric actuators. *ACTUATORS*, 11(8), AUG 2022.
- [EE5] MA; Sheta AFA; Elshafiey I Abdulkawi, WM; Alqaisei. New compact antenna array for mimo internet of things applications. *MICROMACHINES*, 13(09), SEP 2022.
- [EE6] Ahmad Fauzi Abas, Kuen Y. Lau, Farah D. Muhammad, Wazie M. Abdulkawi, Yahya M. Al-Moliki, Mohammed T. Alresheedi, and Mohd Adzir Mahdi. Dual-wavelength mode-locked oscillation with graphene nanoplatelet saturable absorber in erbium-doped fiber laser. *ELECTRONICS*, 11(18), SEP 2022.
- [EE7] Abdullah M. Noman, Abdulaziz Alkuhayli, Abdullrahman A. Al-Shamma'a, and Khaled E. Addoweesh. Hybrid mli topology using open-end windings for active power filter applications. *ENERGIES*, 15(17), SEP 2022.
- [EE8] Mohamed A. M. Shaheen, Hany M. Hasaniien, Said F. Mekhamer, Mohammed H. Qais, Saad Alghuwainem, Zia Ullah, Marcos Tostado-Veliz, Rania A. Turkey, Francisco Jurado, and Mohamed R. Elkadeem. Probabilistic optimal power flow solution using a novel hybrid metaheuristic and machine learning algorithm. *MATHEMATICS*, 10(17), SEP 2022.
- [EE9] Qiuji Wang, Yifeng Xiao, Udaya Dampage, Abdulaziz Alkuhayli, Hassan Haes Alhelou, Andres Annuk, and Mohamed A. Mohamed. An effective fault section location method based three-line defense scheme considering distribution systems resilience. *ENERGY REPORTS*, 8:10937-10949, NOV 2022.
- [EE10] Beenish Tahir, Muhammad Tahir, Wasif Farooq, Mohammad Siraj, and Amanullah Fatehmulla. 3d hcn nanotexture with synergistic effect of nickel and hole scavengers for enhancing photocatalytic h<sub>2</sub> production: Role of and influential. *ADVANCED POWDER TECHNOLOGY*, 33(11), NOV 2022.

- [EE11] Zhenxing Li, Cong Hu, Andres Annuk, Abdulaziz Alkuhayli, Udaya Dampage, Loiy Al-Ghussain, and Mohamed A. Mohamed. A fast current relaying algorithm for distribution systems based on discrete setting value. *ENERGY REPORTS*, 8:11088- 11100, NOV 2022.
- [EE12] Alaaeddine Rjeb, Amr M. Ragheb, Maged A. Esmail, Habib Fathallah, and Saleh A. Alshebeili. Discriminative strain and temperature sensing using a ring-hyperbolic tangent fiber sensor. *OPTICS EXPRESS*, 30(19):34612-34628, SEP 12 2022.
- [EE13] Abdullah M. Noman, Abdullrahman A. Al-Shamma'a, Pedram Asef, and Abdulaziz Alkuhayli. Hybrid cascaded mli development for pv-grid connection applications. *IET POWER ELECTRONICS*, 16(10, SI):1717-1731, AUG 2023.
- [EE14] Shahid Aziz Khan, Jamshed Ahmed Ansari, Rashid Hussain Chandio, Hafiz Mudassir Munir, Mohammed Alharbi, and Abdulaziz Alkuhayli. Ai based controller optimization for vsc-mtdc grids. *FRONTIERS IN ENERGY RESEARCH*, 10, SEP 23 2022.
- [EE15] Khalil Chikhaoui, Mohammad Alhassoun, and Saleh Alshebeili. Port isolation and array spacing of a 5 x 5 rotman lens frequency decomposer. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 48(5):7221-7224, MAY 2023.
- [EE16] Ali H. Alqahtani, Esam M. Almohimmah, Mohammed T. Alresheedi, Ahmad Fauzi Abas, Ahmad-Adnan Qidan, and Jaafar Elmoghani. Decoding-order-based power allocation (dopa) scheme for non-orthogonal multiple access (noma) visible light communication systems. *PHOTONICS*, 9(10), OCT 2022.
- [EE17] Faroq Razzaz, Saud M. Saeed, and Majeed A. S. Alkanhal. Compact ultra-wideband wilkinson power dividers using linearly tapered transmission lines. *ELECTRONICS*, 11(19), OCT 2022.
- [EE18] Alaaeddine Rjeb, Amr M. Ragheb, Maged A. Esmail, Habib Fathallah, Mohsen Machhout, and Saleh A. Alshebeili. Reciprocal inverse graded index fiber (r-igif) for oam-sdm networks. *IEEE PHOTONICS JOURNAL*, 14(5), OCT 2022.
- [EE19] Semih Isik, Vasishta Burugula, Mohammed Alharbi, Ali Azidehak, and Subhashish Bhattacharya. Implementation of a modular distributed fault-tolerant controller for mmc applications. *ENERGIES*, 15(22), NOV 2022.
- [EE20] Ahmed M. Hussien, Jonghoon Kim, Abdulaziz Alkuhayli, Mohammed Alharbi, Hany M. Hasani, Marcos Tostado-Veliz, Rania A. Turkey, and Francisco Jurado. Adaptive pi control strategy for optimal microgrid autonomous operation. *SUSTAINABILITY*, 14(22), NOV 2022.
- [EE21] Ayad G. Baziyad, Irfan Ahmad, Yasser Bin Salamah, and Abdulaziz Alkuhayli. Robust tracking control of piezo-actuated nanopositioning stage using improved inverse lssvm hysteresis model and rst controller. *ACTUATORS*, 11(11), NOV 2022.

- [EE22] Ahmed A. Al-Katheri, Essam A. Al-Ammar, Majed A. Alotaibi, Wonsuk Ko, Sisam Park, and Hyeong-Jin Choi. Application of artificial intelligence in pv fault detection. *SUSTAINABILITY*, 14(21), NOV 2022.
- [EE23] Mohammed M. Alkhabet, Saad H. Girei, Husam K. Salih, Rasha Thabit, Mohammed Abdullah Issa, Suriati Paiman, Norhana Arsad, Mohammed Thamer Alresheedi, Mohd A. Mahdi, and Mohd H. Yaacob. Room temperature operated hydrogen sensor using palladium coated on tapered optical fiber. *MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS*, 287, JAN 2023.
- [EE24] Muhammad Arfan, Abdul Ghaffar, Majeed A. S. Alkanhal, Yasin Khan, Ali H. Alqahtani, and Sajjad Ur Rehman. Laguerre-gaussian beam scattering by a perfect electromagnetic conductor (pemc) sphere. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 48(6):8001-8009, JUN 2023.
- [EE25] Mohammed Alharbi, Semih Isik, and Subhashish Bhattacharya. Submodule fault-tolerant strategy for modular multilevel converter with scalable control structure. *SUSTAINABILITY*, 14(24), DEC 2022.
- [EE26] Alan E. Willner, Xinzhou Su, Huibin Zhou, Amir Minoofar, Zhe Zhao, Runzhou Zhang, Moshe Tur, Andreas F. Molisch, Doohwan Lee, and Ahmed Almaiman. High capacity terahertz communication systems based on multiple orbital-angular-momentum beams. *JOURNAL OF OPTICS*, 24(12), DEC 1 2022.
- [EE27] Amr M. Ragheb, Q. Tareq, Maged A. Esmail, Muhammad R. Alrabeiah, Saleh A. Alshebeili, and Mohammed Z. M. Khan. Enabling wigig communications using quantum-dash laser source under smoky weather conditions. *IEEE PHOTONICS JOURNAL*, 14(6), DEC 2022.
- [EE28] Majid Aljalal, Saeed A. Aldosari, Marta Molinas, Khalil AlSharabi, and Fahd A. Alturki. Detection of parkinson's disease from eeg signals using discrete wavelet transform, different entropy measures, and machine learning techniques. *SCIENTIFIC REPORTS*, 12(1), DEC 29 2022.
- [EE29] Marios Aristodemou, Xiaolan Liu, Sangarapillai Lambotharan, and Basil AsSadhan. Bayesian optimization-driven adversarial poisoning attacks against distributed learning. *IEEE ACCESS*, 11:86214-86226, 2023.
- [EE30] Faisal Alsaif, Yue Zhang, Xiao Li, Nihanth Adina, Khalid Alkhalid, and Jin Wang. T-type modular dc circuit breaker (t-breaker) as a compensator for future dc grids. *IEEE ACCESS*, 11:81134-81142, 2023.
- [EE31] Bappa Roy, Shuma Adhikari, Subir Datta, K. Jilenkumari Devi, Aribam Deleena Devi, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. Deep learning based relay for online fault detection, classification, and fault location in a grid-connected microgrid. *IEEE ACCESS*, 11:62674-62696, 2023.
- [EE32] Aamir Ali, Ghulam Abbas, Muhammad Usman Keerio, Ezzeddine Touti, Zahoor Ahmed, Osamah Alsalman, and Yun-Su Kim. A bi-level techno-economic optimal reactive power dispatch considering wind and solar power integration. *IEEE*

- ACCESS, 11:62799-62819, 2023.
- [EE33] Allamsetty Hema Chander, K. Dhananjay Rao, Bankupalli Phani Teja, Lalit Kumar Sahu, Subhojit Dawn, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. A transformerless photovoltaic inverter with dedicated mppt for grid application. IEEE ACCESS, 11:61358-61367, 2023.
- [EE34] M. Arfan, A. Ghaffar, M. Y. Naz, M. A. Hanif, F. K. Alsaif, and Y. Khan. Characteristics of laguerre-gaussian beam scattering from a coated circular nihility cylinder. JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 25(1-2):36- 41, JAN-FEB 2023.
- [EE35] Poras Khetarpal, Neelu Nagpal, Mohammed S. Al-Numay, Pierluigi Siano, Yogendra Arya, and Neelam Kassarwani. Power quality disturbances detection and classification based on deep convolution auto-encoder networks. IEEE ACCESS, 11:46026- 46038, 2023.
- [EE36] Jayanta Bhusan Basu, Subhojit Dawn, Pradip Kumar Saha, Mitul Ranjan Chakraborty, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. Risk mitigation & profit improvement of a wind-fuel cell hybrid system with tcsc placement. IEEE ACCESS, 11:39431-39447, 2023.
- [EE37] Shahid Iqbal, Adnan Ahmed, Mohammad Siraj, Majid Al Tamimi, Ali Raza Bhangwar, and Pardeep Kumar. A multi-hop qos-aware and predicting link quality estimation (plqe) routing protocol for reliable wbsn. IEEE ACCESS, 11:35993-36003, 2023.
- [EE38] Anika Tahsin, Palash Roy, Md. Abdur Razzaque, Md. Mamun-Or-Rashid, Mohammad Siraj, Salman A. AlQahtani, Md. Rafiul Hassan, and Mohammad Mehedi Hassan. Energy cooperation among sustainable base stations in multi-operator cellular networks. IEEE ACCESS, 11:19405-19417, 2023.
- [EE39] Rao Atif, Mannan Hassan, Muhammad Bilal Shahid, Hafiz Mudassir Munir, Mahmoud S. R. Saeed, Muhammad Shahzad, Semih Isik, and Mohammed Alharbi. Simplified model predictive current control of four-level nested neutral point clamped converter. SUSTAINABILITY, 15(2), JAN 2023.
- [EE40] Kangdi Shi, Muhammad Alrabeiah, and Jun Chen. Progressive with purpose: Guiding progressive inpainting dnns through context and structure. IEEE ACCESS, 11:2023-2034, 2023.
- [EE41] Nathan P. O'malley, Keith A. Mckinzie, Mohammed S. Alshaykh, J. U. N. Q. I. U. Liu, Daniel E. Leaird, Tobias J. Kippenberg, Jason D. Mckinney, and Andrew M. Weiner. Architecture for integrated rf photonic downconversion of electronic signals. OPTICS LETTERS, 48(1):159-162, JAN 1 2023.
- [EE42] Abdulrahman B. B. Abdelaziz, Mohammad A. A. Rahimi, Muhammad R. R. Alrabeiah, Ahmed B. B. Ibrahim, Ahmed S. S. Almaiman, Amr M. M. Ragheb, and Saleh A. A. Alshebeili. Photoplethysmography data reduction using truncated singular value decomposition and internet of things computing. ELECTRONICS, 12(1), JAN 2023.



- [EE43] Mohamed S. Hashish, Hany M. Hasanien, Haoran Ji, Abdulaziz Alkuhayli, Mohammed Alharbi, Tlenshiyeva Akmaral, Rania A. Turkey, Francisco Jurado, and Ahmed O. Badr. Monte carlo simulation and a clustering technique for solving the probabilistic optimal power flow problem for hybrid renewable energy systems. *SUSTAINABILITY*, 15(1), JAN 2023.
- [EE44] Esam. M. Almohimmah, Omar Aldayel, Jameel Ali, Amr. M. Ragheb, Ahmed Almainan, Maged. A. Esmail, and Saleh. A. Alshebeili. Performance investigation of an ambiguity function-shaped waveform (afsw) using a photonics-based radar system. *OPTICS EXPRESS*, 31(3):3784-3803, JAN 30 2023.
- [EE45] Hisham Kadhum Hisham, Siti Barirah Ahmad Anas, Muhammad Hafiz Abu Bakar, Mohammed Thamer Alresheedi, Ahmad Fauzi Abas, and Mohd Adzir Mahdi. Parametric study of the transient period characteristics of distributed feedback laser diodes. *JOURNAL OF OPTICAL TECHNOLOGY*, 90(2):68-74, FEB 1 2023.
- [EE46] Lu Zhang, Sangarapillai Lambbotharan, Gan Zheng, Guisheng Liao, Basil AsSadhan, and Fabio Roli. Attention-based adversarial robust distillation in radio signal classifications for low-power iot devices. *IEEE INTERNET OF THINGS JOURNAL*, 10(3):2646-2657, FEB 1 2023.
- [EE47] Faris E. E. Alfaris. A sensorless intelligent system to detect dust on pv panels for optimized cleaning units. *ENERGIES*, 16(3), FEB 2023.
- [EE48] Khalid Haseeb, Fahad A. Alzahrani, Mohammad Siraj, Zahid Ullah, and Jaime Lloret. Energy-aware next-generation mobile routing chains with fog computing for emerging applications. *ELECTRONICS*, 12(3), FEB 2023.
- [EE49] Esam Bahaidra, Najeeb Al-Khalli, Mahmoud Hezam, Mohammad Alduraibi, Bouraoui Ilahi, Nacer Debbar, and Mohamed Abdel-Rahman. Electro-optical characterization of an amorphous germanium-tin (ge<sub>1</sub>-xsn<sub>x</sub>) microbolometer. *JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES*, 44(3-4):233-244, APR 2023.
- [EE50] N. Z. A. Naharuddin, M. H. Abu Bakar, N. Tamchek, M. T. Alresheedi, A. F. Abas, C. S. Goh, N. H. Zainuddin, and M. A. Mahdi. Effect of gold-nanoparticle size on microfiber saturable absorber for mode-locked erbium-doped fiber lasers. *OPTIK*, 276, APR 2023.
- [EE51] Irshad Ahmad, Shazia Shukrullah, Muhammad Yasin Naz, Faisal Khalid Alsaif, Sager Alsulamy, Yasin Khan, N. R. Khalid, and Waheed Qamar Khan. Construction of ag-modified zno-ceo<sub>2</sub> 2d-1d s-scheme heterojunction photocatalyst with phenomenal photocatalytic performance for h<sub>2</sub> evolution. *MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING*, 159, JUN 1 2023.
- [EE52] Faisal Alsaif and Jin Wang. Effect of high dv/dt on voltage stress across inductor turns and utilization of additive manufacturing for mitigation. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 2023 FEB 20 2023.
- [EE53] E. K. Ng, N. Mohd Yusoff, H. K. Lee, J. Y. C. Liew, M. H. Abu Bakar, N. H. Zainol

- Abidin, M. T. Alresheedi, and M. A. Mahdi. Optimization process of spin-coated black phosphorus/ polydimethylsiloxane composite on microfiber as saturable absorber for ultrafast photonics. *INFRARED PHYSICS & TECHNOLOGY*, 130, MAY 2023.
- [EE54] Walid El-Shafai, Amany Daosh, Nehad Haggag, Aya M. Gamal, Nevein Sadic, Yasser Mahrous, Fatma E. Ibrahim, Naglaa F. Soliman, Abeer D. Algarni, Ghada M. ElBanby, Mohamed R. Abdel-Rahman, Saeed A. Aldosari, Emad S. Hassan, Huda I. Ashiba, Eman A. Sultan, Waleed Al-Hanafy, Adel A. Saleeb, Adel S. El-Fishawy, ElSayed M. El-Rabaie, Mohamed El-Halawany, Moawad I. Dessouky, Sami A. El Dolil, Nabil A. Ismail, Ibrahim M. Eldokany, Atef Abou Elazm, and Fathi E. Abd El-Samie. Efficient framework for video communication in iot applications. *WIRELESS PERSONAL COMMUNICATIONS*, 129(1):1-35, MAR 2023.
- [EE55] Gopu Venugopal, Arun Kumar Udayakumar, Adhavan Balashanmugham, Mohamad Abou Houran, Faisal Alsaif, Rajvikram Madurai Elavarasan, Kannadasan Raju, and Mohammed H. Alsharif. Fault identification and classification of asynchronous motor drive using optimization approach with improved reliability. *ENERGIES*, 16(6), MAR 2023.
- [EE56] Amr Saleh, Hany M. Hasanien, Rania A. Turkey, Balgynbek Turdybek, Mohammed Alharbi, Francisco Jurado, and Walid A. Omran. Optimal model predictive control for virtual inertia control of autonomous microgrids. *SUSTAINABILITY*, 15(6), MAR 2023.
- [EE57] Mohammed Alharbi, Muhammad Ragab, Kareem M. AboRas, Hossam Kotb, Masoud Dashtdar, Mokhtar Shouran, and Elmazeg Elgamli. Innovative avr-lfc design for a multi-area power system using hybrid fractional-order pi and pid2 controllers based on dandelion optimizer. *MATHEMATICS*, 11(6), MAR 2023.
- [EE58] Ahmed Hussain Elmetwaly, Ramy Adel Younis, Abdelazeem Abdallah Abdelsalam, Ahmed Ibrahim Omar, Mohamed Metwally Mahmoud, Faisal Alsaif, Adel El-Shahat, and Mohamed Attya Saad. Modeling, simulation, and experimental validation of a novel mppt for hybrid renewable sources integrated with upqc: An application of jellyfish search optimizer. *SUSTAINABILITY*, 15(6), MAR 2023.
- [EE59] Dilip Kumar, Yogesh Kumar Chauhan, Ajay Shekhar Pandey, Ankit Kumar Srivastava, Varun Kumar, Faisal Alsaif, Rajvikram Madurai Elavarasan, Md Rabiul Islam, Raju Kannadasan, and Mohammed H. Alsharif. A novel hybrid mppt approach for solar pv systems using particle-swarm-optimization-trained machine learning and flying squirrel search optimization. *SUSTAINABILITY*, 15(6), MAR 2023.
- [EE60] Karthik Myilswamy, V, Suparna Seshadri, Hsuan-Hao Lu, Mohammed S. Alshaykh, Junqiu Liu, Tobias J. Kippenberg, Andrew M. Weiner, and Joseph M. Lukens. Time-resolved hanbury brown-twiss interferometry of on-chip biphoton frequency combs using vernier phase modulation. *PHYSICAL REVIEW APPLIED*, 19(3), MAR 7 2023.
- [EE61] Norita Mohd Yusoff, Han Kee Lee, Eng Khoon Ng, Natrah Shafiqah Rosli, Che

- Azurahanim Che Abdullah, Mohammed Thamer Alresheedi, and Mohd Adzir Mahdi. Titania-coated silica nanocomposite for I-band noise-like pulse fiber laser. JOURNAL OF LUMINESCENCE, 258, JUN 2023.
- [EE62] Prabhakar Krishnan, A. Prabu, V. Sumathi Loganathan, Sidheswar Routray, Uttam Ghosh, and Mohammed AL-Numay. Analyzing and managing various energy-related environmental factors for providing personalized IoT services for smart buildings in smart environment. SUSTAINABILITY, 15(8), APR 2023.
- [EE63] Mohammed A. Alqaisei, Abdel-Fattah A. Sheta, Ibrahim Elshafiey, and Majid Altamimi. Design of hybrid beamforming system based on practical circuit parameter of 6-bit millimeter-wave phase shifters. MICROMACHINES, 14(4), APR 2023.
- [EE64] Ahmed H. Yakout, Kareem M. AboRas, Hossam Kotb, Mohammed Alharbi, Mokhtar Shouran, and Bdereddin Abdul Samad. A novel ultra local based-fuzzy pidf controller for frequency regulation of a hybrid microgrid system with high renewable energy penetration and storage devices. PROCESSES, 11(4), APR 2023.
- [EE65] Fahad S. Alenazi, Khalil El Hindi, and Basil AsSadhan. Complement-class harmonized naive bayes classifier. APPLIED SCIENCES-BASEL, 13(8), APR 2023.
- [EE66] Mohammed Thamer Alresheedi, Mohamed Elsafi, Yosef T. Aladadi, Ahmad Fauzi Abas, Abdullrahman Bin Ganam, M. I. Sayyed, and Mohd Adzir Mahdi. Mechanical, morphological, thermal and the attenuation properties of heavy mortars doped with nanoparticles for gamma-ray shielding applications. MATERIALS, 16(8), APR 2023.
- [EE67] Ammar Armghan, Meshari Alsharari, Khaled Aliqab, Osamah Als Salman, Juveriya Parmar, and Shobhit K. Patel. Graphene twistrionics: Tuning the absorption spectrum and achieving metamaterial properties. MATHEMATICS, 11(7), APR 2023.
- [EE68] Lakshminarayana Gadupudi, Gudapati Sambasiva Rao, Rachakonda Venkata Lakshmi Narayana Divakar, Hasmal Malik, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. Fuzzy-based fifteen-level vsc for statcom operations with single dc-link voltage. SUSTAINABILITY, 15(7), APR 2023.
- [EE69] Ahmad Fauzi Abas, Kuen Yao Lau, Yahya Mohammed Al-Moliki, Yosef Taher Aladadi, Mohammed Thamer Alresheedi, and Mohd Adzir Mahdi. Impact of intracavity power variations toward ultrashort pulse generation. APPLIED SCIENCES-BASEL, 13(7), APR 2023.
- [EE70] Solomon Feleke, Balamurali Pydi, Raavi Satish, Degarege Anteneh, Kareem M. AboRas, Hossam Kotb, Mohammed Alharbi, and Mohamed Abuagreb. De-based design of an intelligent and conventional hybrid control system with ipfc for agc of interconnected power system. SUSTAINABILITY, 15(7), APR 2023.
- [EE71] Bo Bo Han, Osamah Als Salman, Jaymit Surve, Juveriya Parmar, Sofyan Taya, and Shobhit K. Patel. Compact size zr-fe2o3 inspired metal-dielectric angle and

- polarization insensitive nanostructure for efficient solar energy absorption. INTERNATIONAL JOURNAL OF THERMAL SCIENCES, 190, AUG 2023.
- [EE72] Maisarah Mansor, Nadiah Hussein Zainol Abidin, Norita Mohd Yusoff, Kuen Yao Lau, Josephine Liew Ying Chyi, Vijay Janyani, Amit Kumar Garg, Mohammed Thamer Alresheedi, and Mohd Adzir Mahdi. Tungsten trioxide nanocomposite for conventional soliton and noise-like pulse generation in anomalous dispersion laser cavity. NANOTECHNOLOGY REVIEWS, 12(1), APR 7 2023.
- [EE73] Zeeshan Anjum Memon, Dalila Mat Said, Mohammad Yusri Hassan, Hafiz Mudassir Munir, Faisal Alsaif, and Sager Alsulamy. Effective deterministic methodology for enhanced distribution network performance and plug-in electric vehicles. SUSTAINABILITY, 15(9), APR 23 2023.
- [EE74] Yibing Wu, Rongxin Wang, Rui Lin, Xue Xu, Xingye Zhang, Osamah Alsalman, Yu Qiu, Ashraf Uddin, and Xinhua Ouyang. Excited-state intramolecular proton transfer emitter for efficient violet-blue organic light-emitting diodes with hybridized local/charge transfer channel. CHEMICAL ENGINEERING JOURNAL, 465, JUN 1 2023.
- [EE75] Mohamed Metwally Mahmoud, Basiony Shehata Atia, Yahia M. Esmail, Sid Ahmed El Mehdi Ardjoun, Noha Anwer, Ahmed I. Omar, Faisal Alsaif, Sager Alsulamy, and Shazly A. Mohamed. Application of whale optimization algorithm based fopci controllers for statcom and upqc to mitigate harmonics and voltage instability in modern distribution power grids. AXIOMS, 12(5), APR 26 2023.
- [EE76] Chen Zhu, Osamah Alsalman, and Jie Huang. From fiber bragg gratings to coaxial cable bragg gratings: One-dimensional microwave quasi-periodic photonic crystals. JOURNAL OF APPLIED PHYSICS, 133(16), APR 28 2023.
- [EE77] Mohammed Thamer Alresheedi, Mohamed Elsafi, Yosef T. T. Aladadi, Ahmad Fauzi Abas, Abdullrahman Bin Ganam, M. I. Sayyed, and Mohd Adzir Mahdi. Assessment of silicone rubber/lead oxide composites enriched with  $\text{Bi}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{BaO}$ , and  $\text{SnO}_2$  nanoparticles for radiation shielding applications. POLYMERS, 15(9), APR 30 2023.
- [EE78] Mohammed Salman Baig, Mohammed Thamer Alresheedi, Mohd Adzir Mahdi, and Ahmad Fauzi Abas. A spectrally efficient modified asymmetrically and symmetrically clipped optical (masco)-ofdm for im/dd systems. OPTICAL AND QUANTUM ELECTRONICS, 55(5), MAY 2023.
- [EE79] Chen Zhu, Osamah Alsalman, and Wassana Naku. Machine learning for a vernier-effect-based optical fiber sensor. OPTICS LETTERS, 48(9):2488-2491, MAY 1 2023.
- [EE80] Shobhit K. Patel, Dhruvik Agravat, Osamah Alsalman, Jaymit Surve, Iain Crowe, Sofyan Taya, and Truong Khang Nguyen. Design of a broadband solar absorber based on  $\text{Fe}_2\text{O}_3/\text{CuO}$  thin film absorption structure. OPTICAL AND QUANTUM ELECTRONICS, 55(5), MAY 2023.
- [EE81] Khaled Aljaloud, Yosef T. Aladadi, Majeed A. S. Alkanhal, Wazie M. Abdulkawi,

- and Rifaqat Hussain. A wideband grin dielectric lens antenna for 5g applications. *MICROMACHINES*, 14(5), MAY 3 2023.
- [EE82] Muhammad Fitra Zambak, Samir Salem Al-Bawri, Muzammil Jusoh, Ali Hanafiah Rambe, Hamsakutty Vettikalladi, Ali M. Albishi, and Mohamed Himdi. A compact 2.4 ghz l-shaped microstrip patch antenna for ism-band internet of things (iot) applications. *ELECTRONICS*, 12(9), MAY 8 2023.
- [EE83] Hend M. Fahmy, Rania A. Sweif, Hany M. Hasanien, Marcos Tostado-Veliz, Mohammed Alharbi, and Francisco Jurado. Parameter identification of lithium-ion battery model based on african vultures optimization algorithm. *MATHEMATICS*, 11(9), MAY 8 2023.
- [EE84] Ali Ahmed Khalil, Mostafa I. I. El Sayeid, Fatma E. E. Ibrahim, Ashraf A. M. Khalaf, Entessar Gemeay, Hossam Kasem, Salah Eldeen A. Khamis, Ghada M. M. ElBanby, Walid El-Shafai, El-Sayed M. El-Rabaie, Adel S. S. El-Fishawy, Moawad I. I. Dessouky, Ibrahim M. M. El-Dokany, Turkey Alotaiby, Saleh A. A. Alshebeili, and Fathi E. Abd E. El-Samie. Efficient frameworks for statistical seizure detection and prediction. *JOURNAL OF SUPERCOMPUTING*, 79(16):17824-17858, NOV 2023.
- [EE85] Hammed Olabisi Omotoso, Abdullrahman A. Al-Shamma'a, Mohammed Alharbi, Hassan M. Hussein Farh, Abdulaziz Alkuhayli, Akram M. Abdurraqeeb, Faisal Alsaif, Umar Bawah, and Khaled E. Addoweesh. Machine learning supervisory control of grid-forming inverters in islanded mode. *SUSTAINABILITY*, 15(10), MAY 15 2023.
- [EE86] Chen Zhu, Hongkun Zheng, Osamah Alsalman, Wassana Naku, and Lingmei Ma. Simultaneous and multiplexed measurement of curvature and strain based on optical fiber fabry-perot interferometric sensors. *PHOTONICS*, 10(5), MAY 16 2023.
- [EE87] Kaiyi Wu, Nathan P. O'malley, Saleha Fatema, Cong Wang, Marcello Girardi, Mohammed S. Alshaykh, Zhichao Ye, Daniel E. Leaird, Minghao Qi, Victor Torres-Company, and Andrew M. Weiner. Vernier microcombs for high-frequency carrier envelope offset and repetition rate detection. *OPTICA*, 10(5):626-633, MAY 20 2023.
- [EE88] Shobhit K. Patel, Bo Bo Han, Osamah Alsalman, Sofyan A. Taya, and Juveriya Parmar. Multi-layered ti-si solar absorber design based on tungsten material for solar thermal energy conversion. *INTERNATIONAL JOURNAL OF THERMAL SCIENCES*, 192(B), OCT 2023.
- [EE89] Irshad Ahmad, Shazia Shukrullah, Humaira Hussain, Muhammad Yasin Naz, Faisal Khalid Alsaif, Sager Alsulamy, and Yasin Khan. Robust s-scheme zno-tio<sub>2</sub>-ag with efficient charge separations for highly active hydrogen evolution performance and photocatalytic mechanism insight. *APPLIED CATALYSIS A-GENERAL*, 662, JUL 25 2023.
- [EE90] Ahmad Elleathy, Faris Alhumaidan, Mohammed Alqahtani, Ahmed S. Almaiman, Amr M. Ragheb, Ahmed B. Ibrahim, Jameel Ali, Maged A. Esmail, and Saleh A.

- Alshebeili. Strain fbg-based sensor for detecting fence intruders using machine learning and adaptive thresholding. *SENSORS*, 23(11), MAY 24 2023.
- [EE91] Jahangeer Badar, Faheem Akhtar, Dileep Kumar, Hafiz Mudassir Munir, Khawaja Haider Ali, Faisal Alsaif, and Sager Alsulamy. An mmc based hvdc system with optimized ac fault ride-through capability and enhanced circulating current suppression control. *FRONTIERS IN ENERGY RESEARCH*, 11, MAY 24 2023.
- [EE92] Nurul Hida Zainuddin, Hui Yee Chee, Suraya Abdul Rashid, Muhammad Zamharir Ahmad, Zuraidah Zan, Muhammad Hafiz Abu Bakar, Mohammed Thamer Alresheedi, Mohd Adzir Mahdi, and Mohd Hanif Yaacob. Enhanced detection sensitivity of leptospira dna using a post-deposition annealed carbon quantum dots integrated tapered optical fiber biosensor. *OPTICAL MATERIALS*, 141, JUN 2023.
- [EE93] Dina A. A. Zaki, Hany M. M. Hasanien, Mohammed Alharbi, Zia Ullah, and Mariam A. A. Sameh. Hybrid driving training and particle swarm optimization algorithm-based optimal control for performance improvement of microgrids. *ENERGIES*, 16(11), MAY 26 2023.
- [EE94] Ayad G. Baziyad, Irfan Ahmad, and Yasser Bin Salamah. Precision motion control of a piezoelectric actuator via a modified preisach hysteresis model and two-degree- of-freedom h-infinity robust control. *MICROMACHINES*, 14(6), JUN 2023.
- [EE95] Shehab Khan Noor, Muzammil Jusoh, Thennarasan Sabapathy, Ali Hanafiah Rambe, Hamsakutty Vettikalladi, Ali M. Albishi, and Mohamed Himdi. A patch antenna with enhanced gain and bandwidth for sub-6 ghz and sub-7 ghz 5g wireless applications. *ELECTRONICS*, 12(12), JUN 2023.
- [EE96] Shobhit K. Patel, Bo Bo Han, Osamah Alsalman, W. Rajan Babu, Sofyan A. Taya, and Juveriya Parmar. Graphene-based diamond-shaped solar absorber using fe-sio<sub>2</sub>- fe structure for uv to mir region. *INTERNATIONAL JOURNAL OF THERMAL SCIENCES*, 192(B), OCT 2023.
- [EE97] Sanjoy Choudhury, Ashish Kumar Luhach, Joel J. P. C. Rodrigues, Mohammed ALNumay, Uttam Ghosh, and Diptendu Sinha Roy. A residual resource fitness-based genetic algorithm for a fog-level virtual machine placement for green smart city services. *SUSTAINABILITY*, 15(11), JUN 1 2023.
- [EE98] Jahangeer Badar Soomro, Dileep Kumar, Faheem Akhtar Chachar, Semih Isik, and Mohammed Alharbi. An enhanced ac fault ride through scheme for offshore wind- based mmc-hvdc system. *SUSTAINABILITY*, 15(11), JUN 1 2023.
- [EE99] Osamah Alsalman and Iain Crowe. A design of a novel silicon photonics sensor with ultra-large free spectral range based on a directional coupler-assisted racetrack resonator (dcarr). *SENSORS*, 23(11), JUN 4 2023.
- [EE100] Humaid Eqab, Yasser Bin Salamah, Irfan Ahmad, and M. A. Morsy. Development of source seeking algorithm for mobile robots. *INTELLIGENT SERVICE*

ROBOTICS, 16(3):393-401, JUL 2023.

- [EE101] Muhammad Arfan, Naila Khaleel, Abdul Ghaffar, Faisal Khalid Alsaif, Yasin Khan, and Sager Alsulamy. Scattering of laguerre-gaussian beam by a topological insulator cylinder coated with metamaterials. IRANIAN JOURNAL OF SCIENCE, 47(4):1421- 1430, AUG 2023.
- [EE102] Chen Zhu and Osamah Alsalman. Vernier effect-based optical fiber sensor for dynamic sensing using a coarsely resolved spectrometer. OPTICS EXPRESS, 31(13):22250-22259, JUN 19 2023.
- [EE103] Meryeme Azaroual, Djeudjo Temene Hermann, Mohammed Ouassaid, Mohit Bajaj, Mohamed Maaroufi, Faisal Alsaif, and Sager Alsulamy. Optimal solution of peer-to- peer and peer-to-grid trading strategy sharing between prosumers with grid-connected photovoltaic/wind turbine/battery storage systems. INTERNATIONAL JOURNAL OF ENERGY RESEARCH, 2023, JUN 19 2023.
- [EE104] Rania A. Turkey, Tarek S. Abdelsalam, Hany M. Hasanien, Mohammed Alharbi, Zia Ullah, S. M. Muyeen, and Amr M. Abdeen. Adaptive controlled superconducting magnetic energy storage devices for performance enhancement of wind energy systems. AIN SHAMS ENGINEERING JOURNAL, 14(7), JUL 2023.
- [EE105] Ahmed Alzuhair and Abdullah Alghaihab. The design and optimization of an acoustic and ambient sensing aiot platform for agricultural applications. SENSORS, 23(14), JUL 2023.
- [EE106] Hao Song, Kaiheng Zou, Huibin Zhou, Narek Karapetyan, Amir Minoofar, Xinzhou Su, Ahmed Almaiman, Jonathan L. Habif, Moshe Tur, and Alan E. Willner. Experimental demonstration of an optics-based 4-psk half-adder using nonlinear wave mixing. OPTICS LETTERS, 48(13):3475-3478, JUL 1 2023.
- [EE107] MadhuSudana Rao Ranga, Veera Reddy Aduru, N. Vamsi Krishna, K. Dhananjay Rao, Subhjit Dawn, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. An unscented kalman filter-based robust state of health prediction technique for lithium ion batteries. BATTERIES-BASEL, 9(7), JUL 2023.
- [EE108] Hend M. Fahmy, Rania A. Swief, Hany M. Hasanien, Mohammed Alharbi, Jose Luis Maldonado, and Francisco Jurado. Hybrid state of charge estimation of lithium-ion battery using the coulomb counting method and an adaptive unscented kalman filter. ENERGIES, 16(14), JUL 2023.
- [EE109] Abhilipsa Sahoo, Prakash Kumar Hota, Preeti Ranjan Sahu, Faisal Alsaif, Sager Alsulamy, and Taha Selim Ustun. Optimal congestion management with facts devices for optimal power dispatch in the deregulated electricity market. AXIOMS, 12(7), JUL 2023.
- [EE110] Muhammad Tahir, Azmat Ali Khan, Abdullah Bafaqeer, Naveen Kumar, Mohammad Siraj, and Amanullah Fatehmulla. Highly stable photocatalytic dry and bi-reforming of methane with the role of a hole scavenger for syngas production over a defective co-doped g-c3n4 nanotexture. CATALYSTS, 13(7), JUL 2023.

- [EE111] Polamarasetty P. Kumar, Akhlaqur Rahman, Ramakrishna S. S. Nuvvula, Ilhami Colak, S. M. Muyeen, Sk. A. Shezan, G. M. Shafiullah, Md. Fatin Ishraque, Md. Alamgir Hossain, Faisal Alsaif, and Rajvikram Madurai Elavarasan. Using energy conservation-based demand-side management to optimize an off-grid integrated renewable energy system using different battery technologies. *SUSTAINABILITY*, 15(13), JUL 2023.
- [EE112] Jahangeer Badar Soomro, Faheem Akhtar Chachar, Madad Ali Shah, Abdul Aziz Memon, Faisal Alsaif, and Sager Alsulamy. Optimized circulating current control and enhanced ac fault ride-through capability using model predictive control for mmc- hvdc applications. *ENERGIES*, 16(13), JUL 2023.
- [EE113] Najeeb Al-Khalli, Saud Alateeq, Mohammed Almansour, Yousef Alhassoun, Ahmed B. Ibrahim, and Saleh A. Alshebeili. Real-time detection of intruders using an acoustic sensor and internet-of-things computing. *SENSORS*, 23(13), JUL 2023.
- [EE114] Malek G. Daher, Naser M. Ahmed, Osamah Als Salman, Abinash Panda, Ahmed Nabih Zaki Rashed, Juveriya Parmar, Sofyan A. Taya, and Shobhit K. Patel. Novel efficient surface plasmon resonance biosensor for the determination of sucrose concentration. *PLASMONICS*, 2023 JUL 5 2023.
- [EE115] M. Arfan, A. Ghaffar, F. K. Alsaif, Y. Khan, and I. Shakir. Analysis of light scattering of a gaussian beam by a perfect electromagnetic conductor (pemc) sphere. *INDIAN JOURNAL OF PHYSICS*, 2023 JUL 15 2023.
- [EE116] Jameel Ali, Ahmed Almaiman, Amr M. Ragheb, Maged A. Esmail, Esam M. Almohimmah, and Saleh A. Alshebeili. Multievent localization for loop-based sagnac sensing system using machine learning. *OPTICS EXPRESS*, 31(15):24005–24024, JUL 17 2023.
- [EE117] Jacob Wekalao, Osamah Als Salman, N. A. Natraj, Jaymit Surve, Juveriya Parmar, and Shobhit K. Patel. Design of graphene metasurface sensor for efficient detection of covid-19. *PLASMONICS*, 2023 JUL 19 2023.
- [EE118] Shobhit K. K. Patel, Osamah Als Salman, Sofyan A. A. Taya, and Juveriya Parmar. Skin cancer detection using tunable graphene spr optical sensor designed using circular ring resonator. *PLASMONICS*, 2023 JUL 25 2023.
- [EE119] Abdulmuneem Bashaiwth, Hamad Binsalleeh, and Basil AsSadhan. An explanation of the lstm model used for ddos attacks classification. *APPLIED SCIENCES-BASEL*, 13(15), AUG 2023.
- [EE120] Nour A. A. Mohamed, Hany M. M. Hasanien, Abdulaziz Alkuhayli, Tlenshiyeva Akmaral, Francisco Jurado, and Ahmed O. O. Badr. Hybrid particle swarm and gravitational search algorithm-based optimal fractional order pid control scheme for performance enhancement of offshore wind farms. *SUSTAINABILITY*, 15(15), AUG 2023.
- [EE121] Oussama Allama, Mohamed Hadi Habaebi, Sheroz Khan, Md. Rafiqul Islam, and Abdullah Alghaihab. Simulation and control design of a midrange wpt charging



system for in-flight drones. ENERGIES, 16(15), AUG 2023.

- [EE122] Abdul Rahman Sarmani, Norita Mohd Yusoff, Abdulmoghni Wazae Al-Alimi, Mohammed Thamer Alresheedi, Nurul Hida Zainuddin, Eng Khoon Ng, and Mohd Adzir Mahdi. Spectral broadening in tight confinement geometry of a random fiber laser. OPTICAL AND QUANTUM ELECTRONICS, 55(8), AUG 2023.
- [EE123] Naladi Ram Babu, Sanjeev Kumar Bhagat, Tirumalasetty Chiranjeevi, Mukesh Pushkarna, Arindita Saha, Hossam Kotb, Kareem M. AboRas, Faisal Alsaif, Sager Alsulamy, Yazeed Yasin Ghadi, and Djeudjo Temene Hermann. Frequency control of a realistic dish stirling solar thermal system and accurate hvdc models using a cascaded fopi-iddn-based crow search algorithm. INTERNATIONAL JOURNAL OF ENERGY RESEARCH, 2023, AUG 5 2023.
- [EE124] Jacob Wekalao, Shobhit K. Patel, Osamah Als Salman, Jaymit Surve, N. K. Anushkannan, and Juveriya Parmar. Waterborne bacteria detecting highly sensitive graphene metasurface based cost-efficient and efficient refractive index sensors. PLASMONICS, 2023 AUG 15 2023.
- [EE125] Amr M. M. Ragheb, Qazi Tareq, Maged. A. Esmail, Habib Fathallah, Saleh A. A. Alshebeili, and Mohammed Z. M. Khan. Sub-thz signal transmission in harsh environments using I-band quantum-dash laser source: Experiments and modeling. IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, 29(5), SEP 2023.
- [EE126] Shobhit K. Patel, Dhruvik Agravat, Osamah Als Salman, Jaymit Surve, Sofyan A. Taya, and Juveriya Parmar. Numerical analysis of wideband solar absorber using thick film with glassy material, resonator and back reflector. OPTICAL AND QUANTUM ELECTRONICS, 55(9), SEP 2023.

# INDUSTRIAL ENGINEERING

## PUBLICATIONS

- [IE1] Marwan El Helou, Khaled Benfriha, Abdulrahman M. Al-Ahmari, Peter Wardle, Esmat Talhi, Stephane Loubere, Chawki El Zant, and Quentin Charrier. A modular smart vision system for industrial inspection and control of conformity. *SMART AND SUSTAINABLE MANUFACTURING SYSTEMS*, 6(1):177-189, 2022.
- [IE2] Menna-Tullah Ashraf, Ali A. AlHammadi, Ahmed M. El-Sherbeeney, Salh Alhammadi, Wail Al Zoubi, Young Gun Ko, and Mostafa R. Abukhadra. Synthesis of cellulose fibers/zeolite-a nanocomposite as an environmental adsorbent for organic and inorganic selenium ions; characterization and advanced equilibrium studies. *JOURNAL OF MOLECULAR LIQUIDS*, 360, AUG 15 2022.
- [IE3] Madiha Razaqat, Nadeem Ahmad Mufti, Naveed Ahmed, Ateekh Ur Rehman, Abdullah Yahia AlFaify, Muhammad Umar Farooq, and Mustafa Saleh. Hole-making in d2-grade steel tool by electric-discharge machining through non-conventional electrodes. *PROCESSES*, 10(8), AUG 2022.
- [IE4] Jinping Chen, Razaullah Khan, Yanmei Cui, Bashir Salah, Yuanpeng Liu, and Waqas Saleem. The effect of changes in settings from multiple filling points to a single filling point of an industry 4.0-based yogurt filling machine. *PROCESSES*, 10(8), AUG 2022.
- [IE5] Lavanya Nagamalla, J. V. Shanmukha Kumar, Mohammed Rafi Shaik, Chintakindi Sanjay, Ali M. Alsamhan, Mohsin Ahmed Kasim, and Abdulrahman Alwarthan. Identification of novel axl kinase inhibitors using ligand-based pharmacophore screening and molecular dynamics simulations. *CRYSTALS*, 12(8), AUG 2022.
- [IE6] Abdul Salam Khan, Razaullah Khan, Waqas Saleem, Bashir Salah, and Soliman Alkhatib. Modeling and optimization of assembly line balancing type 2 and e (slbp-2e) for a reconfigurable manufacturing system. *PROCESSES*, 10(8), AUG 2022.
- [IE7] Varun Tripathi, Somnath Chattopadhyaya, Alok Kumar Mukhopadhyay, Shubham Sharma, Changhe Li, Sunpreet Singh, Waqas Saleem, Bashir Salah, and Abdullah Mohamed. Recent progression developments on process optimization approach for inherent issues in production shop floor management for industry 4.0. *PROCESSES*, 10(8), AUG 2022.
- [IE8] Saud Altaf, Shafiq Ahmad, Mazen Zaindin, Shamsul Huda, Sofia Iqbal, and Muhammad Waseem Soomro. Multiple industrial induction motors fault diagnosis model within powerline system based on wireless sensor network. *SUSTAINABILITY*, 14(16), AUG 2022.
- [IE9] Tariq Sadad, Syed Ahmad Chan Bukhari, Asim Munir, Anwar Ghani, Ahmed M. M. El-Sherbeeney, and Hafiz Tayyab Rauf. Detection of cardiovascular disease based on ppg signals using machine learning with cloud computing. *COMPUTATIONAL INTELLIGENCE AND NEUROSCIENCE*, 2022, AUG 4 2022.
- [IE10] Esraa R. Adly, Mohamed S. Shaban, Ahmed M. El-Sherbeeney, Wail Al Zoubi, and Mostafa R. Abukhadra. Enhanced Congo red adsorption and photo-fenton

- oxidation over an iron-impeded geopolymer from ferruginous kaolinite: Steric, energetic, oxidation, and synergetic studies. *ACS OMEGA*, 7(35):31218-31232, SEP 6 2022.
- [IE11] Asadullah Dawood, Shazia Bashir, Naveed Ahmed, Asma Hayat, Abdullah Yahia AlFaify, Syed Muhammad Abouzar Sarfraz, Shahab Ahmed Abbasi, and Ateekh Ur Rehman. Surface structuring and thin film coating through additive concept using laser induced plasma of mg alloy: A comparison between the presence and absence of transverse magnetic field (tmf). *COATINGS*, 12(9), SEP 2022.
- [IE12] Muhammad Harris, Hammad Mohsin, Johan Potgieter, Khalid Mahmood Arif, Saqib Anwar, Abdullah AlFaify, and Muhammad Umar Farooq. Hybrid deposition additive manufacturing: novel volume distribution, thermo-mechanical characterization, and image analysis. *JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING*, 44(9), SEP 2022.
- [IE13] Sarmad Ali Khan, Muhammad Faizan Ameer, Ghulam Moeen Uddin, Muhammad Asad Ali, Saqib Anwar, Muhammad Umar Farooq, and Abdullah Alfaify. An in-depth analysis of tool wear mechanisms and surface integrity during high-speed hard turning of aisi d2 steel via novel inserts. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 122(9-10):4013-4028, OCT 2022.
- [IE14] Mustufa Haider Abidi, Hisham Alkhalefah, Khaja Moiduddin, and Abdulrahman AlAhmari. Novel improved chaotic elephant herding optimization algorithm-based optimal defense resource allocation in cyber-physical systems. *SOFT COMPUTING*, 27(6):2965-2980, MAR 2023.
- [IE15] Muhammad Umar Farooq, Saqib Anwar, M. Saravana Kumar, Abdullah AlFaify, Muhammad Asad Ali, Raman Kumar, and Rodolfo Haber. A novel flushing mechanism to minimize roughness and dimensional errors during wire electric discharge machining of complex profiles on inconel 718. *MATERIALS*, 15(20), OCT 2022.
- [IE16] Wadea Ameen, Abdulrahman Al-Ahmari, Syed Hammad Mian, Muneer Khan Mohammed, Husam Kaid, and Osama Abdulhameed. Optimization of tree-like support for titanium overhang structures produced via electron beam melting. *SUSTAINABILITY*, 14(20), OCT 2022.
- [IE17] Mahalingam Siva Kumar, Devaraj Rajamani, Ahmed M. El-Sherbeeney, Esakki Balasubramanian, Krishnasamy Karthik, Hussein Mohamed Abdelmoneam Hussein, and Antonello Astarita. Intelligent modeling and multi-response optimization of awjc on fiber intermetallic laminates through a hybrid anfis-salp swarm algorithm. *MATERIALS*, 15(20), OCT 2022.
- [IE18] Abdulsalam A. Al-Tamimi. Topology optimization of patient-specific custom-fit distal tibia plate: A spiral distal tibia bone fracture. *APPLIED SCIENCES-BASEL*, 12(20), OCT 2022.
- [IE19] Shafiq Ahmad. Electromagnetic field optimization based selective harmonic elimination in a cascaded symmetric h-bridge inverter. *ENERGIES*, 15(20), OCT

2022.

- [IE20] Osama Abdulhameed, Syed Hammad Mian, Khaja Moiduddin, Abdulrahman AlAhmari, Naveed Ahmed, and Mohamed K. Aboudaif. A multi-part orientation planning schema for fabrication of non-related components using additive manufacturing. *MICROMACHINES*, 13(10), OCT 2022.
- [IE21] Mostafa R. Abukhadra, Marwa H. Shemy, Ahmed M. El-Sherbeeney, Ahmed Tawhid Ahmed Soliman, and Wail Al Zoubi. Characterization of sulfonated raw coal products as enhanced adsorbents for toxic methyl parathion pesticide: Advanced equilibrium investigation and effect of acid concentration. *CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION*, 182, DEC 2022.
- [IE22] Nehad Ali Shah, Aziz Ullah Awan, Rabia Khan, Iskander Tlili, M. Umar Farooq, Bashir Salah, and Jae Dong Chung. Free convection hartmann flow of a viscous fluid with damped thermal transport through a cylindrical tube. *CHINESE JOURNAL OF PHYSICS*, 80:19-33, DEC 2022.
- [IE23] Muhammad Zaman-ul Haq, Ambrina Kanwal, Akber Abid Gardezi, Hina Fatima, Zafeer Saqib, Syed Atif Bokhari, Emad Abouel Nasr, Shafiq Ahmad, and Muhammad Shafiq. Assessing spatial-temporal changes in monetary values of urban ecosystem services through remotely sensed data. *SUSTAINABILITY*, 14(22), NOV 2022.
- [IE24] Imran Zahid, Muhammad Farooq, Muhammad Farhan, Muhammad Usman, Adnan Qamar, Muhammad Imran, Mejdal A. Alqahtani, Saqib Anwar, Muhammad Sultan, and Muhammad Yasar Javaid. Thermal performance analysis of various heat sinks based on alumina nepcm for passive cooling of electronic components: An experimental study. *ENERGIES*, 15(22), NOV 2022.
- [IE25] Muhammad Omair, Mohammed Alkahtani, Kashif Ayaz, Ghulam Hussain, and Johannes Buhl. Supply chain modelling of the automobile multi-stage production considering circular economy by waste management using recycling and reworking operations. *SUSTAINABILITY*, 14(22), NOV 2022.
- [IE26] Mustafa Saleh, Saqib Anwar, Abdulrahman M. Al-Ahmari, and Abdullah Alfaify. Compression performance and failure analysis of 3d-printed carbon fiber/pla composite tpms lattice structures. *POLYMERS*, 14(21), NOV 2022.
- [IE27] Malik Javed Akhtar, Rabbia Mahum, Faisal Shafique Butt, Rashid Amin, Ahmed M. El-Sherbeeney, Seongkwan Mark Lee, and Sarang Shaikh. A robust framework for object detection in a traffic surveillance system. *ELECTRONICS*, 11(21), NOV 2022.
- [IE28] Shafiq Ahmad, Zia Ur Rehman, Saud Altaf, Mazen Zaindin, Shamsul Huda, Muhammad Haroon, and Sofia Iqbal. Dynamic key extraction technique using pulse signal and lightweight cryptographic authentication scheme for wban. *SUSTAINABILITY*, 14(21), NOV 2022.
- [IE29] Ghulam Hussain, Mohammed Alkahtani, Marwan Alsultan, Johannes Buhl, and Munish Kumar Gupta. Chip formation, cutting temperature and forces

- measurements in hard turning of gcr15 under the influence of pcbn chamfering parameters. MEASUREMENT, 204, NOV 30 2022.
- [IE30] Gaurav Saxena, Sanjay Chintakindi, Mohsin Ahmed Kasim, Praveen Kumar Maduri, Y. K. Awasthi, Sanjay Kumar, Sahil Kansal, Rishabh Jain, Manish Kumar Sharma, and Charul Dewan. Metasurface inspired wideband high isolation thz mimo antenna for nano communication including 6g applications and liquid sensors. NANO COMMUNICATION NETWORKS, 34, DEC 2022.
- [IE31] Mehdi Tlija and Abdulsalam A. Al-Tamimi. Combined manufacturing and cost complexity scores-based process selection for hybrid manufacturing. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART B- JOURNAL OF ENGINEERING MANUFACTURE, 237(10):1473-1484, AUG 2023.
- [IE32] Saad Balhasan, Mohammed Alnahhal, Shahrul Shawan, Bashir Salah, Waqas Saleem, and Mosab I. I. Tabash. Optimization of exploration and production sharing agreements using the maxi-min and nash solutions. ENERGIES, 15(23), DEC 2022.
- [IE33] Khaled A. Alkhaledi, Ahmed M. El-Sherbeeney, and Salaheddine Bendak. Theoretical estimation of neck stiffness subjected to lateral dynamic striking. NETWORK MODELING AND ANALYSIS IN HEALTH INFORMATICS AND BIOINFORMATICS, 11(1), DEC 2022.
- [IE34] Faiz Ali, Adil Sarwar, Farhad Ilahi Bakhsh, Shafiq Ahmad, Adam Ali Shah, and Hafiz Ahmed. Parameter extraction of photovoltaic models using atomic orbital search algorithm on a decent basis for novel accurate rmse calculation. ENERGY CONVERSION AND MANAGEMENT, 277, FEB 1 2023.
- [IE35] Bashir Salah, Ali M. Alsamhan, Waqas Saleem, Razaullah Khan, and Ahmed Tawhid Ahmed Soliman. 3d simulation of a yogurt filling machine using grafacet studio and factory io: Realization of industry 4.0. TRANSACTIONS OF FAMENA, 47(3):15-30, 2023.
- [IE36] Mehdi Mrad, Khaled Bamatraf, Mohammed Alkahtani, and Lotfi Hidri. A genetic algorithm for the integrated warehouse location, allocation and vehicle routing problem in a pooled transportation system. INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING-THEORY APPLICATIONS AND PRACTICE, 30(3):852-875, 2023.
- [IE37] Mohamed Aly Bouke, Azizol Abdullah, Jaroslav Frnda, Korhan Cengiz, and Bashir Salah. Bukagini: A stability-aware gini index feature selection algorithm for robust model performance. IEEE ACCESS, 11:59386-59396, 2023.
- [IE38] Muzzamil Ghaffar, Shakil Rehman Sheikh, Noman Naseer, Syed Ali Usama, Bashir Salah, and Soliman Abdul Karim Alkhatib. Accuracy improvement of non-intrusive load monitoring using voting-based consensus clustering. IEEE ACCESS, 11:53165- 53175, 2023.
- [IE39] Husam Kaid, Abdulrahman Al-Ahmari, Khaled N. Alqahtani, Fahad Alasim, Emad H. Abualsauod, Abdulmajeed Dabwan, and Mustafa M. Nasr. A novel method for converting colored petri nets to ladder diagram in the automation of automated

- manufacturing systems. IEEE ACCESS, 11:29275-29295, 2023.
- [IE40] Emad Fararah, Emad Abouel Nasr, and Haitham Abbas Mahmoud. Multi-objective optimization modeling of integrated supply chain for solid waste treatment. INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING-THEORY APPLICATIONS AND PRACTICE, 30(1):147-165, 2023.
- [IE41] Mohammed A. Noman, Fahad M. Alqahtani, Ibrahim Al-Harkan, Saad A. Alabdulkarim, and Fahad Alasim. A new integrated risk-assessment model for minimizing human-machine error consequences in a preventive maintenance system. IEEE ACCESS, 11:25253-25265, 2023.
- [IE42] Mohammed Saeed Al-Alqam, Ateekh Ur Rehman, and Marwan Alsultan. Sustainability indexing model for saudi manufacturing organizations. SUSTAINABILITY, 15(2), JAN 2023.
- [IE43] Ateekh Ur Rehman, Syed Hammad Mian, Yusuf Siraj Usmani, Mustufa Haider Abidi, and Muneer Khan Mohammed. Modeling consequences of covid-19 and assessing its epidemiological parameters: A system dynamics approach. HEALTHCARE, 11(2), JAN 2023.
- [IE44] Saud Altaf, Muhammad Haroon, Shafiq Ahmad, Emad Abouel Nasr, Mazen Zaindin, Shamsul Huda, and Zia ur Rehman. Radio-frequency-identification-based 3d human pose estimation using knowledge-level technique. ELECTRONICS, 12(2), JAN 2023.
- [IE45] Albi Thomas, Suresh Ma, Ateekh Ur Rehman, and Yusuf Siraj Usmani. Green operation strategies in healthcare for enhanced quality of life. HEALTHCARE, 11(1), JAN 2023.
- [IE46] Muhammad Mujahid, Furqan Rustam, Fahad Alasim, Muhammad Abubakar Siddique, Imran Ashraf, and Raheem Yar Khan. What people think about fast food: opinions analysis and lda modeling on fast food restaurants using unstructured tweets. PEERJ COMPUTER SCIENCE, 9, JAN 13 2023.
- [IE47] Sheikh Muhammad Ali Haider, Tahir Abdul Hussain Ratlamwala, Khurram Kamal, Fahad Alqahtani, Mohammed Alkahtani, Emad Mohammad, and Moath Alatefi. Energy and exergy analysis of a geothermal sourced multigeneration system for sustainable city. ENERGIES, 16(4), FEB 2023.
- [IE48] Fawaz M. M. Abdullah, Abdulrahman M. M. Al-Ahmari, and Saqib Anwar. A hybrid fuzzy multi-criteria decision-making model for evaluating the influence of industry 4.0 technologies on manufacturing strategies. MACHINES, 11(2), FEB 2023.
- [IE49] Fawaz M. M. Abdullah, Abdulrahman M. M. Al-Ahmari, and Saqib Anwar. Analyzing interdependencies among influencing factors in smart manufacturing. SUSTAINABILITY, 15(4), FEB 2023.
- [IE50] Husam Kaid, Abdulrahman Al-Ahmari, and Khaled N. Alqahtani. Fault detection, diagnostics, and treatment in automated manufacturing systems using internet of things and colored petri nets. MACHINES, 11(2), FEB 2023.

- [IE51] Yan Qiao, Naiqi Wu, Zhiwu Li, Abdulrahman M. Al-Ahmari, Abdul-Aziz El-Tamimi, and Husam Kaid. A two-step approach to scheduling a class of two-stage flow shops in automotive glass manufacturing. *MACHINES*, 11(2), FEB 2023.
- [IE52] Rimsha Asad, Saud Altaf, Shafiq Ahmad, Adamali Shah Noor Mohamed, Shamsul Huda, and Sofia Iqbal. Achieving personalized precision education using the catboost model during the covid-19 lockdown period in pakistan. *SUSTAINABILITY*, 15(3), FEB 2023.
- [IE53] Zakariya Kaneesamkandi and Ateekh Ur Rehman. Selection of a photovoltaic panel cooling technique using multi-criteria decision analysis. *APPLIED SCIENCES-BASEL*, 13(3), FEB 2023.
- [IE54] Reham A. Eltuhamy, Mohamed Rady, Eydhah Almatrafi, Haitham A. Mahmoud, and Khaled H. Ibrahim. Fault detection and classification of cigs thin-film pv modules using an adaptive neuro-fuzzy inference scheme. *SENSORS*, 23(3), FEB 2023.
- [IE55] Abdul Qadeer, G. Hussain, Mohammed Alkahtani, and Johannes Buhl. Springback behavior of a metal/polymer laminate in incremental sheet forming: stress/strain relaxation perspective. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 23:1725-1737, MAR-APR 2023.
- [IE56] Mustajab Ahmed, Khurram Kamal, Tahir Abdul Hussain Ratlamwala, Ghulam Hussain, Mejdal Alqahtani, Mohammed Alkahtani, Moath Alatefi, and Ayoub Alzabidi. Tool health monitoring of a milling process using acoustic emissions and a resnet deep learning model. *SENSORS*, 23(6), MAR 2023.
- [IE57] Ravi Prakash Singh, Santosh Kumar, Sarang Pande, Sachin Salunkhe, Adham E. Ragab, Pankaj Kumar Singh, Md Meraz, and J. Paulo Davim. Robot-assisted cold and warm incremental sheet forming of aluminum alloy 6061: A comparative study. *METALS*, 13(3), MAR 2023.
- [IE58] Muhammad Umar Farooq and Saqib Anwar. Investigations on the surface integrity of ti6al4v under modified dielectric(s)-based electric discharge machining using cryogenically treated electrodes. *PROCESSES*, 11(3), MAR 2023.
- [IE59] Asmat Ullah, Muhammad Ismail Mohmand, Hameed Hussain, Sumaira Johar, Inayat Khan, Shafiq Ahmad, Haitham A. Mahmoud, and Shamsul Huda. Customer analysis using machine learning-based classification algorithms for effective segmentation using recency, frequency, monetary, and time. *SENSORS*, 23(6), MAR 2023.
- [IE60] Uzair Bhatti, Hamza Aamir, Khurram Kamal, Tahir Abdul Hussain Ratlamwala, Fahad Alqahtani, Mohammed Alkahtani, Emad Mohammad, and Moath Alatefi. Clean energy based multigeneration system for sustainable cities: Thermodynamic, and stability analyses. *MEMBRANES*, 13(3), MAR 2023.
- [IE61] Fawaz M. Abdullah, Abdulrahman M. Al-Ahmari, and Saqib Anwar. An integrated fuzzy dematel and fuzzy topsis method for analyzing smart manufacturing



technologies. PROCESSES, 11(3), MAR 2023.

- [IE62] Rimsha Asad, Saud Altaf, Shafiq Ahmad, Haitham Mahmoud, Shamsul Huda, and Sofia Iqbal. Machine learning-based hybrid ensemble model achieving precision education for online education amid the lockdown period of covid-19 pandemic in pakistan. SUSTAINABILITY, 15(6), MAR 2023.
- [IE63] Shaoyong Han, Zhun Zhu, Mina Mortazavi, Ahmed M. M. El-Sherbeeney, and Peyman Mehrabi. Analytical assessment of the structural behavior of a specific composite floor system at elevated temperatures using a newly developed hybrid intelligence method. BUILDINGS, 13(3), MAR 2023.
- [IE64] Tamer Khalaf, Muthuramalingam Thangaraj, Khaja Moiduddin, Vasanth Swaminathan, Syed Hammad Mian, Faraz Ahmed, and Mohamed Kamaleldin Aboudaif. Performance evaluation of input power of diode laser on machined leather specimen in laser beam cutting process. MATERIALS, 16(6), MAR 2023.
- [IE65] Saqib Anwar, Nauman Ahmad Khan, Sarmad Ali Khan, and Syed Farhan Raza. One-step high-speed finish drilling of inconel 718 superalloy via novel inserts. PROCESSES, 11(3), MAR 2023.
- [IE66] Mustafa M. Nasr, Saqib Anwar, Ali M. Al-Samhan, Khaled N. Alqahtani, Abdulmajeed Dabwan, and Mohammed H. Alhaag. Sustainable microfabrication enhancement of graphene nanoplatelet-reinforced biomedical alumina ceramic matrix nanocomposites. NANOMATERIALS, 13(6), MAR 2023.
- [IE67] Adel T. Abbas, Magdy M. El Rayes, Abdulhamid A. Al-Abduljabbar, Adham E. Ragab, Faycal Benyahia, and Ahmed Elkaseer. Effects of tool edge geometry and cutting conditions on the performance indicators in dry turning aisi 1045 steel. MACHINES, 11(3), MAR 2023.
- [IE68] Aditya M. M. Mahajan, Nagumothu Kishore Babu, Mahesh Kumar Talari, Ateekh Ur Rehman, and Prakash Srirangam. Effect of heat treatment on the microstructure and mechanical properties of rotary friction welded aa7075 and aa5083 dissimilar joint. MATERIALS, 16(6), MAR 2023.
- [IE69] Perumandla Pavan, Mahesh Kumar Talari, Nagumothu Kishore Babu, Ateekh Ur Rehman, and Prakash Srirangam. Effect of heat treatment on the microstructure and mechanical properties of rotary friction welded dissimilar in718 to ss304l alloys. APPLIED SCIENCES-BASEL, 13(6), MAR 2023.
- [IE70] Ummara Ayman, Muhammad Sultan Zia, Ofonime Dominic Okon, Najam-ur Rehman, Talha Meraj, Adham E. Ragab, and Hafiz Tayyab Rauf. Epileptic patient activity recognition system using extreme learning machine method. BIOMEDICINES, 11(3), MAR 2023.
- [IE71] Sidrah Mumtaz, Mudassar Raza, Ofonime Dominic Okon, Saeed Ur Rehman, Adham E. Ragab, and Hafiz Tayyab Rauf. A hybrid framework for detection and analysis of leaf blight using guava leaves imaging. AGRICULTURE-BASEL, 13(3), MAR 2023.

- [IE72] Mohammed Alkahtani, Lofti Hidri, and Mehdi Mrad. Multi-stage production and process outsourcing in automobile-part supply chain considering a carbon tax strategy using sequential quadratic optimization technique. *MATHEMATICS*, 11(5), MAR 2023.
- [IE73] Syed Farhan Raza, Muhammad Amjad, Kashif Ishfaq, Shafiq Ahmad, and Mali Abdollahian. Effect of three-dimensional (3d) scanning factors on minimizing the scanning errors using a white led light 3d scanner. *APPLIED SCIENCES-BASEL*, 13(5), MAR 2023.
- [IE74] Mujahid Ali, Abhinav Kumar, A. Yvaz, and Bashir Salah. Central composite design application in the optimization of the effect of pumice stone on lightweight concrete properties using rsm. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 18, JUL 2023.
- [IE75] Nadeem Fayaz Lone, Dhruv Bajaj, Namrata Gangil, Touseef Khan, Mustufa Haider Abidi, Abdulrahman Al-Ahmari, and Arshad Noor Siddiquee. Multi principal element alloy particle reinforced metal matrix composites: Synthesis, microstructure, and mechanical aspects. *MANUFACTURING LETTERS*, 36:46-51, JUL 2023.
- [IE76] Alaa T. Okasha, Ahmed A. Abdel-Khalek, Ahmed M. El-Sherbeeney, Wail Al Zoubi, and Mostafa R. Abukhadra. Advanced equilibrium study on the synthesis and characterization of mg-doped hydroxyapatite nano-fibers as a potential enhanced adsorbent of zn (ii) and malachite green dye. *MATERIALS TODAY COMMUNICATIONS*, 35, JUN 2023.
- [IE77] Muhammad Umar Farooq, Saqib Anwar, Rizwan Ullah, and Rodolfo Haber Guerra. Sustainable machining of additive manufactured ss-316l underpinning low carbon manufacturing goal. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 24:2299-2318, MAY-JUN 2023.
- [IE78] Adham E. Ragab. Analyzing spif product characteristics using full factorial design-integrated pca approach. *PROCESSES*, 11(4), APR 2023.
- [IE79] Khaled N. N. Alqahtani, Mustafa M. M. Nasr, Saqib Anwar, Ali M. M. Al-Samhan, Mohammed H. H. Alhaag, and Husam Kaid. Integrated intelligent method based on fuzzy logic for optimizing laser microfabrication processing of gnps-improved alumina nanocomposites. *MICROMACHINES*, 14(4), APR 2023.
- [IE80] Abdulmajeed Dabwan, Saqib Anwar, Ali M. Al-Samhan, Khaled N. Alqahtani, Mustafa M. Nasr, Husam Kaid, and Wadea Ameen. Cnc turning of an additively manufactured complex profile ti6al4v component considering the effect of layer orientations. *PROCESSES*, 11(4), APR 2023.
- [IE81] Haoming Zhu, Ahmed M. El-Sherbeeney, Mohammed A. El-Meligy, Amir M. Fathollahi-Fard, and Zhiwu Li. Verification of current-state opacity in discrete event systems by using basis coverability graphs. *MATHEMATICS*, 11(8), APR 2023.
- [IE82] Moath Alatefi, Abdulrahman M. Al-Ahmari, Abdullah Yahia AlFaify, and Mustafa Saleh. A framework for multivariate statistical quality monitoring of additive

- manufacturing: Fused filament fabrication process. PROCESSES, 11(4), APR 2023.
- [IE83] Ateekh Ur Rehman, Syed Hammad Mian, Yusuf Siraj Usmani, Mustufa Haider Abidi, and Muneer Khan Mohammed. Modelling and analysis of hospital inventory policies during covid-19 pandemic. PROCESSES, 11(4), APR 2023.
- [IE84] Akhil Reddy Beeravolu, Nagumothu Kishore Babu, Mahesh Kumar Talari, Ateekh Ur Rehman, and Prakash Srirangam. Influence of microstructure and mechanical properties of dissimilar rotary friction welded inconel to stainless steel joints. MATERIALS, 16(8), APR 2023.
- [IE85] M. Tlija, A. Korbi, B. Louhichi, and A. Tahan. A computer-aided design-based tolerance analysis of assemblies with form defects and deformations of nonrigid parts. JOURNAL OF COMPUTING AND INFORMATION SCIENCE IN ENGINEERING, 23(2), APR 1 2023.
- [IE86] Ajay Surendrarao Bhongade, Prakash Manohar Khodke, Ateekh Ur Rehman, Manoj Dattatray Nikam, Prathamesh Dattatray Patil, and Pramod Suryavanshi. Managing disruptions in a flow-shop manufacturing system. MATHEMATICS, 11(7), APR 2023.
- [IE87] Bonagiri Varsha, Arif Ali Baig Moghal, Ateekh Ur Rehman, and Bhaskar C. S. Chittoori. Shear, consolidation characteristics and carbon footprint analysis of clayey soil blended with calcium lignosulphonate and granite sand for earthen dam application. SUSTAINABILITY, 15(7), APR 2023.
- [IE88] Mustafa Saleh, Saqib Anwar, Abdulrahman M. Al-Ahmari, and Abdullah Yahia AlFaify. Prediction of mechanical properties for carbon fiber/pla composite lattice structures using mathematical and anfis models. POLYMERS, 15(7), APR 2023.
- [IE89] Emad Abouel Nasr, Haitham A. Mahmoud, Mohammed A. El-Meligy, Emad Mahrous Awwad, Sachin Salunkhe, Vishal Naranje, R. Swarnalatha, and Jaber E. Abu Qudeiri. Electrical efficiency investigation on photovoltaic thermal collector with two different coolants. SUSTAINABILITY, 15(7), APR 2023.
- [IE90] Kashif Ishfaq, Muhammad Sana, Mudassar Rehman, Saqib Anwar, Abdullah Yahia Alfaify, and Abdul Wasy Zia. Role of biodegradable dielectrics toward tool wear and dimensional accuracy in cu-mixed die sinking edm of inconel 600 for sustainable machining. JOURNAL OF THE BRAZILIAN SOCIETY OF MECHANICAL SCIENCES AND ENGINEERING, 45(4), APR 2023.
- [IE91] S. M. Mozammil Hasnain, Rajeshwari Chatterjee, Prabhat Ranjan, Gaurav Kumar, Shubham Sharma, Abhinav Kumar, Bashir Salah, and Syed Sajid Ullah. Performance, emission, and spectroscopic analysis of diesel engine fuelled with ternary biofuel blends. SUSTAINABILITY, 15(9), APR 29 2023.
- [IE92] Aswathy Sreenivasan, Suresh Ma, Ateekh Ur Rehman, and Shanthy Muthuswamy. Assessment of factors influencing agility in start-ups industry 4.0. SUSTAINABILITY, 15(9), MAY 5 2023.

- [IE93] Waheed Gul, Naveed Ahmad, Shoaib Mohammad, Bashir Salah, Syed Sajid Ullah, Muhammad Khurram, and Razaullah Khan. Impact of moisture content, closing speed, and pressurizing speed on the performance of medium density fiberboard (mdf). *FRONTIERS IN MATERIALS*, 10, MAY 9 2023.
- [IE94] Mohammed A. El-Meligy, Ahmed M. El-Sherbeeney, and Haitham A. Mahmoud. Market power-constrained transmission expansion planning using bi-level optimization. *JOURNAL OF ELECTRICAL ENGINEERING & TECHNOLOGY*, 2023 MAY 12 2023.
- [IE95] Ebrahim Ali Alzalab, Umar Suleiman Abubakar, E. Hanyu, Zhiwu Li, Mohammed A. El-Meligy, and Ahmed M. El-Sherbeeney. Modeling of fault recovery and repair for automated manufacturing cells with load-sharing redundant elements using petri nets. *PROCESSES*, 11(5), MAY 15 2023.
- [IE96] Kiran Mughal, Mohammad Pervez Mughal, Muhammad Umar Farooq, Saqib Anwar, and Muhammad Imam Ammarullah. Using nano-fluids minimum quantity lubrication (nf-mql) to improve tool wear characteristics for efficient machining of cfrp/ti6al4v aeronautical structural composite. *PROCESSES*, 11(5), MAY 17 2023.
- [IE97] Zain Bashir, Muhammad Amjad, Syed Farhan Raza, Shafiq Ahmad, Mali Abdollahian, and Muhammad Farooq. Investigating the impact of shifting the brick kiln industry from conventional to zigzag technology for a sustainable environment. *SUSTAINABILITY*, 15(10), MAY 19 2023.
- [IE98] Kashif Ishfaq, Muhammad Sana, Muhammad Umair Waseem, Saqib Anwar, Abdullah Yahia Alfaify, and Abdul Wasy Zia. Surface quality investigation in surfactant-based edm of inconel 617 using deep cryogenically treated electrodes. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 127(12):861-878, JUL 2023.
- [IE99] Madiha Razaqat, Nadeem Ahmad Mufti, Muhammad Qaiser Saleem, Naveed Ahmed, Ateekh Ur Rehman, and Muhammad Asad Ali. Machining of triangular holes in d2 steel by the use of non-conventional electrodes in die-sinking electric discharge machining. *MATERIALS*, 16(10), MAY 20 2023.
- [IE100] Safwan Mustafa, Adil Sarwar, Mohd Tariq, Shafiq Ahmad, and Haitham A. Mahmoud. Development and control of a switched capacitor multilevel inverter. *ENERGIES*, 16(11), MAY 23 2023.
- [IE101] Shahbaz Sikandar, Rabbia Mahum, Adham E. Ragab, Sule Yildirim Yayilgan, and Sarang Shaikh. Scdet: A robust approach for the detection of skin lesions. *DIAGNOSTICS*, 13(11), MAY 24 2023.
- [IE102] Muhammad Rehan, Sarmad Ali Khan, Rakhshanda Naveed, Muhammad Usman, Saqib Anwar, Abdullah Yahia Alfaify, Catalin Iulian Pruncu, and Luciano Lamberti. Experimental investigation of the influence of wire offset and composition on complex profile wedm of ti6al4v using trim-pass strategy. *INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY*, 127(3-4):1209-

1224, JUL 2023.

- [IE103] Nimel Sworna Ross, N. Srinivasan, M. Belsam Jeba Ananth, Abdullah Yahia AlFaify, Saqib Anwar, and Munish Kumar Gupta. Performance assessment of different cooling conditions in improving the machining and tribological characteristics of additively manufactured alsi10mg alloy. *TRIBOLOGY INTERNATIONAL*, 186, AUG 2023.
- [IE104] Arshad Mehmood, Kareem Akhtar, Sahar Noor, M. Zeeshan Zahir, Barkat Ullah, Razaullah Khan, Bashir Salah, and Syed Sajid Ullah. Experimental study to optimize cold working, aging temperature, and time on the properties of aa6061 tubes: analysis using design of experiment. *FRONTIERS IN MATERIALS*, 10, MAY 30 2023.
- [IE105] Muhammad Umar Farooq, Saqib Anwar, Haider Ali Bhatti, M. Saravana Kumar, Muhammad Asad Ali, and Muhammad Imam Ammarullah. Electric discharge machining of ti6al4v eli in biomedical industry: Parametric analysis of surface functionalization and tribological characterization. *MATERIALS*, 16(12), JUN 2023.
- [IE106] Khaled N. Alqahtani, Abdulmajeed Dabwan, Emad Hashiem Abualsauod, Saqib Anwar, Ali M. Al-Samhan, and Husam Kaid. Multi-response optimization of additively manufactured ti6al4v component using grey relational analysis coupled with entropy weights. *METALS*, 13(6), JUN 2023.
- [IE107] Mohammed Alnahhal, Nikola Gjeldum, and Bashir Salah. Optimal scheduling of rainwater collection vehicles: Mixed integer programming and genetic algorithms. *SUSTAINABILITY*, 15(12), JUN 2023.
- [IE108] Abdulsalam Abdulaziz Al-Tamimi, Mehdi Tlija, Mustufa Haider Abidi, Arfat Anis, and Abd Elaty E. Abd Elgawad. Material extrusion of multi-polymer structures utilizing design and shrinkage behaviors: A design of experiment study. *POLYMERS*, 15(12), JUN 2023.
- [IE109] Aditya Raj, Tarun Sharma, Sandeep Singh, Umesh Sharma, Prashant Sharma, Rajesh Singh, Shubham Sharma, Jatinder Kaur, Harshpreet Kaur, Bashir Salah, Syed Sajid Ullah, and Soliman Alkhatib. Building a sustainable future from theory to practice: A comprehensive prisma-guided assessment of compressed stabilized earth blocks (cseb) for construction applications. *SUSTAINABILITY*, 15(12), JUN 2023.
- [IE110] Javeria Naz, Muhammad Imran Sharif, Muhammad Irfan Sharif, Seifedine Kadry, Hafiz Tayyab Rauf, and Adham E. Ragab. A comparative analysis of optimization algorithms for gastrointestinal abnormalities recognition and classification based on ensemble xception23 and resnet18 features. *BIOMEDICINES*, 11(6), JUN 2023.
- [IE111] Magdy M. El Rayes, Adel T. Abbas, Abdulhamid A. Al-Abduljabbar, Adham E. Ragab, Faycal Benyahia, and Ahmed Elkaseer. Investigation and statistical analysis for optimizing surface roughness, cutting forces, temperature, and productivity in turning grey cast iron. *METALS*, 13(6), JUN 2023.

- [IE112] Kashif Ishfaq, Muhammad Sana, Muhammad Arif Mahmood, Saqib Anwar, and Muhammad Umair Waseem. Evaluating surface quality of inconel 617 by employing deep cryogenically treated electrodes in surfactant-added dielectrics of transformer oil. *METALS*, 13(6), JUN 2023.
- [IE113] Md Modassir Khan, Arun Kumar Kadian, Rabindra Prasad Sharma, S. M. Mozammil Hasnain, Ahmed Mohamed, Adham E. Ragab, Ali Zare, and Shatrudhan Pandey. Emission reduction and performance enhancement of ci engine propelled by neem biodiesel-neem oil-decanol-diesel blends at high injection pressure. *SUSTAINABILITY*, 15(11), JUN 5 2023.
- [IE114] Haroon Rehman, Injila Sajid, Adil Sarwar, Mohd Tariq, Farhad Ilahi Bakhsh, Shafiq Ahmad, Haitham A. A. Mahmoud, and Asma Aziz. Driving training-based optimization (dtbo) for global maximum power point tracking for a photovoltaic system under partial shading condition. *IET RENEWABLE POWER GENERATION*, 17(10):2542- 2562, JUL 2023.
- [IE115] Waheed Gul, Syed Riaz Akbar Shah, Afzal Khan, Naveed Ahmad, Sheraz Ahmed, Noor Ain, Arshad Mehmood, Bashir Salah, Syed Sajid Ullah, and Razaullah Khan. Synthesis of graphene oxide (go) and reduced graphene oxide (rgo) and their application as nano-fillers to improve the physical and mechanical properties of medium density fiberboard. *FRONTIERS IN MATERIALS*, 10, JUN 15 2023.
- [IE116] K. Vamsi Krishna, C. Gopi Krishna, Ateekh Ur Rehman, Kishore Babu Nagumothu, Mahesh Kumar Talari, and Prakash Srirangam. Effect of welding speed and postweld heat treatment on microstructural and mechanical properties of alpha plus beta titanium alloy eb welds. *FUSION SCIENCE AND TECHNOLOGY*, 2023 JUN 19 2023.
- [IE117] M. Adeel Munir, Shahid Imran, M. Farooq, Huma Latif, Amjad Hussain, Ateekh Ur Rehman, M. Sultan, Qasim Ali, and Jaroslaw Krzywanski. Development of a supply chain model for the production of biodiesel from waste cooking oil for sustainable development. *FRONTIERS IN ENERGY RESEARCH*, 11, JUN 26 2023.
- [IE118] Manish Kumar, Manish Kumar, Shatakshi Singh, Sunggon Kim, Ashutosh Anand, Shatrudhan Pandey, S. M. Mozammil Hasnain, Adham E. Ragab, and Ahmed Farouk Deifalla. A hybrid model based on convolution neural network and long short-term memory for qualitative assessment of permeable and porous concrete. *CASE STUDIES IN CONSTRUCTION MATERIALS*, 19, DEC 2023.
- [IE119] Zakariya Kaneesamkandi, Ateekh Ur-Rehman, and Yusuf Siraj Usmani. Selection of ideal msw incineration and utilization technology routes using mcda for different waste utilization scenarios and variable conditions. *PROCESSES*, 11(7), JUL 2023.
- [IE120] Rukaiya Kausher, Rambabu Singh, Anand Kumar Sinha, Satya Narayan Sethy, Sudhir Kumar, Shatrudhan Pandey, Adham E. Ragab, and Ahmed Mohamed. Assessing impacts of mining-induced land use changes on groundwater and surface water quality using isotopic and hydrogeochemical signatures.

SUSTAINABILITY, 15(14), JUL 2023.

- [IE121] Solomon Gbene Zaato, Noor Raihani Zainol, Sania Khan, Ateekh Ur Rehman, Mohammad Rishad Faridi, and Ali Ahmed Khan. The mediating role of customer satisfaction between antecedent factors and brand loyalty for the shopee application. BEHAVIORAL SCIENCES, 13(7), JUL 2023.
- [IE122] Aditya M. Mahajan, K. Vamsi Krishna, M. J. Quamar, Ateekh Ur Rehman, Bharath Bandi, and N. Kishore Babu. Structure-property correlation between friction-welded work hardenable al-4.9mg alloy joints. CRYSTALS, 13(7), JUL 2023.
- [IE123] Ibrahim Mahnashi, Bashir Salah, and Adham E. Ragab. Industry 4.0 framework based on organizational diagnostics and plan-do-check-act cycle for the saudi arabian cement sector. SUSTAINABILITY, 15(14), JUL 2023.
- [IE124] Eman El-Shenawy, Ahmed I. Z. Farahat, Adham E. E. Ragab, Ahmed Elsayed, and Reham Reda. Flow behavior and mechanical properties of multi-pass thermomechanically processed 7075 al-alloy. METALS, 13(7), JUL 2023.
- [IE125] Fazli Khaliq, Muhammad Shabir, Inayat Khan, Shafiq Ahmad, Muhammad Usman, Muhammad Zubair, and Shamsul Huda. Pashto handwritten invariant character trajectory prediction using a customized deep learning technique. SENSORS, 23(13), JUL 2023.
- [IE126] Jai Kumar Sharma, Sateesh Kumar, Nishant Kumar, S. M. Mozammil Hasnain, Shatrudhan Pandey, Ahmed Farouk Deifalla, and Adham E. Ragab. Computational modeling of sigmoid functionally graded material (sfgm) plate. MATERIALS RESEARCH EXPRESS, 10(7), JUL 1 2023.
- [IE127] P. K. Miniappan, S. Marimuthu, S. Dharani Kumar, Shubham Sharma, Abhinav Kumar, Bashir Salah, and Syed Sajid Ullah. Exploring the mechanical, tribological, and morphological characteristics of areca fiber epoxy composites reinforced with various fillers for multifaceted applications. FRONTIERS IN MATERIALS, 10, JUL 3 2023.
- [IE128] Mian Rizwan, Ciwei Gao, Xingyu Yan, Shafiq Ahmad, and Mazen Zaindin. An approach to disparage the blindness of backup protection in grid connected renewable energy sources system by inducing artificial fault current. INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, 153, NOV 2023.
- [IE129] Imran Zahid, Adnan Qamar, Muhammad Farooq, Fahid Riaz, Muhammad Salman Habib, Muhammad Farhan, Muhammad Sultan, Ateekh Ur Rehman, and Muhammad Aamer Hayat. Experimental optimization of various heat sinks using passive thermal management system. CASE STUDIES IN THERMAL ENGINEERING, 49, SEP 2023.
- [IE130] Shabbir Ahmad, Hidemasa Takana, Kashif Ali, Yasmeen Akhtar, Ahmed M. Hassan, and Adham E. Ragab. Role of localized magnetic field in vortex generation in tri-hybrid nanofluid flow: A numerical approach. NANOTECHNOLOGY REVIEWS, 12(1), JUL 11 2023.

- [IE131] Mohamed Haikel Chehab, Makram Khelil, Chokri Ben Salah, Mehdi Tlija, and Abdelhamid Rabhi. Photovoltaic class-e inverter for resonance wireless power transfer for electric vehicle charging applications with optimization algorithms. ENERGY TECHNOLOGY, 11(9), SEP 2023.
- [IE132] S. Gohar, G. Hussain, A. Ali, M. Ilyas, and Mohammed Alkahtani. In-plane bending performance of novel negative poisson's ratio structures and its enhancement through the application of shape optimization method. COMPOSITE STRUCTURES, 322, OCT 15 2023.
- [IE133] Muhammad Umar Farooq, Saqib Anwar, and Abu Hurairah. Reducing micromachining errors during electric discharge machining of titanium alloy using nonionic liquids. MATERIALS AND MANUFACTURING PROCESSES, 2023 JUL 23 2023.
- [IE134] Saud Altaf, Rimsha Asad, Shafiq Ahmad, Iftikhar Ahmed, Mali Abdollahian, and Mazen Zaindin. A hybrid framework of deep learning techniques to predict online performance of learners during covid-19 pandemic. SUSTAINABILITY, 15(15), AUG 2023.



# MECHANICAL ENGINEERING

## PUBLICATIONS

- [ME1] Fekri Abdulrageb Ahmed Ali, Javed Alam, Arun Kumar Shukla, Zeyad A. Almutairi, and Mansour Alhoshan. Assessing the properties of thin-film nanocomposite membrane embedded with go nanosheets using the dspm-de model. *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T*, 19:74-90, JUL-AUG 2022.
- [ME2] Shaker Alaqel, Eldwin Djajadiwinata, Rageh S. Saeed, Nader S. Saleh, Hany AlAnsary, Abdelrahman El-Leathy, Syed Danish, Zeyad Al-Suhaibani, Talha Shafiq, Matthew Golob, Clayton Nguyen, Sheldon Jeter, Said Abdel-Khalik, Muhammad Sarfraz, Ahmed Al-Balawi, Fahad Al-Harhi, Salem Bashraheel, and Hatim Gandayh. Performance of the world's first integrated gas turbine-solar particle heating and energy storage system. *APPLIED THERMAL ENGINEERING*, 215, OCT 2022.
- [ME3] Ahmed Fouly, Ibrahim A. Alnaser, Abdulaziz K. Assaifan, and Hany S. Abdo. Evaluating the performance of 3d-printed pla reinforced with date pit particles for its suitability as an acetabular liner in artificial hip joints. *POLYMERS*, 14(16), AUG 2022.
- [ME4] Fahad Awjah Almehmadi, Abdullah Najib, Emad Ali, Hany Al-Ansary, and Jamel Orfi. Sustainable approach of generating water and energy: Techno-economic analysis of a hybrid solar photoactive thermal system coupled with direct contact membrane distillation for water purification and electricity generation. *APPLIED SCIENCES-BASEL*, 12(18), SEP 2022.
- [ME5] Emad Ali, Jamel Orfi, Hany AlAnsary, Ahmad S. Alsaadi, and Noreddine Ghaffour. Novel multistage flash reversal concept: Modelling and analysis. *APPLIED THERMAL ENGINEERING*, 217, NOV 25 2022.
- [ME6] B. B. Bouiadjra, S. M. Fekih, M. M. Bouziane, F. Benyahia, S. M. A. Khan Mohammed, and A. Albedah. Optimization of the mechanical strength of pp/talc microcomposite after immersion in benzene. *STRENGTH OF MATERIALS*, 54(3):493- 502, MAY 2022.
- [ME7] Syed Noman Danish, Hany Al-Ansary, Abdelrahman El-Leathy, Mazen Ba-Abbad, Salah Ud-Din Khan, Arslan Rizvi, Jamel Orfi, and Ahmed Al-Nakhli. Experimental and techno-economic analysis of two innovative solar thermal receiver designs for a point focus solar fresnel collector. *ENERGY*, 261(A), DEC 15 2022.
- [ME8] Dazhen Huang, Hyunho Kim, Guodong Zou, Xiangming Xu, Yunpei Zhu, Kaleem Ahmad, Zeyad A. Almutairi, and Husam N. Alshareef. All-mxene thermoelectric nanogenerator. *MATERIALS TODAY ENERGY*, 29, OCT 2022.
- [ME9] Surojit Saha, Tabish Alam, Md Irfanul Haque Siddiqui, Mukesh Kumar, Masood Ashraf Ali, Naveen Kumar Gupta, and Dan Dobrota. Analysis of microchannel heat sink of silicon material with right triangular groove on sidewall of passage. *MATERIALS*, 15(19), OCT 2022.

- [ME10] Salah Ud-Din Khan, Abdullah Al-Hamdan, and Zeyad Almutairi. Development and validation of theoretical-computational model for nuclear powered hydrogen production: A case study for Saudi Arabia. *NUCLEAR ENGINEERING AND DESIGN*, 399, DEC 1 2022.
- [ME11] Nikita Kumari, Tabish Alam, Masood Ashraf Ali, Anil Singh Yadav, Naveen Kumar Gupta, Md Irfanul Haque Siddiqui, Dan Dobrota, Ionela Magdalena Rotaru, and Abhishek Sharma. A numerical investigation on hydrothermal performance of micro channel heat sink with periodic spatial modification on sidewalls. *MICROMACHINES*, 13(11), NOV 2022.
- [ME12] Ayush Prada Dash, Tabish Alam, Md Irfanul Haque Siddiqui, Paolo Blecich, Mukesh Kumar, Naveen Kumar Gupta, Masood Ashraf Ali, and Anil Singh Yadav. Impact on heat transfer rate due to an extended surface on the passage of microchannel using cylindrical ribs with varying sector angle. *ENERGIES*, 15(21), NOV 2022.
- [ME13] Harri Junaedi, Muneer Baig, Abdulsattar Dawood, Essam Albahkali, and Abdulhakim Almajid. Effect of the matrix melt flow index and fillers on mechanical properties of polypropylene-based composites. *MATERIALS*, 15(21), NOV 2022.
- [ME14] Md Irfanul Haque Siddiqui, Ayidh Albaqami, Latif Arifudin, Khalid Alluhydan, and Ibrahim Abdullah Alnaser. Simulation of inclusion particle motion behavior under interfacial tension in continuous casting mold. *MATERIALS*, 15(21), NOV 2022.
- [ME15] Uttam Kumar Murmu, Abhishek Ghosh, Asiful H. Sheikh, Ibrahim A. Alnaser, Hany S. Abdo, Naif S. Alowaysi, and Manojit Ghosh. Mechanical alloying of ball-milled Cu-Ti-B elemental powder with the in situ formation of titanium diboride. *METALS*, 12(12), DEC 2022.
- [ME16] El-Sayed M. Sherif, Yassir A. A. Bahri, Hamad F. F. Alharbi, Muhammad Farzik Ijaz, and Ibrahim A. A. Alnaser. Influence of tantalum addition on the corrosion passivation of titanium-zirconium alloy in simulated body fluid. *MATERIALS*, 15(24), DEC 2022.
- [ME17] Muhammad Farzik Ijaz and Faraz Hussain Hashmi. Revisiting alloy design of Al-base alloys for potential orthotics and prosthetics applications. *CRYSTALS*, 12(12), DEC 2022.
- [ME18] Muhammad Farzik Ijaz, Hamad F. Alharbi, Yassir A. Bahri, and El-Sayed M. Sherif. Alloy design and fabrication of duplex titanium-based alloys by spark plasma sintering for biomedical implant applications. *MATERIALS*, 15(23), DEC 2022.
- [ME19] Ahmed Fouly, Abdulaziz K. K. Assaifan, Ibrahim A. A. Alnaser, Omar A. A. Hussein, and Hany S. S. Abdo. Evaluating the mechanical and tribological properties of 3D printed polylactic-acid (PLA) green-composite for artificial implant: Hip joint case study. *POLYMERS*, 14(23), DEC 2022.
- [ME20] Hossam Halfa, Asiful H. Sheikh, Hany S. Abdo, Ibrahim A. Alnaser, Mahmoud S. Soliman, and Sameh M. Ragab. Study on the microstructure of vanadium-

- modified tungsten high-speed steel-coded sae-aisi t1 steel. ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, 2022, DEC 30 2022.
- [ME21] Muhammad Omer Aijaz, Seong Baek Yang, Mohammad Rezaul Karim, Mohd Hafiz Dzarfan Othman, and Ibrahim Abdullah Alnaser. Preparation and characterization of poly(lactic acid)/poly (ethylene glycol)-poly(propyl glycol)-poly(ethylene glycol) blended nanofiber membranes for fog collection. MEMBRANES, 13(1), JAN 2023.
- [ME22] Adel T. Abbas, Abdulhamid A. Al-Abduljabbar, Magdy M. El Rayes, Faycal Benyahia, Islam H. Abdelgalil, and Ahmed Elkaseer. Multi-objective optimization of performance indicators in turning of aisi 1045 under dry cutting conditions. METALS, 13(1), JAN 2023.
- [ME23] Khaled Al-Salem, Mohamed Ali, Redhwan Almuzaiqer, Zeyad Al-Suhaibani, and Abdullah Nuhait. Recycling discarded facemasks of covid-19 pandemic to new novel composite thermal insulation and sound-absorbing materials. SUSTAINABILITY, 15(2), JAN 2023.
- [ME24] Muhammad Omer Aijaz, Seong Baek Yang, Mohammad Rezaul Karim, Ibrahim Abdullah Alnaser, Abdulelah Dhaifallah Alahmari, Fahad S. Almubaddel, and Abdulaziz K. Assaifan. Preparation and characterization of electrospun poly(lactic acid)/poly(ethylene glycol)-b-poly(propylene glycol)-b-poly(ethylene glycol)/silicon dioxide nanofibrous adsorbents for selective copper (ii) ions removal from wastewater. MEMBRANES, 13(1), JAN 2023.
- [ME25] Ibrahim A. Alnaser, Hany S. Abdo, Mohamed S. Abdo, Mohamed Alkalla, and Ahmed Fouly. Effect of synthesized titanium dioxide nanofibers weight fraction on the tribological characteristics of magnesium nanocomposites used in biomedical applications. NANOMATERIALS, 13(2), JAN 2023.
- [ME26] Mahmoud B. Elsheniti, Saad Zaheer, Obida Zeitoun, Hassan Alshehri, Abdulrahman AlRabiah, and Zeyad Almutairi. Experimental evaluation of a solar low- concentration photovoltaic/thermal system combined with a phase-change material cooling technique. APPLIED SCIENCES-BASEL, 13(1), JAN 2023.
- [ME27] Mahmoud Badawy Elsheniti, Amr Ibrahim, Osama Elsamni, and Mahmoud Elewa. Experimental and economic investigation of sweeping gas membrane distillation/pervaporation modules using novel pilot scale device. SEPARATION AND PURIFICATION TECHNOLOGY, 310, APR 1 2023.
- [ME28] Ibrahim Albaik, Kamal E. Diab, Majdi Saleh, Raya Al-Dadah, Saad Mahmoud, Mahmoud B. Elsheniti, Ismail Solmaz, Eslam Salama, H. Shokry Hassan, and Marwa F. Elkadi. Mof based coated adsorption system for water desalination and cooling integrated with pre-treatment unit. SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, 56, MAR 2023.
- [ME29] Mahmoud Badawy Elsheniti, Abdulrahman AlRabiah, Hany Al-Ansary, Zeyad Almutairi, Jamel Orfi, and Abdelrahman El-Leathy. Performance assessment of an ice-production hybrid solar cpv/t system combining both adsorption and

- vapor- compression refrigeration systems. SUSTAINABILITY, 15(4), FEB 2023.
- [ME30] Md Irfanul Haque Siddiqui, Latif Arifudin, Ibrahim Abdullah Alnaser, Masood Ashraf Ali, and Khalid Alluhydan. Modeling of interfacial tension and inclusion motion behavior in steelmaking continuous casting mold. MATERIALS, 16(3), FEB 2023.
- [ME31] Zakariya Kaneesamkandi and Ateekh Ur Rehman. Selection of a photovoltaic panel cooling technique using multi-criteria decision analysis. APPLIED SCIENCES- BASEL, 13(3), FEB 2023.
- [ME32] Eid M. M. Alosime and Ahmed A. A. Basfar. A systematic investigation on the influence of intumescent flame retardants on the properties of ethylene vinyl acetate (eva)/liner low density polyethylene (lldpe) blends. MOLECULES, 28(3), FEB 2023.
- [ME33] Zakariya Kaneesamkandi, Mohammed Jarallah Almalki, Abdul Sayeed, and Zeyad A. Haidar. Passive cooling of pv modules using heat pipe thermosiphon with acetone: Experimental and theoretical study. APPLIED SCIENCES-BASEL, 13(3), FEB 2023.
- [ME34] Philips O. Agboola, Imran Shakir, Zeyad Ammar Almutairi, Sahar Saad Shar, and Mohamed F. Aly Aboud. Ni-foam based heterogenous bi<sub>2</sub>s<sub>3</sub> polyhedrons/multi walled carbon nanotubes (bi<sub>2</sub>s<sub>3</sub>@mwcnts/nf) as an advanced battery type electrode for enhanced supercapacitor performance. JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, 23:3177-3186, MAR-APR 2023.
- [ME35] Syed Noman Danish, Zeyad Almutairi, and Malik Alshareef. Cfd studies of the effect of holes and angles of upstream duct of horizontal axis wind turbines. AIP ADVANCES, 13(3), MAR 1 2023.
- [ME36] Arpita Chatterjee, Soumyadeep Sen, Subhodeep Paul, Pallab Roy, Asiful H. Seikh, Ibrahim A. Alnaser, Kalyan Das, Goutam Sutradhar, and Manojit Ghosh. Fabrication and characterization of sic-reinforced aluminium matrix composite for brake pad applications. METALS, 13(3), MAR 2023.
- [ME37] Salah Ud-Din Khan, Irfan Wazeer, and Zeyad Almutairi. Comparative analysis of sam and retscreen tools for the case study of 600 kw solar pv system installation in riadh, saudi arabia. SUSTAINABILITY, 15(6), MAR 2023.
- [ME38] Muhammad Farzik Ijaz, Hamad F. Alharbi, Ahmed Zaki Alsaggaf, and Abdulaziz K. Assaifan. Aspects of polymeric-based membranes in the water treatment field: An interim structural analysis. WATER, 15(6), MAR 2023.
- [ME39] Obida Zeitoun, Jamel Orfi, Salah Ud-Din Khan, and Hany Al-Ansary. Desalinated water costs from steam, combined, and nuclear cogeneration plants using power and heat allocation methods. ENERGIES, 16(6), MAR 2023.
- [ME40] Adel T. Abbas, Magdy M. El Rayes, Abdulhamid A. Al-Abduljabbar, Adham E. Ragab, Faycal Benyahia, and Ahmed Elkaseer. Effects of tool edge geometry and cutting conditions on the performance indicators in dry turning aisi 1045

- steel. MACHINES, 11(3), MAR 2023.
- [ME41] Hisham Sumayli, Abdelrahman El-Leathy, Syed Noman Danish, Hany Al-Ansary, Zeyad Almutairi, Zeyad Al-Suhaibani, Nader S. Saleh, Rageh S. Saeed, Abdulelah Alswaiyd, Eldwin Djajadiwinata, and Shaker Alaqel. Integrated csp-pv hybrid solar power plant for two cities in saudi arabia. CASE STUDIES IN THERMAL ENGINEERING, 44, APR 2023.
- [ME42] Zu-Shun Fan, Yusuf Valentino Kaneti, Silvia Chowdhury, Xiohan Wang, Muhammad Rezaul Karim, Ibrahim Abdullah Alnaser, and Fei-Bao Zhang. Weak base- modulated synthesis of bundle-like carbon superstructures from metal-organic framework for high-performance supercapacitors. CHEMICAL ENGINEERING JOURNAL, 462, APR 15 2023.
- [ME43] Ahmed Fouly, Ibrahim A. Alnaser, Abdulaziz K. Assaifan, and Hany S. Abdo. Developing pmma/coffee husk green composites to meet the individual requirements of people with disabilities: Hip spacer case study. JOURNAL OF FUNCTIONAL BIOMATERIALS, 14(4), APR 2023.
- [ME44] Abdulhamid Al-Abduljabbar, Majid Al-Mogbel, Syed Noman Danish, and Abdelrahman El-Leathy. Insulation performance of building components and effect on the cooling load of homes in saudi arabia. SUSTAINABILITY, 15(7), APR 2023.
- [ME45] Philips O. Agboola, Imran Shakir, Zeyad Ammar Almutairi, Sahar Saad Shar, and Mohamed F. Aly Aboud. Synergistic effect of fe (iii) doping and mwcnts integration on the electrochemical performance of nickel sulfide nanoparticles for hybrid supercapacitor applications. PHYSICA B-CONDENSED MATTER, 659, JUN 15 2023.
- [ME46] Wenli Zhao, Zhen Cao, Zahra Bayhan, Hanfeng Liang, Yongjiu Lei, Long Chen, Mushtaq A. Dar, Zeyad Almutairi, Luigi Cavallo, Gang Huang, and Husam N. Alshareef. A two-dimensional cation-deficient  $\text{ti}_{0.87}\text{o}_2$  artificial protection layer for stable sodium metal anodes. MATERIALS TODAY ENERGY, 34, JUN 2023.
- [ME47] Lorene Heraud, Philippe Castany, Muhammad Farzik Ijaz, Doina-Margareta Gordin, and Thierry Gloriant. Large-strain functional fatigue properties of superelastic metastable  $\beta$  titanium and niti alloys: A comparative study. JOURNAL OF ALLOYS AND COMPOUNDS, 953, AUG 25 2023.
- [ME48] Mohamed Rezk, Mahmoud B. Elsheniti, Ahmed Rezk, and Osama A. Elsamni. Multi-objective optimisation of mof-801 adsorbent packed into copper foamed bed for cooling and water desalination systems. APPLIED THERMAL ENGINEERING, 229, JUL 5 2023.
- [ME49] Pushpak Banerjee, Avinava Roy, Soumyadeep Sen, Arkajit Ghosh, Gourab Saha, Asiful H. Seikh, Ibrahim A. Alnaser, and Manojit Ghosh. Service life assessment of yttria stabilized zirconia (ysz) based thermal barrier coating through wear behaviour. HELIYON, 9(5), MAY 2023.
- [ME50] Zeyad Alsuhaibani, Mohamed Ali, and Nader S. Saleh. Center-to-center

- distance's effect between vertical square tubes of a horizontal array on natural convection heat transfer. *APPLIED SCIENCES-BASEL*, 13(10), MAY 22 2023.
- [ME51] Eid M. M. Alosime, Omar A. A. Adam, and Ahmed A. A. Basfar. Encapsulation of carbon nanotubes by styrene and butyl acrylate particles via suspension polymerization for polymerized toner applications. *MATERIALS*, 16(11), MAY 24 2023.
- [ME52] Zakariya Kaneesamkandi and Abdul Sayeed. Performance of solar hybrid cooling operated by solar compound parabolic collectors under weather conditions in riadh, kingdom of saudi arabia. *APPLIED SCIENCES-BASEL*, 13(12), JUN 2023.
- [ME53] Adel T. Abbas, Neeraj Sharma, Zeyad A. Alsuhaibani, Vishal S. Sharma, Mahmoud S. Soliman, and Rakesh Chandmal Sharma. Processing of al/sic/gr hybrid composite on edm by different electrode materials using rsm-copras approach. *METALS*, 13(6), JUN 2023.
- [ME54] Talal Talib Alshammari, Muhammad Farzik Ijaz, Hamad F. Alharbi, and Mahmoud S. Soliman. Effect of the cu/mg ratio on mechanical properties and corrosion resistance of wrought al-cu-mg-ag alloy. *CRYSTALS*, 13(6), JUN 2023.
- [ME55] Magdy M. El Rayes, Adel T. Abbas, Abdulhamid A. Al-Abduljabbar, Adham E. Ragab, Faycal Benyahia, and Ahmed Elkaseer. Investigation and statistical analysis for optimizing surface roughness, cutting forces, temperature, and productivity in turning grey cast iron. *METALS*, 13(6), JUN 2023.
- [ME56] Hassan Mehboob, Abdelhak Ouldyeou, and Muhammad Farzik Ijaz. Biomechanical investigation of patient-specific porous dental implants: A finite element study. *APPLIED SCIENCES-BASEL*, 13(12), JUN 2023.
- [ME57] Mohamed H. M. Ahmed, Nuno Batalha, Mohammad Rezaul Karim, Ibrahim Abdullah Alnaser, Yusuke Yamauchi, Yusuf Valentino Kaneti, and Muxina Konarova. Design of trifunctional catalysts for promoting sequential condensation, deoxygenation, and aromatization of pyrolyzed mixed waste. *JOURNAL OF MATERIALS CHEMISTRY A*, 11(26):14404-14415, JUL 4 2023.
- [ME58] Mohamed O. Elbessomy, Osama A. Elsamni, Mahmoud B. Elsheniti, and Samy M. Elsherbiny. Optimum configurations of a compact hollow-fiber water gap membrane distillation module for ultra-low waste heat applications. *CHEMICAL ENGINEERING RESEARCH & DESIGN*, 195:218-234, JUL 2023.
- [ME59] Majed B. Al-Harbi, Sami A. Al-Sanea, F. Benyahia, and Shereef Aly Sadek. Effect of window-glass type on solar heat gain and velocity and temperature distributions inside air-conditioned rooms-a conjugate numerical analysis. *CASE STUDIES IN THERMAL ENGINEERING*, 49, SEP 2023.
- [ME60] Zakariya Kaneesamkandi, Ateekh Ur-Rehman, and Yusuf Siraj Usmani. Selection of ideal msw incineration and utilization technology routes using mcda for different waste utilization scenarios and variable conditions. *PROCESSES*, 11(7), JUL 2023.

- [ME61] Mohamed Taha, Ahmed Fouly, Hany S. S. Abdo, Ibrahim A. A. Alnaser, Ragab Abouzeid, and Ahmed Nabhan. Unveiling the potential of rice straw nanofiberreinforced hdpe for biomedical applications: Investigating mechanical and tribological characteristics. *JOURNAL OF FUNCTIONAL BIOMATERIALS*, 14(7), JUL 2023.
- [ME62] Adel T. Abbas, Neeraj Sharma, Mahmoud S. Soliman, Magdy M. El Rayes, Rakesh Chandmal Sharma, and Ahmed Elkaseer. Effect of wiper edge geometry on machining performance while turning aisi 1045 steel in dry conditions using the vikor-ml approach. *MACHINES*, 11(7), JUL 2023.
- [ME63] Adel T. Abbas, Neeraj Sharma, Zeyad A. Alsuhaibani, Abhishek Sharma, Irfan Farooq, and Ahmed Elkaseer. Multi-objective optimization of aisi p20 mold steel machining in dry conditions using machine learning-topsis approach. *MACHINES*, 11(7), JUL 2023.
- [ME64] Thamer Albahkali, Hany S. Abdo, Omar Salah, and Ahmed Fouly. Adaptive neuro-fuzzy-based models for predicting the tribological properties of 3d-printed pla green composites used for biomedical applications. *POLYMERS*, 15(14), JUL 2023.
- [ME65] Ali M. Eltamaly, Zeyad A. Almutairi, and Mohamed A. Abdelhamid. Modern optimization algorithm for improved performance of maximum power point tracker of partially shaded pv systems. *ENERGIES*, 16(13), JUL 2023.
- [ME66] El-Sayed M. Sherif, Yassir A. Bahri, Hamad F. Alharbi, and Muhammad Farzik Ijaz. Corrosion passivation in simulated body fluid of ti-zr-ta-xsn alloys as biomedical materials. *MATERIALS*, 16(13), JUL 2023.
- [ME67] Nor Amalina Muhayudin, Khairul Salleh Basaruddin, Muhammad Farzik Ijaz, and Ruslizam Daud. Finite element modelling of a synthetic paediatric spine for biomechanical investigation. *MATERIALS*, 16(13), JUL 2023.
- [ME68] Khalid Mujasam Batoo, Muhammad Farzik Ijaz, Ahamad Imran, and Saravanan Pandiaraj. Piezo-plasmon phototronically enhanced direct solar-chemical translations from au decorated perovskite bifeo3 sea urchin-like 3d nanostructures. *SURFACES AND INTERFACES*, 40, AUG 2023.
- [ME69] Muhammad Farzik Ijaz, Wataru Tasaki, Hee Young Kim, and Shuichi Miyazaki. Achievement of ultralow elastic modulus through optimization of phase stability and recrystallization texture in ti-nb-fe-sn alloys. *ADVANCED ENGINEERING MATERIALS*, 2023 JUL 12 2023.
- [ME70] Abdullah A. A. Alghannam, Mahmoud S. S. Soliman, Asiful H. H. Seikh, Ibrahim A. A. Alnaser, Ahmed Fouly, Jabair A. A. Mohammed, Sameh A. A. Ragab, and Hany S. S. Abdo. Investigation on mechanical properties and corrosion resistance of ti-modified aa5083 aluminum alloy for aerospace and automotive applications. *SCIENTIFIC REPORTS*, 13(1), JUL 17 2023.
- [ME71] Abdulmalik S. Alshammari, Mohammed S. Almeataq, and Ahmed A. Basfar. Treatment of uranium-contaminated ground water using adsorption technology via novel mesoporous silica nanoparticles. *MOLECULES*, 28(15), AUG 2023.



- [ME72] Zakariya Kaneesamkandi and Abdul Sayeed. Evaluation of multi-utility models with municipal solid waste combustion as the primary source under specific geographical and operating conditions. ENERGIES, 16(15), AUG 2023.
- [ME73] Salah Lotfy and Ahmed A. Basfar. Influence of gamma irradiation on acrylate-based shape memory polymers in the presence of various crosslinkers. JOURNAL OF APPLIED POLYMER SCIENCE, 2023 AUG 2 2023.

# PETROLEUM AND GAS ENGINEERING

## PUBLICATIONS

- [PE1] Bassem S. Nabawy, Aref A. Lashin, and Moataz Kh Barakat. Implementation of lithofacies and microfacies types on reservoir quality and heterogeneity of the late cretaceous upper bahariya member in the shourok field, shoushan basin, north western desert, egypt. *JOURNAL OF ASIAN EARTH SCIENCES*, 224, FEB 2022.
- [PE2] Mohammed Hail Hakimi, Mohammad Alqudah, Khairul Azlan Mustapha, Mikhail A. Varfolomeev, Aref Lashin, Baleid Ali Hatem, Afikah Rahim, Souvik Sen, Ahmed E. Radwan, and Nura Abdulmumini Yelwa. Early-oil generation potential of type ii-s kerogen in the upper cretaceous (cenomanian-turonian) organic-rich carbonate succession from ajloun region in northern jordan. *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, 2022 SEP 28 2022.
- [PE3] Mohammed Hail Hakimi, Aref Lashin, Abbas F. Gharib, Afikah Rahim, Nura Abdulmumini Yelwa, Mukhtar A. Nasher, Naira M. Lotfy, and Wafaa E. Afify. The effect of pliocene volcanic intrusive rocks and thermogenic gas generation from the miocene salif formation in the offshore tihamah basin, yemeni red sea. *MARINE AND PETROLEUM GEOLOGY*, 146, DEC 2022.
- [PE4] Mohammed Hail Hakimi, Atif N. Abass, Aref Lashin, Abbas F. Gharib, Ahmed E. Radwan, Afikah Rahim, Adeb Ahmed, Lanre Asiwaju, and Wafaa E. Afify. Geochemical investigation and basin modelling of the al renk shale formation in the melut basin, south sudan: Implications for estimation of thermogenic gas generation potential. *MARINE AND PETROLEUM GEOLOGY*, 146, DEC 2022.
- [PE5] Mohammed Hail Hakimi, Tamer E. Hamed, Naira M. Lotfy, Ahmed E. Radwan, Aref Lashin, and Afikah Rahim. Hydraulic fracturing as unconventional production potential for the organic-rich carbonate reservoir rocks in the abu el gharadig field, north western desert (egypt): Evidence from combined organic geochemical, petrophysical and bulk kinetics modeling results. *FUEL*, 334(1), FEB 15 2023.
- [PE6] Mohammed Hail Hakimi, Naira M. Lotfy, Mohamed M. El Nady, Walid A. Makled, Fatma S. Ramadan, Afikah Rahim, S. M. Talha Qadri, Aref Lashin, Ahmed E. Radwan, and Doaa A. Mousa. Characterization of lower cretaceous organic-rich shales from the kom ombo basin, egypt: Implications for conventional oil generation. *JOURNAL OF ASIAN EARTH SCIENCES*, 241, JAN 2023.
- [PE7] Shadi A. Saeed, Mohammed Hail Hakimi, Ameen A. Al-Muntaser, Aliia N. Khamieva, Mikhail A. Varfolomeev, Vladimir P. Morozov, Aref Lashin, Mohamed A. Abdelaal, Muneer A. Suwaid, Khairul Azlan Mustapha, Richard Djimasbe, Rail I. Kadyrov, Bulat I. Gareev, and Michael Kwofie. Geochemical, mineralogical and petrographical characteristics of the domanik formation from north samara region in the volga-ural basin, russia: Implication for unconventional tight oil reservoir potential. *GEOENERGY SCIENCE AND ENGINEERING*, 220(A), JAN 2023.
- [PE8] Mohammed Hail Hakimi, Alok Kumar, Alok K. Singh, Aref Lashin, Afikah Rahim, Mikhail A. Varfolomeev, Nura Abdulmumini Yelwa, and Khairul Azlan Mustapha. Geochemistry and organic petrology of the bituminite shales from the kapurdi mine, rajasthan of nw india: implications for waxy oil generation potential. *JOURNAL OF PETROLEUM EXPLORATION AND PRODUCTION TECHNOLOGY*,

13(2):505-521, FEB 2023.

- [PE9] Faisal AlGhamdi, Abdulrahman AlQuraishi, Abiodun Amao, Abdulaziz Bin Laboun, Khalid Abdel Fattah, Ali Kahal, and Aref Lashin. Depositional setting, mineralogical and diagenetic implication on petrophysical properties of unconventional gas reservoir of the silurian qusaiba formation, northwestern arabian peninsula. GEOENERGY SCIENCE AND ENGINEERING, 223, APR 2023.
- [PE10] Aref Lashin, Mohammed Abu Anbar, Essam Aboud, Faisal Zaidi, Abdulaziz AlBassam, Nassir Al Arifi, and Emad Al-Homadhi. Geochemistry and petrogenesis of the ediacaran post-collisional granitoid rocks in the midyan terrain, northern arabian shield, saudi arabia. MINERALS, 13(3), MAR 2023.
- [PE11] Essam Aboud, Aref Lashin, Faisal Zaidi, Abdulaziz Al-Bassam, Nassir Al Arifi, Mohamed Abu Anbar, and Emad Al-Homadhi. Audio magnetotelluric and gravity investigation of the high-heat-generating granites of midyan terrane, northwest saudi arabia. APPLIED SCIENCES-BASEL, 13(6), MAR 2023.
- [PE12] Mohammed Hail Hakimi, Aref Lashin, Mikhail A. Varfolomeev, Afikah Rahim, Souvik Sen, Waqas Naseem, Shadi A. Saeed, Ameen A. Al-Muntaser, S. M. Talha Qadri, and Khairul Azlan Mustapha. Oil generation and expulsion modeling of the syn-rift salif oil-source rock in the tihamah basin, yemeni red sea: Implications for shale oil exploration. JOURNAL OF AFRICAN EARTH SCIENCES, 202, JUN 2023.
- [PE13] Aref Lashin, Mohamed Hail Hakimi, Faisal AlGhamdi, Abiodun Matthew Amao, Abdulrahman AlQuraishi, Khalid Abdel Fattah, and Abdulaziz Bin Laboun. Elemental geochemistry and biomarker measurements of the silurian shale of qusaiba formation, tayma area, northwestern saudi arabia: Implication for organic matter input and paleoenvironmental conditions. MINERALS, 13(4), APR 2023.
- [PE14] Alexander Anya, Hossein Emadi, Marshall Watson, Oladoyin Kolawole, and Faisal Altawati. An investigation of fatigue response of well cement under cyclic loading and impact on zonal isolation performance. GEOENERGY SCIENCE AND ENGINEERING, 230, NOV 2023.

To view an electronic version of this report please check the following link:

[https://engineering.ksu.edu.sa/ar/scientific\\_reports](https://engineering.ksu.edu.sa/ar/scientific_reports)





**College of Engineering**  
**P.O. Box 800, Riyadh-11421**  
**Kingdom of Saudi Arabia**  
**Tel: +966-11-4677089**  
**Fax: +966-11-4673517**  
**E-mail: [coe\\_d@ksu.edu.sa](mailto:coe_d@ksu.edu.sa)**