List of Publication 2024	
1	Hafiza Khadija Aslam, Sehrish Bilal, Sana Mir, Sobia Tabassum,**MazharAmjad Gilani**, Mustansara Yaqub, Muhammad Asim (2024) A robust and simple non-enzymatic electrochemical sensor based on carbon dots-metal oxide composite for the detection of metronidazole traces in food products, Food chemistry, 460, 140297,(**IF = 8.5**)
2	Fakhira Bashir, Aqsa Afzaal, Shahnaz, **Mazhar Amjad Gilani**, Muhammad Saleem, Shagufta Perveen, Ahmad Junaid Ashraf, Olivier Huck, Sobia Tabassum, European, (2024), Eco-friendly development of intrinsically antibacterial and mechanically robust self-healing hydrogels using alginate and oval proteins: Advancing periodontitis treatment, European Polymer Journal, 220, 113423, (**IF** =3.86)
3	Zakawat Ali, Xiaochun Zhang, Palwasha Khan, Jie Li, Nai Zhang, Qixin Wang, Muhammad Yasin, **Mazhar Amjad Gilani**, Asim Laeeq Khan, Linglong Shan, Xiangping Zhang, (2024), Self- assembled ILs-PVA micelle nanostructure impart the pervaporation membrane with high ethanol dehydration performance, Journal of Membrane Science, 2024.75, 123481, (**IF** =8.4)
4	Ameena Kiran a, Tanzila Anjum b, Asim Laeeq Khan, Hamad AlMohamadi, Sana Kiran, **Mazhar Amjad Gilani**, Muhammad Aslam, Mohammad Younas, R. Nawaz, Aqeel Ahmed Bazmi, Muhammad Yasin, (2024), Enhancing water purification efficiency with zirconium-mercaptosuccinic acid metal-organic framework integrated mixed matrix membranes: Synthesis, comprehensive characterization, and performance insights, Chemical Engineering Research and Design, 211, 9-20, (**IF** = 3.7)
5	Abdulrahman Allangawi, Naveen Kosar, Khurshid Ayub, **Mazhar Amjad Gilani**, Nadeem S. Sheikh, Muhammad Imran, Tariq Mahmood, (2024), Unparalleled single-atom catalytic efficiency of TM@Al12P12 (TM = Fe, Co, Ni, Cu) nanoclusters toward oxygen evolution reaction (OER), Inorganic Chemistry Communications, 169, 113014, (**IF** = 3.4)
6	Maria Maqbool, Annum Ahsan, Faizan Ullah, Ahmed Lakhani, Nadeem S. Sheikh, Tariq Mahmood, **Mazhar Amjad Gilani** , Khurshid Ayub, (2024), Finely tuned energy gaps in host-guest complexes: Insights from belt[14]pyridine and fullerene-basednano-Saturnsystems, Diamond and Related Materials, 150, 111686, (**IF** = 4.3)
7	Babar Saeed, Palwasha khan, Asim Laeeq Khan, Hamad AlMohamadi, Abeera Naeem, Muhammad Aslam, Muhammad Zaman, Muhammad Bilal K. Niazi, **Mazhar Amjad Gilani**, Muhammad Yasin, (2024), Experimental and theoretical insights into bioethanol recovery: Valorizing waste PET bottles for sustainable pervaporation membranes, Separation and Purification Technology, 357, 130104, (**IF** = 8.6)
8	Javaria Ashiq, Ali Hussain, **Mazhar Amjad Gilani**, Sara Riaz, Mian Husnain Nawaz, (2024), Ultrasensitive detection of histamine in spoiled meat employing silver nanoparticles decorated Perylene: An experimental-computational conjugation, Food Chemistry, 464, 141673, (**IF** = 8.5)
9	Muhammad Ejaz, Hamad AlMohamadi, AsimLaeeq Khan, Muhammad Yaseen, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum, Shahnaz, **Mazhar Amjad Gilani**, (2024), Alkali metal-doped C_{20} fullerene sensors for COVID-19 biomarker detection: DFT insights into naked-eye and infrared techniques, Diamond and Related Materials, 148, 111523, (**IF** = 4.3)

10	Naveen Kosar, Khurshid Ayub, **Mazhar Amjad Gilani**, Muhammad Arshad, Muhammad Imran, Tariq Mahmood, (2024), Harnessing halides: Comparative study of oxide fullerene modifications for sodium ion secondary battery efficiency, Materials Science in Semiconductor Processing, 181, 108646, (**IF** = 4.2)
11	Abdulrahman Allangawi, Naveen Kousar, Khurshid Ayub, **Mazhar Amjad Gilani**, Muhammad Imran and Tariq Mahmood, (2024), Unrivaled single atom catalytic efficiency of Fe@Mg12O12 toward N2 reduction reaction (NRR) for NH3 generation, , Physica Scripta, 99, 105023, (**IF** = 2.6)
12	Muhammad Ejaz, Hamad AlMohamadi, Asim Laeeq Khan, Muhammad Yasin, Tariq Mahmood, Khurshid Ayub, Sobia Tabassum, **Mazhar Amjad Gilani**, (2024), A rational design of metal doped C20 fullerene based sensor for the selective detection of ethyl butyrate as COVID-19 biomarker, Surfaces and Interfaces, 52, 104869, (**IF** = 5.7)
13	Manal Fatimah, Muhammad Abdul Qyyum, Mungyu Lee, Rayed S. Alshareef, Muhammad Aslam, Babar Saeed, Lichun Dai, **Mazhar Amjad Gilani**, Aqeel Ahmed Bazmi, In Seop Chang, Hamad AlMohamadi, Asim Laeeq Khan, Muhammad Yasin, (2024), Industrial waste gases as a resource for sustainable hydrogen production: Resource availability, production potential, challenges, and prospects, Carbon Capture Science & Technology, 12, 100228, (**IF** = 10.4)
14	Shimna Biju, Abdulrahman, Allangawi, Remabai Balachandran, Khurshid Ayub, **Mazhar Amjad Gilani,** Muhammad Imran, Tariq Mahmood, (2024), Transition metal-modified 1-Azahomocubane dimers: Designed catalysts for enhanced hydrogen and oxygen evolution reactions via first-principles calculations, International Journal of Hydrogen Energy, 77, 906-914, (**IF** = 8.1)
15	Yumna Niamat, Junaid Yaqoob, Muhammad Usman Khan, Riaz Hussain, **Mazhar Amjad Gilani**, Abrar Ul Hassan & Tansir Ahamad, (2024), Investigating the potential of monocyclic B9N9 and C18 rings for the electrochemical sensing, and adsorption of carbazole-based anti-cancer drug derivatives: DFT-based first-principle study, Journal of Molecular Modeling, 8,245, (**IF** = 2.1)
16	Ujala Aslam, Junaid Yaqoob, Muhammad Usman Khan, **Mazhar Amjad Gilani**, Abrar Ul Hassan, Saad M. Alshehri, (2024), Deciphering the impact of superalkali metals [M3O (M = Li, Na, K)] doping on sulflower for enhanced NLO responses with efficient energetic offsets: A density functional theory perspective, Computational and Theoretical Chemistry, 1238, 114742, (**IF** = 1.7)
17	Moiz U din Khan, Aqsa Afzaal, Shahnaz, **Mazhar Amjad Gilani**, Shagufta Perveen, Faiza Sharif, Anila Asif, Abrar Faisal, Muhammad Shahid Nazir, Olivier Huck, (2024), Synergistic utilization of cost-effective glycerophosphate and biologically active zein for innovative minimally invasive smart thermo-responsive hydrogels for potential hard tissue engineering applications, Smart Materials and Structures, 33, 085007, (**IF** = 3.7)
18	Muzdalfa Almas, Amir Sada Khan, Saadat Ullah, Asma Nasrullah, Palwasha Khan, **Mazhar Amjad Gilani**, Sher Bahadar Khan, (2024), Fast and efficient extraction of phenol from aqueous phase using deep eutectic solvents: Experimental and density functional theory investigation

19	Ayesha Bilal, Muhammad Yasin, Faheem Hassan Akhtar, **Mazhar Amjad Gilani**, Hamad Almohamadi, Mohammad Younas, Azeem Mushtaq, Muhammad Aslam, Mehdi Hassan, Rab Nawaz, Aqsha Aqsha, Jaka Sunarso, Muhammad Roil Bilad and Asim Laeeq Khan, (2024), Enhancing Water Purification by Integrating Titanium Dioxide Nanotubes into Polyethersulfone Membranes for Improved Hydrophilicity and Anti-Fouling Performance, Membranes, 14, 116, (**IF** = 4.1)
20	Junaid Yaqoob, Hamad Al Mohamadi, Asim Laeeq Khan, Muhammad Yasin, Tariq Mahmood, Khurshid Ayub, Farooq Anwar, Khurram Saleem Joya and **Mazhar Amjad Gilani**, (2024), Optimal balance: alkali metal-doped boron carbide nanosheets achieve superior stability and nonlinear optical responsiveness, Royal society of Chemistry, 14, 31021-31035, (**IF** = 3.9)
21	Ayesha Komal, Amna Kasuri, Muhammad Yasin, Asim Laeeq Khan, Abdul Razzaq, Hamad Alhmohamadi, Faheem Hassan Akhtar, Arsalan Ahmad Raja, R. Nawaz, Emilia Abdulmalek, **Mazhar Amjad Gilani**, (2024), Enhancing butanol separation efficiency in pervaporation with ZIF-8 porous liquid infused mixed matrix membranes, Chemical Engineering Research and Design, 206, 43-53, (**IF** = 3.7)
22	Maria Liaqat, Junaid Yaqoob, Muhammad Usman Khan, Riaz Hussain, **Mazhar Amjad Gilani**, Munazza Idrees, Minahil Ishtiaq, Abrar Ul Hassan, Saad M Alshehri, (2024), Elucidating the mechanistic sensing capability of novel tetragonal graphene quantum dot towards tobacco alkaloids: a DFT study, Structural Chemistry, 1-22, (**IF** = 2.1)
23	Shamsa Bibi, Aamna Imtiaz, Shabbir Muhammad, Shafiq urRehman, Aijaz Rasool Chaudhry, Abdullah G Al-Sehemi, Bakhet Ahmad Alqurashy, **Mazhar Amjad Gilani,** (2024), Tailoring the donor moieties in TPA-based organic dyes for efficient photovoltaic, optical and nonlinear optical response properties, , International Journal of Quantum Chemistry, 124, e27362, (**IF** = 2.3)
24	Abdulrahman Allangawi, Khurshid Ayub, **Mazhar Amjad Gilani**, Abdulla Ebrahim, Muhammad Imran, Tariq Mahmood, (2024), Highly active late second-row transition metals loaded B12P12 nanocages as bifunctional single atom catalysts toward hydrogen and oxygen evolution reactions, International Journal of Hydrogen Energy, 61, 47-56, (**IF** =8.1)
25	Ali Hussain, Muhammad Yar, Rayed S Alshareef, Tariq Mahmood, Khurshid Ayub, R Nawaz, Muhammad Yasin, **Mazhar Amjad Gilani**, (2024), Efficient hydrog en splitting via single atom catalysts supported on Zn12O12 nanocage for sustainable clean fuel production, International Journal of Hydrogen Energy, 58, 806-821, (**IF** = 8.1)
26	Sobia Tabassum, Muhammad Saqib, Madeeha Batool, Faiza Sharif, **Mazhar Amjad Gilani**, Olivier Huck, (2024), Eco-friendly synthesis of mesoporous bioactive glass ceramics and functionalization for drug delivery and hard tissue engineering applications, Biomedical Materials, 19, 035014, (**IF** = 3.9)
27	Naveen Kosar, Simplice Koudjina, Khurshid Ayub, **Mazhar Amjad Gilani**, Muhammad Imran, Tariq Mahmood, (2024), Mechanistic enhanced cell voltage based on halides doped metal oxide fullerenes for use in Li-ion batteries: Insights from DFT intuition, , Diamond and Related Materials, 142, 110778, (**IF** = 4.3)
28	Rehana Bano, Nadia Nawaz, Muhammad Arshad, Abdul Rauf, Tariq Mahmood, Khurshid Ayub, Rayed S Alshareef, Muhammad Yasin, R Nawaz, **Mazhar Amjad Gilani**, (2024), Face specific superalkali doped corannulene complexes with significant electronic and nonlinear optical response, Optical and Quantum Electronics, 56, 204, (**IF** = 3.3)

29	Abdulrahman Allangawi, Khurshid Ayub, **Mazhar Amjad Gilani**, Muhammad Imran, Tariq Mahmood, (2024), Transition metal loaded carbon penta-belt SACs for hydrogen and oxygen evolution reactions and identification of systematic DFT method to characterize the main interacting, International Journal of Hydrogen Energy, 53, 989-998, (**IF** = 8.1)
30	Shaista Ijaz Khan, Ayaz Hassan, Rehana Bano, **Mazhar Amjad Gilani**, Jean Louis Marty, Hongxia Zhang, Akhtar Hayat, (2024), An innovative and universal dual-signal ratiometric spectro- electrochemical imprinted sensor design for sandwich type detection of anticancer-drug, gemcitabine, in serum, Talanta, 267, 125233, (**IF** = 5.6)
31	Misbah Asif, Naveen Kosar, Hasnain Sajid, Sana Qureshi, **Mazhar Amjad Gilani**, Khurshid Ayub, Muhammad Arshad, Muhammad Imran, Malai Haniti SA Hamid, Imene Bayach, Nadeem S Sheikh, Tariq Mahmood, (2024), Exploring the Sensing Potential of g-C3N4 versus Li/g-C3N4 Nanoflakes toward Hazardous Organic Volatiles: A DFT Simulation Study, ACS omega, 9, 3541-3553, (**IF** = 3.75)
32	Abeera Naeem, Babar Saeed, Hamad AlMohamadi, Mungyu Lee, **Mazhar Amjad Gilani**, R Nawaz, Asim Laeeq Khan, Muhammad Yasin, (2024), Sustainable and green membranes for chemical separations: A review, Separation and Purification Technology, 126271, (**IF** = 8.2)
33	Maria Younas, Muhammad Yar, Hamad AlMohamadi, Tariq Mahmood, Khurshid Ayub, Asim Laeeq Khan, Muhammad Yasin, **Mazhar Amjad Gilani**, (2024), A rational design of covalent organic framework supported single atom catalysts for hydrogen evolution reaction: a DFT study, International Journal of Hydrogen Energy, 51, 758-773, (**IF** = 8.1)
34	Khalida Khalil, Ralf Ludwig, Ammar M Tighezza, Khurshid Ayub, Tariq Mahmood, **Mazhar Amjad Gilani**, (2024), Unraveling the role of superalkalis in modulating the static and dynamic hyperpolarizabilities of emerging calix [4] arenes, , Physical Chemistry Chemical Physics, 26, 6794-6805, (**IF** = 2.9)
35	Palwasha Khan, Muhammad Yasin, Hamad AlMohamadi, Xiangping Zhang, Asim Laeeq Khan, R Nawaz, **Mazhar Amjad Gilani**, (2024), Exploring the potential of hydrophobic deep eutectic solvents for bioethanol separation using DFT and COSMO-RS model, Journal of Molecular Liquids, 393, 123665, (**IF** = 5.3)
36	Naveen Kosar, Saba Kanwal, Hasnain Sajid, Khurshid Ayub, **Mazhar Amjad Gilani**, Khalid Elfaki Ibrahim, Mansour K Gatasheh, Y Sheena Mary, Tariq Mahmood, (2024), Frequency-dependent nonlinear optical response and refractive index investigation of lactone-derived thermochromic compounds, Journal of Molecular Graphics and Modelling, 126, 108646, (**IF** = 2.7)
37	Misbah Asif, Sana Qureshi, Hasnain Sajid, Naveen Kosar, **Mazhar Amjad Gilani**, Khurshid Ayub, Muhammad Arshad, Muhammad Azeem, Muhammad Akbar Shahid, Umar Farooq, Tariq Mahmood, (2024), Sensing Performance of Heptazine-Based C3N4 Quantum Dot Toward Highly Toxic Environmental Pollutants, Amides, and Acetyl Derivatives, Journal of Inorganic and Organometallic Polymers and Materials, 34, 79-92, (**IF** = 3.9)
38	Naveen Kosar, Moneeba Asgar, Tariq Mahmood, Khurshid Ayub, Hasnain Sajid, Munirah D. Albaqami, **Mazhar Amjad Gilani**, (2024), ,Electrochemical properties of lithium metal doped C60 fullerene for battery applications, Materials Science in Semiconductor Processing, 175, 108256, (**IF** = 4.2)
39	Abdul Rehman, Javaria Ashiq, Salva Asghar, Ali Raza, Asif Mahmood Qureshi, **Muhammad Javid Iqbal**. (2024) Mitigation of acrylamide in waste cooking oil by utilizing sustainable bio-adsorbent activated sugarcane bagasse. Sustainable Chemistry and Pharmacy, 42 (10), 101865. (**IF** 5.5)

40	M. Shahmir Ali, M. Imtiaz Hussain, Fawad Azeem, **Muhammad Javid Iqbal**, Tareq Manzoor, Habib Ullah Manzoor and Gwi Hyun Lee., (2024) A Detailed Techno-Economic Analysis of Solar Distributed Generation: Possible Scenario for Domestic Consumers**.** Social Science Research Network (SSRN) Elsevier.
41	Saba Riaz, Azhar Rasul, Muhammad Asif Khalil, Laiba Ameen, Komal Riaz, Samreen Gul Khan, Sevki Adem, Mudassir Hassan, **Muhammad Javid Iqbal,** Muhammad Asrar (2024). Cancer and Carcinogens. Book Chapter 3 in Cancer Targeting Therapies ISBN 9781003363958 in CRC Press.
42	Ambreen Aisha, **Muhammad Javid Iqbal**, Razia Noreen, Naila Mukhtar, Asim Hussain, Asim Rehman. (2024). Immobilized Enzyme Systems for Wastewater Treatment. Book Chapter11 in Nanomaterials for Air and water Purification ISBN: 978-3-527-35052-0. John Wiley Online Library.
43	Perveen Kanwal**, Muhammad Javid Iqbal**, Muhammad Ibrahim. 2024. Removal of Free Fatty Acid (FFA) and peroxides from Waste cooking oils (WCOs) using Feller`s earth- China clay adsorbent mixture; Korean Journal of Chemical Engineering.
44	Abdullah, M. A., **Nazir, M. S.,** Hussein, H. A., Shah, S. M. U., Azra, N., Iftikhar, R., Iqbal, M. S., Qamar, Z., Ahmad, Z., Afzaal, M., Om, A. D., Shaharah, M. I., Rak, A. E., & Hung, Y. (2024). New perspectives on biomass conversion and circular economy based on Integrated Algal-Oil Palm Biorefinery framework for sustainable energy and bioproducts co-generation. **Industrial Crops and Products**, 213, 118452. https://doi.org/10.1016/j.indcrop.2024.118452 **45Impact Factor: 5.9**
45	Razzaque, S., Abubakar, M., Farid, M. A., Zia, R., Nazir, S**.**, Razzaque, H., & **Sadaf Ul H*.** (2024). Detection of toxic cypermethrin pesticides in drinking water by simple graphitic electrode modified with Kraft lignin@ Ni@ gC 3 N 4 nano- composite. Journal of Materials Chemistry B. 12, 9364-9374. (**IF**= 6.1)
46	Iftekhar, H., **Nazir, M. S**., Mehboob, A., Majeed, K., Nawab, Y., & Ali, Z. (2024). Rebound characteristics of flexible and stiff jute rubber/epoxy hybrid composite under low-velocity impact. Journal of Reinforced Plastics and Composites**,** 07316844241278046. **(IF**=3.2)
47	Aslam, A. A., Hassan, S. U., Saeed, M. H., Kokab, O., Ali, Z., **Nazir, M. S**., ... & Aslam, A. A. (2023). Cellulose-based adsorbent materials for water remediation: Harnessing their potential in heavy metal and dye removal. Journal of Cleaner Production, 138555. (**IF**= 9.7)
48	Akhtar, M. N., Basha, B., Makhdoom, S., **Nazir, M. S.,** Almohammedi, A., Alelyani, M., Irfan, M., Khan, M. A., AlMohisen, H. M., & Al-Buriahi, M. (2024). Magnetoelectric, physicochemical, and cytotoxicity evaluations of Fluorouracil decorated Gd doped Co nano ferrites. Materials Chemistry and Physics, 318, 129251. (**IF**= 4.6)
49	Khaid, H., Umar, A., Saeed, M. H., Nazir, M. S., Akhtar, T., Ikhlaq, A., & **Sadaf Ul H.*** (2024). Advances in fuel oil desulfurization: A comprehensive review of polyoxometalate catalysts. Journal of Industrial and Engineering Chemistry, 141, 32-45. (**IF**= 5.9)
50	Azra, N., Aziz, V., Hasan, S. U., **Nazir, M. S**., Ali, Z., Hussain, M., & Park, Y. K. (2024). Investigation of the kinetics of imidacloprid adsorption onto bimetallic Cu-BTC MOF. Journal of Industrial and Engineering Chemistry, (**IF**= 5.9)

51	din Khan, M. U., Afzaal, A., Gilani, M. A., Perveen**, S.,** Sharif, F., Asif, A., ... & Tabassum, S. (2024). Synergistic utilization of cost-effective glycerophosphate and biologically active zein for innovative minimally invasive smart thermo-responsive hydrogels for potential hard tissue engineering applications. Smart Materials and Structures, 33(8), 085007. (**IF**= 3.7)
52	Rafique, A., Amjad, F., Janjua, M. R. S. A., Naqvi, S. A. R., **Hassan, S. U***., Abdullah, H., ... & Alalwiat, A. A. (2024). Chia seed-mediated fabrication of ZnO/Ag/Ag2O nanocomposites: structural, antioxidant, anticancer, and wound healing studies. Frontiers in Chemistry, 12, 1405385. (**IF**= 3.8)
53	Daneshfozouna, S., **Nazir, M. S**., Abdullaha, B., & Abdullaha, M. A. (2024). Surface modification of celluloses extracted from oil palm empty fruit bunches for heavy metal sorption. Chemical Engineering, 37, 679-683. (**IF**= 0.97)
54	**Nazir, M. S**., Ajab, H., Raza, M. R., & Abdullah, M. A. (2024). Surface modification of cellulose fibers from Oil Palm Empty Fruit Bunches for heavy metal ion sorption and diesel desulphurization. Vol. 107, 241-256. (**IF**= 1.0)
55	Parveen, N., Hanif, A. A., **Hassan, S. U**., Rehman, A., Razzaque, S., Mahmood, A., ... & Akhter, T. Tailored Ni-Zn-Cu ferrite/EPDM nanocomposites: Synthesis, characterization, and multifaceted properties for mechanical and electrical applications. Polymer Composites. Volume45, Issue12 (**IF**= 4.8)
56	Amir Ikhlaq, Mamoona Kanwal, Osama Shaheen Rizvi, Naveed Ramzan, Asia Akram, Umair Yaqub Qazi, Fei Qi, **Sadaf Ul Hassan**, Rahat Javaid, (2025) Decontamination of fish aquarium wastewater by ozonation catalyzed by multi-metal loaded activated carbons for sustainable aquaculture. Process Safety and Environmental Protection, 193, 374-384. (**IF**= 6.9)
57	Muhammad Asif Iqbal, Asif Mahmood, Waheed Al-Masry, Chan Ho Park, **Sadaf Ul Hassan***, Toheed Akhter*, (2024) Versatile poly(N-vinylcaprolactam)-grafted-hydroxypropyl cellulose polymers with tailored thermo- and pH-responsive properties via sustainable organocatalyzed atom transfer radical polymerization. Polymer Chemistry, 15, 4244-4254.(**IF**= 5.36)
58	Hamna Khalid, Arsheen Umar, Muhammad Shahid Nazir, Muhammad Asim Farid, Zulfiqar Ali, Asif Mahmood, Waheed Al-Masry, Chan Ho Park, Toheed Akhter, **Sadaf Ul Hassan,*** .Ahmad Khan, (2024) Development and optimization of a sustainable polyoxometalate-kaolinite-based catalyst for efficient desulfurization of model and real fuel using Box–Behnken design, RSC Advances, 14 (44), 31979. (**IF**=3.9)
59	Muhammad Junaid ul Hassan, Abid Ali, Ghulam Mooin Ud Din, Iqra Manzoor, Muhammad Ajmal, Mohammed Alsuhybani, Wissem Mnif, Zaina Algarni, **Sadaf Ul Hassan**, Munawar Iqbal, (2024) Bismuth molybdate nanoparticles modified graphene oxide: A novel nanocomposite for photocatalytic removal of organic dyes. Materials Science and Engineering: B, 309, 117659 (**IF**=3.9)
60	Shumaila Razzaque, Muhammad Abubakar, Muhammad Asim Farid, Rehana Zia, Shahid Nazir, Humaira Razzaque, Abid Ali, Zulfiqar Ali, Asif Mahmood, Waheed Al-Masry, Toheed Akhter,*, and **Sadaf Ul Hassan**,* (2024) Detection of Toxic Cypermethrin Pesticides in Drinking Water by Simple Graphitic Electrode Modified With Kraft Lignin@Ni@g-C3N4 Nano-composite. Journal of Material Chemistry B, Accepted (**IF**=7.22)

61	Alia Farooq, M.Shahid Nazir*, **Sadaf Ul Hassan*,** Majid Niaz Akhtar, Murid Hussain, Mariyam Farooq, Awais Ali Aslam, Aqeel Ahmad Khan, Zulfiqar Ali, (2024) Synergistic strategies in MOF on MOF photocatalysts: Review on exploring sustainable hydrogen generation from water splitting. Nano-Structures & Nano-Objects, 39, 101295 (**IF**-5.7).
62	Hamn a Khaid, Arsheen Umar, Muhammad Haris Saeed, Muhammad Shahid Nazir, Toheed Akhtar, Aamir Ikhlaq, Zulfiqar Ali, **Sadaf Ul Hassan***, (2024) Advances in fuel oil desulfurization: A comprehensive review of polyoxometalate catalysts. Journal of Industrial and Engineering Chemistry, **(IF**-6.58)
63	Aisha Rafique, Fatima Amjad, Muhammad Ramzan Saeed Ashraf Janjua, Syed Ali Raza Naqvi*, **Sadaf Ul Hassan*,** Hanzla Abdullah, Muhammad Shahid Nazir, Zulfiqar Ali, Abdulaziz A. Alshihri, Maha Abdullah Momenah, Adel Abo Mansour, Majed A. Bajaber and Ahlam A. Alalwiat, (2024) Chia seed-mediated fabrication of ZnO/Ag/Ag2O nanocomposites: structural, antioxidant, anticancer, and wound healing studies. Frontiers in Chemistry, doi: 10.3389/fchem.2024.1405385. (**IF**-5.04)
64	Ijaz Hussain, Muhammad Ramzan Saeed Ashraf Janjua, Atta Ul Haq, **Sadaf Ul Hassan**, Faisal Miqad K. Albaqami ,Meshari A. Alsuwat, Barakat M. Alrashdi, Sarah Alzwain andSyed Ali Raza Naqvi*, (2024) Evaluation of Anti-Infection and Anti-Diabetic Activities in Methanolic and n-Hexane Plant Extracts of Indigenously Cultivated Chenopodium album. Agronomy 14(7),1340. (**IF**-2.16)
65	Mamoon Ur Rasheed, Syed Ali Raza Naqvi, **Sadaf Ul Hassan**, Atta Ul Haq, Muhammad Ramazan Saeed Ashraf Janjua, Mohamed H. Mahmoud, Gaber El-Saber Batiha, Haroon Rashid, Muhammad Abdul Rahim, João Miguel Rocha*, (2024) In vitro and in vivo exploitation Agronomy of cell stress pathways using methanolic extracts of Phlomis stewartii in diabetic rat's model. Industrial Crops and Products, 217, 118861. (**IF**-6)
67	Syed Ali Raza Naqvi, Ahmad Junaid Hassan, Muhammad Ramzan Saeed Ashraf Janjua, Naseem Abbas, Ameer Fawad Zahoor, **Sadaf Ul Hassan** and Amjad Hussain, (2024) Radiolabeling and preclinical animal model evaluation of DTPA coupled 99mTc-labelled flutamide complex ([99mTc]DTPA-FLUT) as a potential radiotracer for cancer imaging. Acta Radiologica, (Accepted), **(IF**-1.7)
68	Nazia Parveena, Asma Anam Hanifa, **Sadaf ul Hassan**, Aamal Rehman, Shumaila Razzaque, Asif Mahmoode, Waheed Al-Masry, Taewook Kim, Soo-Kyung Han, Chan Ho Park, Shahid Nazir,*, Zulfiqar Ali,*, Toheed Akhter, (2024) Tailored Ni-Zn-Cu Ferrite/EPDM Nanocomposites: Synthesis, Characterization, and Multifaceted Properties for Mechanical and Electrical Applications. Polymer Composites, (Accepted), (**IF**= 5.23)
69	Sana Karamat, Toheed Akhter, **Sadaf Ul Hassan**, Muhammad Faheem, Asif Mahmood, Waheed Al-Masry, Shumaila Razzaque, Sadia Ashraf, Taewook Kim, Soo-Kyung Han, Chan Ho Park, (2024) Recycling of polyethylene terephthalate to bismuth-embedded bimetallic MOFs as photocatalysts toward removal of cationic dye in water. Journal of Industrial and Engineering Chemistry, , https://doi.org/10.1016/j.jiec.2024.03.037. (**IF**= 6.58)
70	Muhammad Maqbool, Nazia Parveen, Saima Jaffar, **Sadaf Ul Hassan**, Asif Mahmood, Waheed Al-Masry, Shumaila Razzaque, Toheed Akhter, Taewook Kim, Soo-Kyung Han, Chan Ho Park, (2024) CO_2-Free Ethylene Oxide Production via Liquid-Phase Epoxidation with Fe2O3/MSM Catalyst. Chemistry–An Asian Journal, (Accepted), (**IF**= 4.25)

71	Iqra Afzal, Toheed Akhter, **Sadaf Ul Hassan**, Ho Kyung Lee, Shumaila Razzaque, Asif Mahmood, Waheed Al-Masry, Hansol Lee, Chan Ho Park, (2024) Logical Optimization of Metal–Organic Frameworks for Photocatalytic Degradation of Organic Pollutants in Water via Box–Behnken Design. ACS ES&T Water, 4(2), 648–660. (**IF**=5.3)
72	Muhammad Maqbool, Toheed Akhter, **Sadaf Ul Hassan**, Asif Mahmoodc, Waheed Al-Masry and Shumaila Razzaque, (2024) Development of a chromium oxide loaded mesoporous silica as an efficient catalyst for carbon dioxide-free production of ethylene oxide. RSC Adv., 14, 445-445. (**IF**=4.34)
73	Muhammad Asim Farid, Ahmad Raza Ashraf, Rida Sarfaraz, **Sadaf ul Hassan**, Nimra Naeem and Hamza Naeem, (2024) Simultaneous photocatalytic degradation of methylene blue and methyl orange using a green synthesized Zn0.98Mn0.02O/BiOCl nanocomposite. New J. Chem., 48, 887-897. (**IF**=3.3)