## **Waheed Miran**

### Associate Professor

School of Chemical & Materials Engineering

Email: waheed.miran@scme.nust.edu.pk

Contact: 0524291436



### **About**

Dr. Waheed Miran is working as Associate Professor in the School of Chemical & Materials Engineering. Dr. Waheed Miran has a PhD in Environmental and Energy Engineering. Dr. Waheed Miran has published 75 research articles & conference papers having a citation count of 3073, carried out 3 projects and filed 2 intellectual property.

## Qualifications

| PhD in Environmental and Energy Engineering  Kyungpook National University, South Korea | 2014 - 2018   |
|---|---------------|
| MSc in Environmental and Energy Engineering Kyungpook National University , South Korea | 2012 - 2014   |
| Post Grad Diploma in Petroleum and Gas University of the Punjab , Pakistan              | 2004 - 2009   |
| Experience  |               |
| Associate Professor   | 2025- Present |
| School of Chemical & Materials Engineering  |               |
| Associate Professor   | 2024 - 2024   |
| School of Chemical & Materials Engineering  |               |
| Associate Professor   | 2023 - 2024   |
| School of Chemical & Materials Engineering  |               |
| Assistant Professor   | 2021 - 2023   |
| School of Chemical & Materials Engineering  |               |
| JSPS Postdoctoral Fellowship  | 2019 - 2021   |
| National Institute for Materials Science , Tsukuba, Japan                               |               |

## **Research Projects**

**Postdoctoral Researcher** 

**Process Support Manager** 

Lotte Chemicals , Port Qasim, Karachi

## **National Projects**

4th ASEAN-Pakistan Conference on Materials Science (APCoMS 2025)

Funding Agency: ASEAN Pakistan Collaboration Fund

National Institute for Materials Science, Tsukuba, Japan

**Amount:** PKR 24,780,568.00 **Status:** Approved\_inprocess

Two-Dimensional Transition Metal-Boride (MBenes) for Electrochemical Sensing of Hepcidin: A Biomarker of Iron-Related Disorders—An Experimental and DFT Study

Funding Agency: Pakistan Academy of Sciences

Amount: PKR 4,000,000.00 Status: Approved\_inprocess

## **International Projects**

2025

2018 - 2019

2009 - 2012

2025

## **Industry Projects**

# **National Projects** Testing Thermal Efficiency of Gas Storage Water Geyser 2024 **Client:** Hotwell industries Amount: PKR 50 000 00 Status: Completed International Projects **Research Articles** Enhanced drug-loading potential through silver and strontium doping in iron oxide nanoparticles for 2025 drug delivery applications Syeda Sana Ali Naqvi Waheed Miran Iftikhar Hussain Gul Zakir Hussain Aneela Javed Usman Liaqat Journal of Materials Research, Volume:40, Issue:13, Page:2016-2025 Impact Factor: 2.900 | Quartile: 3 DOI: https://doi.org/10.1557/s43578-025-01632-5 Anode substrate tailoring in fed-batch photosynthetic microbial desalination cell for industrial and 2025 domestic wastewater treatment Syeda Safina Ali Waheed Miran Zia Ullah Zeshan International Journal of Environmental Science and Technology, Pages:16 Impact Factor: 3.4 | Quartile: 1 DOI: https://doi.org/10.1007/s13762-025-06619-7 2025 Assessment of textile sludge pyrolysis behaviour through advance predictive models for bioenergy production Arslan Khan Asif Hussain Salman Raza Naqvi Waheed Miran Imtiaz Ali Case Studies in Thermal Engineering, Volume 73, Article Number 106698 Impact Factor: 6.400 | Quartile: 1 DOI: https://doi.org/10.1016/j.csite.2025.106698 Investigating the influence of tank material and residual chlorine on the proliferation of bacterial biofilm 2025 growth in the drinking water storage systems Aiza Javed Hira Amjad Imran Hashmi Waheed Miran Journal of Water Sanitation and Hygiene for Development, Volume:15, Issue:4, Pages 305-321 Impact Factor: 1.4 | Quartile: 4 | Citations: 1 DOI: https://doi.org/10.2166/washdev.2025.285 Impact of polypyrrole/MXene modified anode on bioelectricity generation in microbial fuel cells 2025 Fareeha Batool Waheed Miran Marghoob Ahmed Syed Rizwan Hussain Osama Naeem Hamza Zaheer Usman Liagat Journal of Applied Electrochemistry, Pages 1-11 Impact Factor: 2.400 | Quartile: 3 DOI: 10.1007/s10800-025-02275-4 High-performance cauliflower-like Er2O3/NiO nanocomposite derived from Er-Ni-MOF for energy 2025 conversion and storage applications Sonadia Waheed Miran Zoya Iqbal Maryam Shah Ghulam Mustafa Muhammad Umair Mushtaq Anwar Ul-Hamid d Fahad Azad Journal of Energy Storage, Volume:108, Article Number: 115222 Impact Factor: 8.9 | Quartile: 1 | Citations: 5 DOI: https://doi.org/10.1016/j.est.2024.115222 Cysteine-Grafted Cu MOF/ZnO/PANI Nanocomposite for Nonenzymatic Electrochemical Sensing of 2024 **Dopamine** Mariam Basharat Zakir Hussain Dooa Arif Waheed Miran ACS Omega, Volume:9, Issue:50, Pages 49545-49556 Impact Factor: 3.700 | Quartile: 2 | Citations: 3 DOI: https://doi.org/10.1021/acsomega.4c07452 Two-dimensional MXene and molybdenum disulphide for the removal of hexavalent chromium from 2024 water: A comparative study Asma Maqsood Abbasi Waqas Qamar Zaman Hassan Anwer Fahad Azad Xizi Long Waheed Miran Musharib Khan

Desalination and Water Treatment, Volume 320, Article Number 100693

Impact Factor: 1.000 | Quartile: 4 | Citations: 3 DOI: doi.org/10.1016/j.dwt.2024.100693 Tailored Flower-Like Ni-Fe-MOF-Derived oxide Composites: Highly active and durable electrocatalysts 2024 for overall water splitting Zoya Iqbal Sonadia Waheed Miran Anwar Ul-Hamid Manzar Sohail Fahad Azad Fuel, Volume:372, Article Number:132112 Impact Factor: 6.7 | Quartile: 1 | Citations: 10 DOI: 10.1016/j.fuel.2024.132112 Mitigation of uranium toxicity in rice by Sphingopyxis sp. YF1: Evidence from growth, ultrastructure, 2024 subcellular distribution, and physiological characteristics Jun Liu Xinting Fan Juan Ni Meihan Cai Danping Cai Yuanyuan Jiang Aili Mo Waheed Miran Tangjian Peng Xizi Long Fei Yang Plant Physiology and Biochemistry, Volume 214, Article Number 108958 Impact Factor: 6.100 | Quartile: 1 | Citations: 2 DOI: 10.1016/j.plaphy.2024.108958 An electrochemical sensor based on copper oxide nanoparticles loaded on a mesoporous MCM-41 for 2024 non-enzymatic detection of glucose Zohaa Dooa Arif Muneeb Hassan Muhammad Abdullah Waheed Miran Muhammad Ahsan Nasir Sadaf Batool Muhammad Aslam Baig Usman Liaqat Ceramics International., Volume: 50, Issue: 7, Part B, Pages: 12614-12620 Impact Factor: 5.2 | Quartile: 1 | Citations: 19 DOI: 10.1016/j.ceramint.2024.01.171 Green synthesized silver nanoparticles using Rhazya stricta extract for delivery of HDAC inhibitor 2024 panobinostat in MDA- MB-231 breast cancer cell line Tayyaba Nawaz Adeeb Shehzad Waheed Miran Aroosa Younis Nadeem Tooba Nawaz Nanomedicine Journal, Volume 10(2), Pages 187-195 Impact Factor: 1.400 | Quartile: 4 | Citations: 2 DOI: 10.22038/NMJ.2024.75733.1839 2024 Enhanced Electrocatalytic Performance of Erbium-Incorporated Nickel-Based Metal-Organic Frameworks for Water Splitting Sonadia Zoya Iqbal Waheed Miran Anwar-Ul-Hamid Khurram Shehzad Ayub Fahad Azad Energy Fuels, Vol:38, Isseu: 6, Pages:5397-5406 Impact Factor: 5.3 | Quartile: 1 | Citations: 12 DOI: 10.1021/acs.energyfuels.3c04609 2024 Whitlockite -A study on the effect of reaction parameters on morphology in one-solvent system. Anum Ayub Usman Liaqat Zakir Hussain Waheed Miran Materials Chemistry and Physics, Volume 314, Article Number: 128932 Impact Factor: 4.6 | Quartile: 2 | Citations: 1 DOI: 10.1016/j.matchemphys.2024.128932 Electrochemical Characterization of Two Gut Microbial Strains Cooperatively Promoting Multiple 2024 Sclerosis Pathogenesis Divya Naradasu Waheed Miran Akihiro Okamoto Microorganisms, Volume 12, Issue 2, Article Number 257 Impact Factor: 4.5 | Quartile: 2 | Citations: 1 DOI: 10.3390/microorganisms12020257 Optimized electrocatalytic degradation of ciprofloxacin using Co3O4 coated stainless steel electrodes 2024 Muhammad Usman Saleem Muhammad Jawad Fahad Azad Muhammad Asif Nawaz Wagas Qamar Zaman Waheed Miran Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 681, Article Number 132738 Impact Factor: 5.2 | Quartile: 2 | Citations: 6

Impact Factor: 5.2 | Quartile: 2 | Citations: 6 **DOI:** 10.1016/j.colsurfa.2023.132738

Performance comparison of a photosynthetic and mechanically aerated microbial fuel cell for wastewater treatment and bioenergy generation using different analytes

2023

Zia Ullah Waqas Qamar Zaman Zeshan Sheikh Muhammad Zeeshan Ali Khan Waheed Miran Jiansheng Li Muhammad Abdul Nasir Khan Shanza Shabbir Journal of Water Process Engineering, Volume 56, Article Number 104358

Impact Factor: 7.0 | Quartile: 1 | Citations: 6

DOI: 10.1016/j.jwpe.2023.104358

The synergistic triad of graphene quantum dots, polymer, and ferrites for the photodegradation of dyes in aqueous solution

2023

Saima Perveen Waheed Miran Gajanan Ghodake Waqar Azeem Xizi Long Fahad Azad

Heliyon, Volume 9, Issue 11, Article Number e21739

Impact Factor: 4.0 | Quartile: 2 | Citations: 4 DOI: https://doi.org/10.1016/j.heliyon.2023.e21739

#### Wood as a green and sustainable alternative for environmentally friendly & flexible electronic devices

2023

Nouman Ahmed Hizbullah Malik Muhammad Bilal Khan Niazi Waheed Miran Ahmed M. Tawfeek Zaib Jahan Emadeldin M. Kamel Muhammad Saeed Akhtar

Chemosphere, Volume 336, Article Number 139213 Impact Factor: 8.8 | Quartile: 1 | Citations: 10 DOI: 10.1016/j.chemosphere.2023.139213

# Novel cytotoxicity study of strontium (Sr) doped iron oxide (Fe3O4) nanoparticles aided with ibuprofen

2023

for drug delivery applications

Imad Ud Din Irum Shahid Khan Iftikhar Hussain Gul Zakir Hussain Waheed Miran Farhan Javaid Usman Liaqat

Naunyn-Schmiedeberg's Archives of Pharmacology, Pages 1-17

Impact Factor: 3.6 | Quartile: 2 | Citations: 7 DOI: https://doi.org/10.1007/s00210-023-02582-7

### Nonthermal plasma catalysis using ferrites as an efficient catalyst for toluene degradation

2023

Khurram Shahzad Ayub Zain Abbas Waqas Qamar Zaman Shoaib Rauf Muazzam Arshad Meesam Ali Waheed Miran Umair Mushtaq Haroon Khalid Ji Yang Research on Chemical Intermediates, Volume 49, Pages 2399-2415

Impact Factor: 3.134 | Quartile: 3 | Citations: 2

DOI: 10.1007/s11164-023-05010-w

## Feasibility Study of Anaerobic Baffled Reactor Coupled with Anaerobic Filter Followed by Membrane

2023

**Filtration for Wastewater Treatment** 

Aamir Khan Sher Jamal Khan Waheed Miran Waqas Qamar Zaman Alia Aslam Hafiz Muhammad Aamir Shahzad

Membranes, Volume 13(1), Article Number 79 Impact Factor: 4.562 | Quartile: 1 | Citations: 6 DOI: https://doi.org/10.3390/membranes13010079

## Multivariate landscapes constructed by Bayesian estimation over five hundred microbial electrochemical time profiles

2022

Waheed Miran Wenyuan Huang Xizi Long Gaku Imamura Akihiro Okamoto

Patterns, Volume 3, Issue 11, Article Number 100610

Impact Factor: N/A | Citations: 5 DOI: 10.1016/j.patter.2022.100610

### Efficient post-plasma catalytic degradation of toluene via series of Co-Cu/TiO2 catalysts

2022

Wagas Qamar Zaman Waheed Miran Meesam Ali Zain Abbas Umair Mushtag Asif Shahzad Ji Yang Khurram Shahzad Ayub

Research on Chemical Intermediates, Pages 1-22 Impact Factor: 3.134 | Quartile: 3 | Citations: 13

DOI: 10.1007/s11164-022-04805-7

### Methane dry reforming with CO2 over ceria supported Ni catalyst prepared by reverse microemulsion synthesis

2022

Muhammad Usman Rashid Wan Mohd Ashri Wan Daud Nur Atikah Mohidem Mardawani Binti Mohamad Javaid Akhtar Mudussar Azam Waheed Miran

Fuel, Volume:317

Impact Factor: 8.035 | Quartile: 1 | Citations: 17

DOI: 10.1016/j.fuel.2022.123433

## Current Production Capability of Drug-Resistant Pathogen Enables Its Rapid Label-Free Detection Applicable to Wastewater-Based Epidemiology

2022

Waheed Miran Xizi Long Wenyuan Huang Akihiro Okamoto Microorganisms, Volume 10(2), Article Number 472 Impact Factor: 4.926 | Quartile: 2 | Citations: 5

### MXene-coated biochar as potential biocathode for improved microbial electrosynthesis system

2021

Khurram Tahir Waheed Miran Jiseon Jang Nagesh Maile Asif Shahzad Mokrema Moztahida Ahsan Abdul Ghani Bolam Kim Hyeji Jeon Dae Sung Lee Science of the Total Environment, Volume 773, Article Number 145677

Impact Factor: 7.14 | Quartile: 1 | Citations: 32

DOI: 10.1016/j.scitotenv.2021.145677

DOI: 10.3390/microorganisms10020472

#### Phosphatidylinositol in Capnocytophaga ochracea

Divya Naradasu Waheed Miran Shurti Sharma Satoshi Takenawa Takamitsu Soma Nobuhiko Nomura Masanori Toyofuku Akihiro Okamoto

Frontiers in Microbiology, Volume 12, Article Number 682685

Impact Factor: 6.064 | Quartile: 1 | Citations: 17

DOI: 10.3389/fmicb.2021.682685

## Enhanced product selectivity in the microbial electrosynthesis of butyrate using a nickel ferrite-coated

2021

biocathode

Khurram Tahir Waheed Miran Jiseon Jang Seung Han Woo Dae Sung Lee

Environmental Research, Volume 196, Article Number 110907

Impact Factor: 8.431 | Quartile: 1 | Citations: 34

DOI: 10.1016/j.envres.2021.110907

### Nickel ferrite/MXene-coated carbon felt anodes for enhanced microbial fuel cell performance

2021

Khurram Tahir Jiseon Jang Nagesh Maile Asif Shahzad Waheed Miran Mokrema Moztahida Ahsan Adul Ghani Bolam Kim Hyeji Jeon Seong-Rin Lim Dae

Sung Lee

Chemosphere , Volume 268, Article Number 128784

Impact Factor: 8.943 | Quartile: 1 | Citations: 61

DOI: 10.1016/j.chemosphere.2020.128784

### Carbamazepine biodegradation and volatile fatty acids production by selectively enriched sulfate-

2021

### reducing bacteria and fermentative acidogenic bacteria

Khurram Tahir Waheed Miran Jiseon Jang Asif Shahzad Mokrema Moztahida Bolam Kim Seong-Rin Lim Dae Sung Lee

Journal of Chemical Technology and Biotechnology, Volume 96, Issue 3, Pages 592-602

Impact Factor: 3.709 | Quartile: 2 | Citations: 9

DOI: 10.1002/jctb.6572

#### MnCo2O4 coated carbon felt anode for enhanced microbial fuel cell performance

2021

Khurram Tahir Waheed Miran Jiseon Jang Nagesh Maile Asif Shahzad Mokrema Moztahida Ahsan Adul Ghani Bolam Kim Dae Sung Lee

Chemosphere , Volume 265, Article Number 129098

Impact Factor: 8.943 | Quartile: 1 | Citations: 53

DOI: 10.1016/j.chemosphere.2020.129098

### Selectively enriched mixed sulfate-reducing bacteria for acrylamide biodegradation

2020

Khurram Tahir Waheed Miran Jiseon Jang Mokrema Moztahida H. Jeon Bolam Kim Seong-Rin Lim Dae Sung Lee A. Shahzad

International Journal of Environmental Science and Technology, Volume 17, Issue 12, Pages 4693-4702

Impact Factor: 2.860 | Quartile: 3 | Citations: 2

**DOI:** 10.1007/s13762-020-02819-5

## Microbial current production from Streptococcus mutans correlates with biofilm metabolic activity

2020

Divya Naradasu Alexis Guionet Waheed Miran Akihiro Okamoto Biosensors and Bioelectronics, Volume 162, Article Number 112236

Impact Factor: 10.618 | Quartile: 1 | Citations: 31 DOI: https://doi.org/10.1016/j.bios.2020.112236

## Mechanism of Anaerobic Microbial Corrosion Suppression by Mild Negative Cathodic Polarization on

2020

**Carbon Steel** 

Marina Shiibashi Xiao Deng Waheed Miran Akihiro Okamoto

Environmental Science and Technology Letters, Volume 7, Issue 9, Pages 690-694

Impact Factor: 7.653 | Quartile: 1 | Citations: 7

DOI: https://dx.doi.org/10.1021/acs.estlett.0c00383

### Metabolic current production by an oral biofilm pathogen corynebacterium matruchotii

2020

Divya Naradasu Waheed Miran Akihiro Okamoto Molecules , Volume 25, Issue 14, Article Number 3141

Impact Factor: 4.412 | Quartile: 2 | Citations: 14

DOI: 10.3390/molecules25143141

## A human pathogen Capnocytophaga ochracea exhibits current producing capability

2020

Shu Zhang Waheed Miran Divya Naradasu Siyi Guo Akihiro Okamoto

Electrochemistry, Volume 88, Issue 3, Pages 224-229
Impact Factor: 1.381 | Quartile: 4 | Citations: 12

DOI: 10.5796/electrochemistry.20-00021

A novel MXene-coated biocathode for enhanced microbial electrosynthesis performance 2020 Khurram Tahir Waheed Miran Jiseon Jang Asif Shahzad Mokrema Moztahida Bolam Kim Dae Sung Lee Chemical Engineering Journal, Volume 381, Article Number 122687 Impact Factor: 13.273 | Quartile: 1 | Citations: 85 DOI: 10.1016/j.cej.2019.122687 Investigating the role of anodic potential in the biodegradation of carbamazepine in bioelectrochemical 2019 systems Khurram Tahir Waheed Miran Mohsin Nawaz Jiseon Jang Asif Shahzad Mokrema Moztahida Bolam Kim Mudussar Azam Sang Eun Jeong Che Ok Jeon Seong-Rin Lim Dae Sung Lee Science of the Total Environment, Volume 688, Pages 56-64 Impact Factor: 6.551 | Quartile: 1 | Citations: 24 DOI: 10.1016/j.scitotenv.2019.06.219 Isolation and characterization of human gut bacteria capable of extracellular electron transport by 2019 electrochemical techniques Divya Naradasu Waheed Miran Mitsuo Sakamoto Akihiro Okamoto Frontiers in Microbiology, Volume 10, Article Number 3267 Impact Factor: 4.236 | Quartile: 1 | Citations: 46 DOI: 10.3389/fmicb.2018.03267 2018 Biosynthesized Iron Sulfide Nanocluster Enhanced Anodic Current Generation by Sulfate Reducing **Bacteria in Microbial Fuel Cells** Muralidharan Murugan Waheed Miran Takuya Masuda Dae S. Lee Akihiro Okamoto ChemElectroChem, Volume 5, Issue 24, Pages 4015-4020 Impact Factor: 3.975 | Quartile: 2 | Citations: 25 DOI: DOI: 10.1002/celc.201801086 Photodegradation of microcystin-LR using graphene-TiO2/sodium alginate aerogels 2018 Mohsin Nawaza Mokrema Moztahidaa Jiho Kima Asif Shahzada Jiseon Janga Waheed Miran Dae Sung Lee Carbohydrate Polymers, Volume 199, Pages 109-118 Impact Factor: 6.044 | Quartile: 1 | Citations: 69 DOI: https://doi.org/10.1016/j.carbpol.2018.07.007 Biodegradation of the sulfonamide antibiotic sulfamethoxazole by sulfamethoxazole acclimatized 2018 cultures in microbial fuel cells Waheed Miran Jiseon Jang Mohsin Nawaz Asif Shahzad Dae Sung Lee Science of the Total Environment, Volume 627, Pages 1058-1065 Impact Factor: 5.589 | Quartile: 1 | Citations: 132 DOI: https://doi.org/10.1016/j.scitotenv.2018.01.326 Sulfate-reducing mixed communities with the ability to generate bioelectricity and degrade textile diazo 2018 dye in microbial fuel cells Waheed Miran Jiseon Jang Mohsin Nawaz Asif Shahzad Dae Sung Lee Journal of Hazardous Materials, Volume 352, Pages 70-79 Impact Factor: 7.650 | Quartile: 1 | Citations: 83 DOI: https://doi.org/10.1016/j.jhazmat.2018.03.027 Amino-functionalized multi-walled carbon nanotubes for removal of cesium from aqueous solution 2018 Jiseon Jang Waheed Miran Dae Sung Lee Journal of Radioanalytical and Nuclear Chemistry, Volume 316, Issue 2, Pages 691-701 Impact Factor: 1.186 | Quartile: 3 | Citations: 13 DOI: https://doi.org/10.1007/s10967-018-5812-6 Mercuric ion capturing by recoverable titanium carbide magnetic nanocomposite 2018 Asif Shahzad Kashif Rasool Waheed Miran Mohsin Nawaz Jiseon Jang Khaled A. Mahmoud Dae Sung Lee Journal of Hazardous Materials, Volume 344, Pages 811-818 Impact Factor: 7.650 | Quartile: 1 | Citations: 202 DOI: https://doi.org/10.1016/j.jhazmat.2017.11.026 2018 Rice straw-based biochar beads for the removal of radioactive strontium from aqueous solution Jiseon Jang Waheed Miran Sewu D. Divine Mohsin Nawaz Asif Shahzada Seung Han Woo Dae Sung Lee Science of the Total Environment, Volume 615, Pages 698-707 Impact Factor: 5.589 | Quartile: 1 | Citations: 108 DOI: https://doi.org/10.1016/j.scitotenv.2017.10.023

| Mixed sulfate-reducing bacteria-enriched microbial fuel cells for the treatment of wastewater containing copper   | 2017 |
|---|------|
| Waheed Miran Jiseon Jang Mohsin Nawaz Asif Shahzad Sang Eun Jeong Che Ok Jeon Dae Sung Lee Chemosphere, Volume 189, Pages 134-142 Impact Factor: 4.427   Quartile: 1   Citations: 104   |      |
| <b>DOI:</b> https://doi.org/10.1016/j.chemosphere.2017.09.048   |      |
| Two-Dimensional Ti3C2Tx MXene Nanosheets for Efficient Copper Removal from Water  Asif Shahzad Kashif Rasool Waheed Miran Mohsin Nawaz Jiseon Jang Khaled A. Mahmoud Dae Sung Lee  ACS Sustainable Chemistry & Engineering, Volume 5, Issue 12, Pages 11481-11488  Impact Factor: 6.140   Quartile: 1   Citations: 422  DOI: 10.1021/acssuschemeng.7b02695                    | 2017 |
| Chlorinated phenol treatment and in situ hydrogen peroxide production in a sulfate-reducing bacteria enriched bioelectrochemical system  Waheed Miran Mohsin Nawaz Jiseon Jang Dae Sung Lee  Water Research, Volume 117, Pages 198-206  | 2017 |
| Impact Factor: 7.051   Quartile: 1   Citations: 66  DOI: http://dx.doi.org/10.1016/j.watres.2017.04.008   |      |
| One-step hydrothermal synthesis of porous 3D reduced graphene oxide/TiO2 aerogel for carbamazepine photodegradation in aqueous solution  Mohsin Nawaz Waheed Miran Jiseon Jang Dae Sung Lee  Applied Catalysis B: Environmental, Volume 203, Pages 85-95  Impact Factor: 11.698   Quartile: 1   Citations: 253  DOI: http://dx.doi.org/10.1016/j.apcatb.2016.10.007           | 2017 |
| Stabilization of Pickering emulsion with surface-modified titanium dioxide for enhanced photocatalytic  | 2017 |
| degradation of Direct Red 80  Mohsin Nawaz Waheed Miran Jiseon Jang Dae Sung Lee  Catalysis Today, Volume 282, Pages 38-47  Impact Factor: 4.667   Quartile: 1   Citations: 33  DOI: http://dx.doi.org/10.1016/j.cattod.2016.02.017   |      |
| Heavy metals removal by EDTA-functionalized chitosan graphene oxide nanocomposites  Asif Shahzad Waheed Miran Kashif Rasool Mohsin Nawaz Jiseon Jang Seong-Rin Lim Dae Sung Lee  RSC Advances, Volume 7, Issue 16, Pages 9764-9771  Impact Factor: 2.936   Quartile: 2   Citations: 191  DOI: 10.1039/c6ra28406j  | 2017 |
| Effect of wastewater containing multi-walled carbon nanotubes on dual-chamber microbial fuel cell   | 2016 |
| performance  Waheed Miran Mohsin Nawaz Jiseon Jang Dae Sung Lee  RSC Advances, Volume 6, Issue 94, Pages 91314-91319  |      |
| Impact Factor: 3.108   Quartile: 2   Citations: 6  DOI: 10.1039/c6ra20128h  |      |
| Simultaneous electricity production and Direct Red 80 degradation using a dual chamber microbial fuel cell  Waheed Miran Kashif Rasool Mohsin Nawaz Avinash Kadam Seolhye Shin Jun Heo Jiseon Jang Dae Sung Lee  Desalination and Water Treatment, Volume 57, Issue 19, Pages 9051-9059  Impact Factor: 1.631   Quartile: 2   Citations: 22                                   | 2016 |
| DOI: 10.1080/19443994.2015.1049410  | 0010 |
| Conversion of orange peel waste biomass to bioelectricity using a mediator-less microbial fuel cell  Waheed Miran Mohsin Nawaz Jiseon Jang Dae Sung Lee  Science of the Total Environment, Volume 547, Pages 197-205  Impact Factor: 4.900   Quartile: 1   Citations: 111  DOI: http://dx.doi.org/10.1016/j.scitotenv.2016.01.004   | 2016 |
| Microbial community structure in a dual chamber microbial fuel cell fed with brewery waste for azo dye degradation and electricity generation  Waheed Miran Mohsin Nawaz Avinash Kadam Seolhye Shin Jun Heo Jiseon Jang Dae Sung Lee Environmental Science and Pollution Research, Volume 22, Issue 17, Pages 13477-13485  Impact Factor: 2.760   Quartile: 2   Citations: 76 | 2015 |

DOI: 10.1007/s11356-015-4582-8

## **Conference Proceedings**

# Wonders of electricity producing bugs 2023 Waheed Miran 2023 International Conference on Energy, Power, Environment, Control, and Computing, res.country(177,) Citations: N/A DOI: Nil **Book Chapters** Drug efficiency monitoring using biofilm/electrode interfacial electron transfer associated with 2023 pathogen metabolisms Divya Naradasu Waheed Miran Luo Dan Sotaro Takano Akihiro Okamoto In: Material-Microbes Interactions: Environmental Biotechnological Perspective, Chapter 15, Pages 369-385 Citations: N/A **DOI:** 10.1016/B978-0-323-95124-1.00010-3 **Antibacterial Properties of Two-Dimensional Nanomaterials** 2023 Elishba Noor Usman Liagat Wagas Qamar Zaman Sabir Hussain Asif Shahzad Kashif Rasool Zaeem Bin Babar Waheed Miran In: Book on Two-Dimensional Materials for Environmental Applications, 1st Edition, Chapter 5, Pages 137-160 Citations: 3 DOI: 10.1007/978-3-031-28756-5\_5 2022 Biowaste Materials for Advanced Biodegradable Packaging Technology Mohammed Y. Emran Waheed Miran Hassanien Gomaa Islam Ibrahim George V. Belessiotis Adel A. Abdelwahab Mahmoud Ben Othman In: Handbook of Biodegradable Materials, Chapter 1, Pages 1-37 Citations: N/A DOI: 10.1007/978-3-030-83783-9\_46-1 **Design and Configuration of Microbial Fuel Cells** 2022 Tooba Tougeer Waheed Miran Muhammad Waseem Mumtaz Hamid Mukhtar In: Book on Microbial Fuel Cells for Environmental Remediation, 1st Edition, Chapter 3, Pages 25-39 Citations: N/A DOI: 10.1007/978-981-19-2681-5\_3 **Bioelectrochemical Systems: Principles and Applications** 2021 Divya Naradasu Xizi Long Akihiro Okamoto Waheed Miran In: Book on Bioelectrochemical Systems: Vol.1 Principles and Processes, Chapter 1, Pages1-33 Citations: 7

DOI: 10.1007/978-981-15-6872-5\_1

### Electrochemical techniques and applications to characterize single- and multicellular electric microbial **functions**

2019

Junki Saito Muralidharan Murugan Xiao Deng Alexis Guionet Waheed Miran Akihiro Okamoto

In: Book on Bioelectrochemical Interface Engineering, Chapter 3, Pages 37-53

Citations: 4

DOI: 10.1002/9781119611103.ch3

## **Editorial Activities**

| N/A   | 2024 |
|---|------|
| Edited Journal Issue / Proceeding / Book  |      |
| Impact Factor: N/A  |      |
| Microorganisms  | 2023 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 4.926  |      |
| Microorganisms  | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 4.926  |      |
| Minerals  | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 2.818  |      |
| Chemical Engineering Journal  | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 15.1   |      |
| Chemosphere   | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 3.889  |      |
| Sustainability  | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 3.889  |      |
| Applied Surface Science   | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 7.392  |      |
| Catalysts   | 2022 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 4.501  |      |
| Chemical Engineering Journal  | 2021 |
| Reviewed Papers for Journals  |      |
| Impact Factor: 16.777   |      |
| Intellectual Property   |      |
| Copyrights  |      |
| Patents   |      |
| Composition and Method of Manufacturing of Biodegradable Packaging from Sawdust and Corn Starch Status: Filed | 2024 |
| Industrial Designs  |      |
| POTENTIOSTAT  | 2023 |
| Status: Filed   | 2020 |
| Trademarks  |      |