

## **Research Centre with a specific focus on environmental sustainability**

### **At Air University**

#### **Driving Innovations through Research: Air University Business Incubation Centre**

**Introduction:** The Air University Business Incubation Centre for Research is a cutting-edge initiative designed to propel groundbreaking research projects, foster innovation, and drive technological advancements. Located within the esteemed Air University, our incubation centre brings together top-notch researchers, visionary minds, and industry experts to collaborate on transformative projects that have a positive impact on society and industry.

**Our Mission:** At the Air University Business Incubation Centre for Research, our mission is to create an ecosystem that encourages interdisciplinary research, supports aspiring researchers, and facilitates the commercialization of innovative technologies. We aim to bridge the gap between academia and industry, driving research-driven solutions that address real-world challenges.

#### **Why Choose Us?**

**Interdisciplinary Collaboration:** Our incubation centre promotes cross-disciplinary collaboration, allowing researchers from diverse fields to come together and leverage their expertise to tackle complex problems.

**Research-Driven Innovation:** We focus on nurturing research ideas that have the potential to bring disruptive innovations to the market, creating a culture of research-driven entrepreneurship.

**Access to State-of-the-Art Facilities:** Our incubation centre provides access to advanced research facilities, laboratories, and resources that support researchers in conducting cutting-edge experiments and studies.

**Mentorship from Leading Researchers:** Benefit from mentorship and guidance from accomplished researchers and industry leaders who can offer valuable insights and direction.

**Industry Partnerships:** Forge strategic partnerships with industry players, allowing researchers to gain practical insights and explore opportunities for technology commercialization.

**Funding Support:** Eligible research projects can access funding opportunities through grants, partnerships, and collaboration with industry sponsors.

#### **Our Services:**

**Research Incubation Programs:** Our incubation programs support researchers at various stages of their projects, offering guidance, resources, and networking opportunities to take their research to the next level.

**Technology Commercialization Support:** We assist researchers in commercializing their research outcomes, providing guidance on intellectual property, licensing, and market validation.

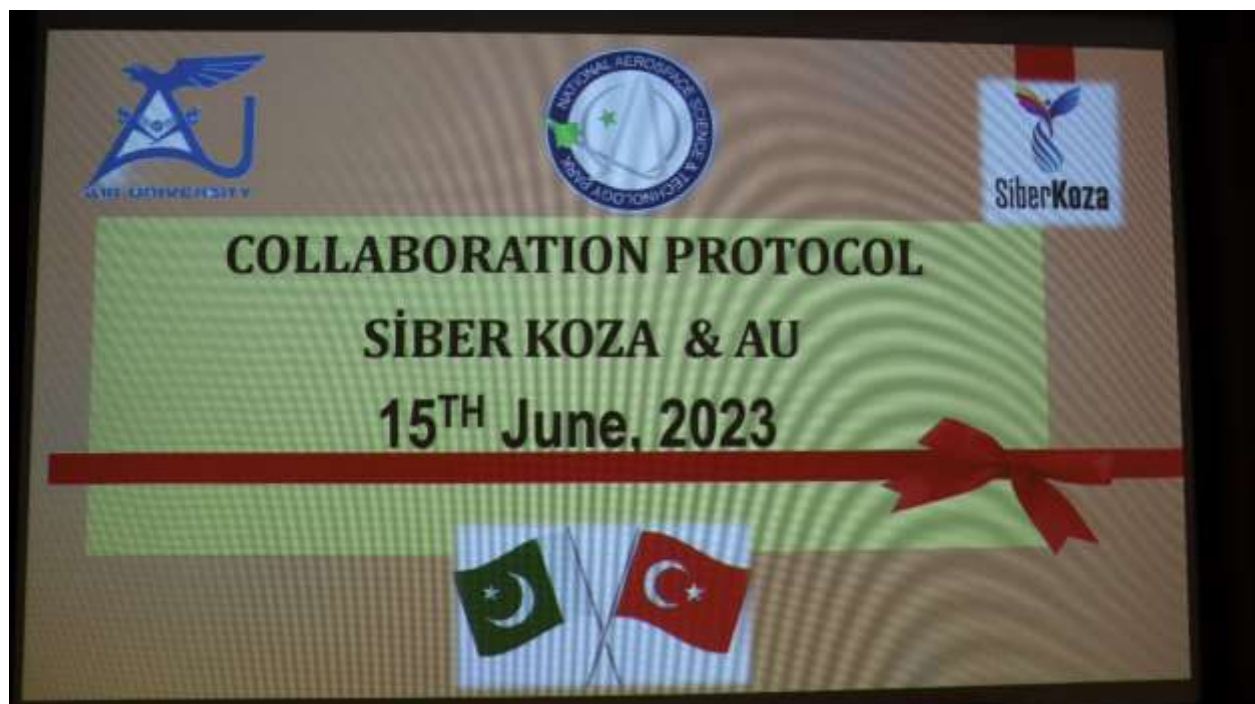
**Entrepreneurship Workshops:** Enhance your research with entrepreneurial skills through specialized workshops, training sessions, and seminars conducted by experienced entrepreneurs.

**Industry Connect:** Engage with industry experts and potential collaborators through networking events, conferences, and symposiums held at the incubation centre.

**Publication and Dissemination Support:** Facilitate the publication and dissemination of research findings in reputed journals, conferences, and industry platforms.

### **Siber koza**

- By establishing instructive and useful surroundings, Siber Koza has implemented the Siber Koza Innovation Centres project to help young people develop ideas for projects that can result in solutions to global concerns.
- Siber Koza and Air University Islamabad have partnered to improve the training of key participants and the research process for sustainable projects. The platforms will give younger generation's access to Turkey's and Pakistan's ecological system. In innovation centres, both university students and volunteers are welcome to participate in and work on the assigned projects.





## **Air University Research Journals**

### **AU ORIC**

AU Office of Research, Innovation & Commercialization (ORIC) was established at Air University, Islamabad in January 2011 and were registered in August 2013.

Air University aspires to be among the leading national universities, excelling in teaching, learning, research, innovation and public service", AUORIC is striving to bridge the gap amongst AU research groups, HEC and other research funding organizations at national and international level.

### **Invest in Knowledge with Research**

Different platforms of the Journals have been introduced by Air University to enable the various departments to conduct quality research within their respective specialties.







## **Setting Trends through Research**

In order to facilitate our students and faculty in hunting for the best research grant opportunities particular to their expertise, here is a comprehensive list categorized separately under the heads of National and International opportunities for your convenience.

### **National Research Opportunities**

- [National Research Programme for Universities \(HEC-NRPU\)](#)
- [Technology Development Fund\(HEC-TDF\)](#)
- [Grand Challenge Fund \(HEC\)](#)
- [Local Challenge Fund \(HEC\)](#)
- [Start-Up Research Grant Program \(HECSRGP\)](#)
- [Social Integration Outreach Program\(HEC-SIOP\)National Engineering And Scientific Commission \(NESCOM\)](#)

### **International Research Opportunities**

- [United Nation's Global Climate Action Award](#)
- [Fonds Eepest Solvay](#)
- [British Council Free Online Courses 2020](#)
- [Indigenous PH.D. Fellowship Program](#)
- [U.S. Department of Agriculture](#)
- [U.S. Department of State](#)
- [Common Fund for Commodities \(CFC\)](#)
- [National Geographic Society and Microsoft's AI for Earth program](#)
- [Cipher Grant Programme](#)
- [AHRC Global Challenges Research Fund \(GCRF\) Urgency Grants Pilot](#)

- Emerald Interdisciplinary Research Fund

### **Accelerate Growth through Research**

Our funding agencies such as HEC-TDF, HEC-NRPU, HEC-SRGP, PAF, PAC Kamra, NESCOM, IGNITE, International (UNICEF), US Embassy, USDA, NSF, US Science Foundation, UK,CANADA Embassies and more

### **Unlock Your Mind through Research**

#### **Computer Labs**

- Local Area Network (LAN)
- Internet Facility
- Hotspots
- Language Laboratory

#### **Research Labs**

- Sensors & Systems Laboratory
- Analog and Digital Communication Laboratory
- Avionics Integration Laboratory
- Communication Security and Embedded Systems Laboratory
- CNC Machine and Robotics Laboratory
- Control Engineering Laboratory
- Digital Electronics Laboratory
- Digital Signal Processing Laboratory
- ECM and RADAR Laboratory
- Electro-optics Laboratory
- Electronics Systems Laboratory
- Embedded Systems Laboratory
- Fluid Mechanics Laboratory
- Heat and Mass Transfer Laboratory
- Industrial Automation Laboratory
- Lego Mindstorms – Advanced Mechatronics Laboratory
- Machine Design Laboratory
- Mechanics of Material Laboratory
- Mechanical Workshop
- Power Electronics and Electrical Machines Laboratory
- RF and Optical Communication Laboratory
- Thermodynamics Laboratory

- The image displays four project posters from Air University, highlighting sustainable research projects. The posters are arranged in a 2x2 grid. Each poster includes a title, a project director's photo and name, a project catalogue with various icons and statistics, and a brief description of the project's goals and achievements.

  - Top Left Poster:** Titled "Cleanly: AI-driven Battery-less Management Using Solar Energy". It features a project director's photo and a catalogue with icons for solar energy, AI, and sustainable management. The text describes the project's focus on developing a sustainable management system for solar energy using AI.
  - Top Right Poster:** Titled "AI Based Design and Development of Tandem Wing Unmanned Aerial Vehicle (UAV) for Disaster Management Applications". It features a project director's photo and a catalogue with icons for AI, UAV, and disaster management. The text describes the project's focus on developing a tandem wing UAV for disaster management applications.
  - Bottom Left Poster:** Titled "AI Based Design and Development of Tandem Wing Unmanned Aerial Vehicle (UAV) for Disaster Management Applications". It features a project director's photo and a catalogue with icons for AI, UAV, and disaster management. The text describes the project's focus on developing a tandem wing UAV for disaster management applications.
  - Bottom Right Poster:** Titled "AI Based Design and Development of Tandem Wing Unmanned Aerial Vehicle (UAV) for Disaster Management Applications". It features a project director's photo and a catalogue with icons for AI, UAV, and disaster management. The text describes the project's focus on developing a tandem wing UAV for disaster management applications.

**Description:**

(Please describe total of sustainability research fund. The following is an example of the description. You can describe more related items if needed.)



Total research fund dedicated to sustainability research in **2023** = **2,831,963 US Dollars**

Total research fund dedicated to sustainability research in **2024** = **897,074 US Dollars**

Total research fund dedicated to sustainability research in **2025** = **2,554,639 US Dollars**

The averaged annum **last 3 years** of research fund dedicated to sustainability research = **2,094,559 US Dollars**

### **Research publications, patents, innovations, or funded research related to sustainability and climate action**

Air University Multan Campus demonstrates a strong research commitment to sustainability and climate action through the diverse scholarly contributions of its faculty members. These research publications reflect an interdisciplinary approach, addressing critical global challenges such as environmental governance, climate change, sustainable finance, and social well-being. Faculty research actively explores the relationship between governance structures and environmental performance, the role of sustainability reporting, and the integration of climate-conscious policies at both national and institutional levels. This body of work significantly contributes to advancing knowledge aligned with global sustainability frameworks and policy development.

A major strength of the university's research lies in its focus on green innovation and sustainable business practices. Studies on green finance, artificial intelligence-driven green product innovation, and the adoption of green technologies in small and medium enterprises (SMEs) highlight the institution's engagement with emerging sustainability trends. Additionally, research on circular economy practices, blockchain-enabled sustainability strategies, and financial development in relation to climate finance demonstrates a forward-looking perspective that integrates technology with environmental responsibility. These contributions not only support economic growth but also promote environmentally responsible industrial development.

Furthermore, faculty research emphasizes the human and social dimensions of sustainability. Investigations into green human resource management (HRM), pro-

environmental behavior, workplace well-being, and healthcare accessibility address key societal challenges. Research on financial inclusion, employee welfare, and customer value co-creation further reinforces the university's dedication to inclusive and equitable development. Collectively, these publications align with multiple Sustainable Development Goals (SDGs), including SDGs 3, 8, 9, 10, 12, 13, 16, and 17, showcasing Air University Multan Campus as a hub of impactful, sustainability-driven research contributing to both local and global development agendas.

The following are the research publications published by our faculty members, also attached with their respective SDGs.

- Naz, S., Ditta, A., Ramzan, M., & Abbas, M. (2024). Governance and sustainable development: The role of environmental performance at the country level. **(SDG 13, SDG 16, SDG 17)**
- Shahzad, M., Abbas, M., & Quddoos, M. U. (2024). Economic, social, and administrative barriers to achieving SDG of good health and wellbeing. **(SDG 3, SDG 10, SDG 16)**
- Anjum, W., Ghufuran, B., & Abbas, M. (2024). Ecological footprint: a bibliometric analysis. **(SDG 12, SDG 13, SDG 15)**
- Abbas, M., & Sabah, S. U. (2024). Role of Green Finance in banking sector of Pakistan. **(SDG 8, SDG 9, SDG 13)**
- Ishaque, S., & Ansari, N. Y. (2025). Green HRM and pro-environmental behavior in hospitality employees. **(SDG 8, SDG 12, SDG 13)**
- Ishaque, S., Akmal, M., Masood, S., & Ansari, N. Y. (2025). Green HRM, creativity, and environmental citizenship behavior. **(SDG 8, SDG 12, SDG 13)**
- Khan, S. A. R., Ahmad, Z., Sheikh, A. A., & Yu, Z. (2024). Green technology adoption in SMEs and circular economy. **(SDG 9, SDG 12, SDG 13)**
- Jamil, K., Ahmad, Z., & Sheikh, A. A. (2025). Green strategies and blockchain technology in SME sustainability. **(SDG 9, SDG 12, SDG 13, SDG 17)**

- Sheikh, A. A., Hameed, A., Khan, S. A. R., & Ahmad, Z. (2025). Green consumer behavior and sustainability. **(SDG 12, SDG 13)**
- Mahmood, G., Ditta, A., Ramzan, M., & Abbas, Z. (2024). AI adoption and green product innovation for sustainable business performance. **(SDG 9, SDG 12, SDG 13)**
- Ahmad, S., Masood, A., Syed, A., & Abbas, Z. (2024). Customer value co-creation in banking sector. **(SDG 8, SDG 9, SDG 16)**
- Alsayegh, M. F., Ditta, A., Mahmood, Z., & Kouser, R. (2023). Sustainability reporting and governance for SDGs. **(SDG 12, SDG 13, SDG 16, SDG 17)**
- Younus, S. Y., Ditta, A., & Ramzan, M. (2025). Blockchain technology and corporate governance for sustainability. **(SDG 9, SDG 16, SDG 17)**
- Sajid, M., Ramzan, M., & Ditta, A. (2025). Fintech use and well-being. **(SDG 3, SDG 8, SDG 9)**
- Khan, M., Ismail, H., Ditta, A., & Tufail, M. S. (2025). Workplace well-being, spirituality, and empathy. **(SDG 3, SDG 8, SDG 16)**
- Hussain, K., Naeem, M., Ditta, A., et al. (2024). Financial development and climate finance nexus. **(SDG 8, SDG 13, SDG 17)**

#### **LIST OF PUBLICATIONS (DEPARTMENT OF PSYCHOLOGY )**

This document carries a List of Researches performed by the students of BS Psychology, supervised by Faculty of Psychology department FCOE(W), and are published in different HEC recognized journals. The following researches are aligned with different SDGs.

1. *“Exploring the relationship between psychopathy and criminal thinking among undergraduate students in Peshawar, with the mediating role of impulsivity”* the research topic falls under **SDG 16**: Peace, Justice and Strong Institutions, as it addresses psychological determinants of criminal behavior and contributes to violence prevention and societal peace.
2. *“Spiritual wellbeing and social support in predicting suicidal ideation among adolescents in Peshawar”* This research aligns strongly with **SDG 3**: Good Health and Well-being, particularly Target 3.4, as it focuses on understanding and preventing suicidal ideation among adolescents through psychological and social protective factors.
3. *“Correlational study on Emotional Intelligence and Academic Achievement among adolescent girls in Peshawar”* This research aligns primarily with **SDG 4**: Quality

Education, as it explores factors influencing academic achievement, and also contributes to **SDG 5: Gender Equality** by focusing on adolescent girls' educational outcomes.

4. *“Exploring the Link between Body Image Perception and Self-Esteem”* This research aligns primarily with **SDG 3: Good Health and Well-being**, as it focuses on psychological well-being, and also contributes to **SDG 5 (Gender Equality)** and **SDG 10 (Reduced Inequalities)** by addressing social and cultural influences on body image and self-esteem.
5. *“Self-Esteem and Psychopathic Traits among Undergraduate Students: A Structural Equation Modeling Approach”* This research primarily aligns with **SDG 3: Good Health and Well-being**, as it focuses on psychological functioning and personality traits, and also contributes to **SDG 16: Peace, Justice and Strong Institutions** by addressing factors related to antisocial behavior.
6. *“The Role of Dogmatism in the Development of Violent Extremism”* This research strongly aligns with **SDG 16: Peace, Justice and Strong Institutions**, as it addresses the psychological causes of violent extremism, and also contributes to **SDG 4** and **SDG 10** by promoting education, tolerance, and social inclusion.
7. *“Psychopathic tendencies and suicidal ideation: Gender-based analysis”* This research primarily aligns with **SDG 3: Good Health and Well-being**, particularly Target 3.4, and also contributes to **SDG 5: Gender Equality** by examining gender differences in psychological risk factors.

#### FCOEW RESEARCH RECORD

#### DEPARTMENT OF ENGLISH

|   | Title                                                                                   | Authors                                              | Journal / Publisher                                                  | Year | Citations | s |
|---|-----------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------|------|-----------|---|
| 1 | Language and Emotion: A Study of Emotional Expression in Multilinguals                  | N Fatima, HM Afzaal, Z Hussain, MKM Sajid            | Journal of Applied Linguistics and TESOL (JALT)                      | 2024 | 13        |   |
| 2 | The Role of Feedback in Enhancing Creative Writing Skills in ELT Contexts               | N Fatima, M Ehsan, MA Darazi, A Majeed, AA Chaudhary | Remittances Review                                                   | 2024 | 12        |   |
| 3 | Formulaic Language in High-Stake Research Writing                                       | N Fatima, S Ahmad                                    | Research Journal in Translation, Literature, Linguistics & Education | 2025 | 6         |   |
| 4 | Role of Communicative Language Teaching Approaches in Strengthening ESL Speaking Skills | N Fatima, Sobia, M Azeem                             | Migration Letters                                                    | 2024 | 6         |   |
| 5 | Systemic Functional Interpretation of Transitivity Templates in News Reports            | N Fatima, FA Hashmi, ZHS Hashmi                      | NUML Journal of Critical Inquiry                                     | 2018 | 6         |   |

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|----|-------------------------------------------------------------------------|---------------------------------------|-------------------------------------------------------------|------|---|--|
|    |                                                                         |                                       |                                                             |      |   |  |
| 6  | Visual Semiotics in Digital Communication: Memes and Emojis             | N Fatima, SJ Ejaz, G Miran            | Liberal Journal of Language & Literature Review             | 2024 | 5 |  |
| 7  | Faculty Perspectives on Online Learning Resources in Academic Libraries | N Fatima, MM Ilyas, Maryam            | Pakistan Journal of Law, Analysis and Wisdom                | 2024 | 5 |  |
| 8  | Discussion Teaching Technique in Improving ESL Speaking Skills          | N Fatima, Z Farah, U Ikram            | Jahan-e-Tahqeeq                                             | 2023 | 5 |  |
| 9  | AI-Powered Language Translation and Human Communication                 | N Andleeb, N Fatima, A Ali et al.     | Testing, Psychometrics, Methodology in Applied Psychology   | 2025 | 4 |  |
| 10 | Attention Modulation in Reading                                         | A Sultan, N Fatima                    | ResearchGate                                                | 2025 | 3 |  |
| 11 | English Language Needs Analysis in Freelancing Domain                   | N Fatima, H Faraz, N Riaz             | Kurdish Studies                                             | 2024 | 3 |  |
| 12 | Politics of Channels and Geography in Diplomatic Discourse              | N Fatima, J Sahrish, M Sobia          | Migration Letters                                           | 2024 | 3 |  |
| 13 | Impact of Teachers' Partiality on Undergraduate Learning                | N Fatima, G Miran                     | Journal of Business and Social Review in Emerging Economies | 2023 | 3 |  |
| 14 | Technology Integration and Learning Outcomes                            | N Fatima, AH Tarar, A Shahid, K Lodhi | Policy Research Journal                                     | 2025 | 2 |  |
| 15 | Project-Based Learning and Student Creativity                           | N Fatima, S Khan, G Miran et al.      | Contemporary Journal of Social Science Review               | 2025 | 2 |  |
| 16 | Critical Discourse Analysis of Print Media Language                     | N Fatima, M Rahman, G Miran           | Policy Research Journal                                     | 2025 | 2 |  |
| 17 | Writing Activities in Pakistani ESL Context                             | MA Gul, N Fatima, H Faraz             | Kurdish Studies                                             | 2024 | 2 |  |
| 18 | Motivation Towards Second Language Learning                             | N Fatima, A Aamer, N Riaz             | Remittances Review                                          | 2024 | 2 |  |
| 19 | Process Types in News Coverage of Crimes Against Women                  | N Fatima                              | Pakistan Journal of Society, Education and Language         | 2023 | 2 |  |
| 20 | Emotional Intelligence, Well-Being and Academic Achievement             | N Fatima et al.                       | Testing, Psychometrics, Methodology in Applied Psychology   | 2025 | 1 |  |
|    |                                                                         |                                       |                                                             |      |   |  |

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|----|-----------------------------------------------------------------|--------------------------------------|--------------------------------------------------------|------|---|--|
|    |                                                                 |                                      |                                                        |      |   |  |
| 21 | Socio-Pragmatic Effects of Code Switching and Code Mixing       | AS Durrani, A Mushtaq, N Fatima      | Contemporary Journal of Social Science Review          | 2025 | 1 |  |
| 22 | ESL Game-Based Learning in Pakistani Primary Schools            | I Ranjhani, N Fatima, F Rashid       | Journal of Applied Linguistics and TESOL               | 2024 | 1 |  |
| 23 | Source Language Activation in Cross-Linguistic Context          | F Ahmed, E Maharvi, N Fatima, R Khan | Migration Letters                                      | 2024 | 1 |  |
| 24 | Enhancing Listening Skills in Pakistani ESL Classrooms          | N Riaz, N Fatima, A Aamer            | Kurdish Studies                                        | 2024 | 1 |  |
| 25 | Use of AI in Social Sciences Research                           | A Shahid, N Fatima                   | —                                                      | 2024 | 1 |  |
| 26 | Translanguaging in Teaching Grammar                             | N Fatima, G Miran                    | Sustainable Business and Society in Emerging Economies | 2023 | 1 |  |
| 27 | Teacher Agency and Curriculum Adaptation in High-stakes Testing | Z Iqbal, N Fatima et al.             | Liberal Journal of Language & Literature Review        | 2026 | — |  |
| 28 | Digital Literacy, Cognitive Growth and Language Acquisition     | N Fatima, Z Fatima, Z Saleem         | Journal of Applied Linguistics and TESOL               | 2025 | — |  |
| 29 | Challenges in Lab-based Language Education                      | M Ramzan, ZK Javaid, N Fatima        | Educational Research and Innovation                    | 2025 | — |  |
| 30 | Impact of Voice Assistants on Human-Computer Interaction        | U Paracha, N Fatima, A Ikram         | Spectrum of Engineering Sciences                       | 2025 | — |  |
| 31 | AI-Driven Approaches to English Language Learning               | N Fatima, R Siddique, S Suleman      | Pakistan Journal of Social Studies Review              | 2025 | — |  |
| 32 | Transformative Pedagogies in Higher Education (Book)            | N Fatima                             | Lumina Literati Publishing                             | 2025 | — |  |
| 33 | Integrating Formal and Cognitive Approaches to Language         | N Fatima                             | Lumina Literati Publishing                             | 2025 | — |  |
| 34 | Transfer Learning in NLP Tasks                                  | N Fatima et al.                      | Spectrum of Engineering Sciences                       | 2025 | — |  |
| 35 | AI Chatbots for English Speaking Skills                         | N Fatima, A Firdaus, Z Saleem        | Policy Journal of Social Science Review                | 2025 | — |  |
|    |                                                                 |                                      |                                                        |      |   |  |



| 36 | Generational Differences in EdTech Adoption                      | N Fatima et al.              | Lex Localis – Journal of Local Self Government                  | 2025 | — |
|----|------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------|------|---|
| 37 | Accelerating Second Language Learning through AI                 | N Fatima, H Faraz            | Liberal Journal of Language & Literature Review                 | 2025 | — |
| 38 | Attention Modulation in Reading (Extended Study)                 | A Sultan, N Fatima           | —                                                               | 2025 | — |
| 39 | Technology in Teacher-Student Communication                      | N Fatima, H Faraz, Amna      | Journal of Applied Linguistics and TESOL                        | 2024 | — |
| 40 | Language, Power and Play: CDA of Judy Blume                      | N Fatima                     | Journal of Applied Linguistics and TESOL                        | 2024 | — |
| 41 | Symbolic Power and Male Supremacy: CDA of <i>The Stone Woman</i> | Z Fatima, M Fatima, N Fatima | International Journal of Contemporary Issues in Social Sciences | 2024 | — |
| 42 | CDA of Imran Khan's Speeches                                     | N Fatima et al.              | International Journal of Human and Society                      | 2024 | — |
| 43 | Turn-Taking Strategies in <i>The Ellen DeGeneres Show</i>        | N Fatima, A Waheed, N Riaz   | Migration Letters                                               | 2024 | — |
| 44 | Intercultural Study of Compliments                               | A Waheed, N Fatima           | Bulletin of Multidisciplinary Studies                           | 2024 | — |
| 45 | CDA of Pakistani Diplomatic Cypher                               | S Bukhari, N Fatima et al.   | Harf-o-Sukhan                                                   | 2024 | — |
| 46 | Language Variations in News Reports of Crime against Women       | N Fatima                     | International SFL Conference                                    | 2023 | — |
| 47 | Climate Change Communication in Scientific vs Popular Media      | N Fatima                     | International SFL Conference                                    | 2023 | — |
| 48 | Translanguaging Pedagogy in Pakistani Classrooms                 | N Fatima                     | International Education and Innovative Sciences Congress        | 2023 | — |
| 49 | Systemic Functional Interpretation of Transitivity Templates     | N Fatima                     | National University of Modern Languages                         | 2022 | — |
| #  | Title                                                            | Authors                      | Journal / Conference                                            | Year |   |

| 1 | A Comparative-Lexical Analysis of Kinship Terminologies in Urdu and English                                                  | Aiman Atta, Zainab Siddique, Tabassum Solehria       | Journal of Asian Development Studies                                                    | 2026 |           |
|---|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------|------|-----------|
| 2 | Language of Corona Virus Pandemic: A Corpus-Based Analysis of Online Newspaper Articles                                      | Laiba Parveen, Zainab Siddique                       | Qlantic Journal of Social Sciences and Humanities                                       | 2026 |           |
| 3 | Influence of the Audience on a Speaker's Speech Style: A Joosian Analysis                                                    | Zainab Haroon, Zainab Siddique                       | —                                                                                       | 2023 |           |
| 4 | Sadness and Joy in <i>Inside Out</i> : A Multimodal Analysis                                                                 | Fatima Siddique, Ubaidullah A. Qazi, Zainab Siddique | —                                                                                       | 2022 |           |
| 5 | Movies are Speech-acts                                                                                                       | Zainab Siddique, Muhammad Uzair                      | —                                                                                       | 2018 |           |
| 6 | A Searlean Analysis of Film-Acts for Meaning                                                                                 | Zainab Siddique                                      | 7th International Conference on Intercultural Pragmatics and Communication (INPRA 2016) | 2016 |           |
| 7 | The Pragmatics of Abuse in and through <i>Bashar Momin</i>                                                                   | Zainab Siddique                                      | ICLAP 2016                                                                              | 2016 |           |
| 8 | Intentionality and Film-Acts: A Searlean Analysis                                                                            | Zainab Siddique                                      | New Developments in Linguistic Pragmatics (NDLP 2015)                                   | 2015 |           |
| # | Title                                                                                                                        | Authors                                              | Journal / Publisher                                                                     | Year | Citations |
| 1 | A Madwoman or Crippled by Society? A Study of Disability and Depression in Plath's Poems                                     | M Sher, H Riaz                                       | Pakistan Journal of Society, Education and Language (PJSEL)                             | 2024 | 4         |
| 2 | Diasporic Consciousness: Family, History, Identity, and Language in Selected Poems by Sujata Bhatt                           | S Nazeer, M Sher                                     | City University Research Journal of Literature and Linguistics                          | 2021 | 3         |
| 3 | Linguistic Sexism in 'Rishta Culture' of Peshawar: A Feminist Stylistic Analysis of Matrimonial Advertisements in Newspapers | M Sher, A Saleem                                     | Journal of Academic Research for Humanities                                             | 2023 | 2         |

|   |                                                                                                                            |                                              |                                                                |      |   |
|---|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------|------|---|
|   |                                                                                                                            |                                              |                                                                |      |   |
| 4 | Confessions in the Investigative Interviews: A Forensic Linguistic Analysis of Robert Bryndza’s <i>The Girl in the Ice</i> | M Sher, A Saleem                             | Journal of Applied Linguistics and TESOL (JALT)                | 2024 | 1 |
| 5 | How Reality Is Construed in Legal Judgments: An SFL Analysis of a Pakistani Appellate Decision on Sexual Assault           | M Sher, A Saleem                             | International Premier Journal of Languages & Literature        | 2026 | — |
| 6 | Female Agency and Communality: A Social Role Study of Hussain’s <i>Rubies for a Dog: A Fable</i>                           | Huma, M Sher                                 | Pakistan Languages and Humanities Review                       | 2025 | — |
| 7 | Depersonalization of Power: A Lexicogrammatical Analysis of a Legal Text                                                   | A Saleem, M Sher                             | Pakistan Languages and Humanities Review (PLHR)                | 2024 | — |
| 8 | Quest for Survival: A ‘New Racism’ Perspective of Studying Immigrant Experience in Adams’s <i>Harbor</i>                   | M Sher, H Riaz                               | Pakistan Journal of Society, Education and Language (PJSEL)    | 2023 | — |
| 9 | Structuralist Perspective on Chopin’s <i>The Story of an Hour</i> : Transformations of Eighteenth-Century American Women   | M Sher                                       | City University Research Journal of Literature and Linguistics | 2019 | — |
|   |                                                                                                                            |                                              |                                                                |      |   |
| # | Title                                                                                                                      | Authors                                      | Journal                                                        | Year |   |
| 1 | The Illusion of Consent: Hegemony and Resistance in Ama Ata Aidoo’s <i>Our Sister Killjoy</i>                              | Syeda Aliya Shah, Rabia Tariq                | Pakistan Languages and Humanities Review                       | 2025 |   |
| 2 | An Eco-Critical Analysis into William Wordsworth’s <i>Lines Written a Few Miles Above Tintern Abbey</i>                    | Rabia Tariq                                  | Policy Journal of Social Science Review                        | 2025 |   |
| 1 | Emerging Identities: An Application of ISA to Breaking it Up by Bapsi Sidhwa                                               | Farzeen Ghazal , Tabassum Naz and Faiza khan | Pakistan Languages and Humanities Review                       | 2026 |   |
|   |                                                                                                                            |                                              |                                                                |      |   |

## LINKING OF THE RESEARCH PAPERS WITH SDGs

1. Language and Emotion: A Study of Emotional Expression in Multilinguals — **SDG 4 (Quality Education), SDG 3 (Good Health & Well-being)**
2. The Role of Feedback in Enhancing Creative Writing Skills in ELT Contexts — **SDG 4 (Quality Education)**
3. Formulaic Language in High-Stake Research Writing — **SDG 4 (Quality Education), SDG 17 (Partnerships for the Goals)**
4. Role of Communicative Language Teaching Approaches in Strengthening ESL Speaking Skills — **SDG 4 (Quality Education)**
5. Systemic Functional Interpretation of Transitivity Templates in News Reports — **SDG 16 (Peace, Justice & Strong Institutions), SDG 17 (Partnerships)**
6. Visual Semiotics in Digital Communication: Memes and Emojis — **SDG 17 (Partnerships), SDG 9 (Industry, Innovation & Infrastructure)**
7. Faculty Perspectives on Online Learning Resources in Academic Libraries — **SDG 4 (Quality Education), SDG 9 (Innovation)**
8. Discussion Teaching Technique in Improving ESL Speaking Skills — **SDG 4 (Quality Education)**
9. AI-Powered Language Translation and Human Communication — **SDG 9 (Industry, Innovation & Infrastructure)**
10. Attention Modulation in Reading — **SDG 4 (Quality Education)**
11. English Language Needs Analysis in Freelancing Domain — **SDG 8 (Decent Work & Economic Growth)**
12. Politics of Channels and Geography in Diplomatic Discourse — **SDG 16 (Peace, Justice & Strong Institutions)**
13. Impact of Teachers' Partiality on Undergraduate Learning — **SDG 4 (Quality Education), SDG 10 (Reduced Inequalities)**
14. Technology Integration and Learning Outcomes — **SDG 4 (Quality Education), SDG 9 (Innovation)**
15. Project-Based Learning and Student Creativity — **SDG 4 (Quality Education)**
16. Critical Discourse Analysis of Print Media Language — **SDG 16 (Peace, Justice & Strong Institutions)**
17. Writing Activities in Pakistani ESL Context — **SDG 4 (Quality Education)**
18. Motivation Towards Second Language Learning — **SDG 4 (Quality Education)**

19. Process Types in News Coverage of Crimes Against Women — **SDG 5 (Gender Equality), SDG 16 (Strong Institutions)**
20. Emotional Intelligence, Well-Being and Academic Achievement — **SDG 3 (Good Health & Well-being), SDG 4 (Quality Education)**
21. Socio-Pragmatic Effects of Code Switching and Code Mixing — **SDG 10 (Reduced Inequalities), SDG 4 (Quality Education)**
22. ESL Game-Based Learning in Pakistani Primary Schools — **SDG 4 (Quality Education), SDG 9 (Innovation)**
23. Source Language Activation in Cross-Linguistic Context — **SDG 10 (Reduced Inequalities), SDG 4 (Quality Education)**
24. Enhancing Listening Skills in Pakistani ESL Classrooms — **SDG 4 (Quality Education)**
25. Use of AI in Social Sciences Research — **SDG 9 (Industry, Innovation & Infrastructure)**
26. Translanguaging in Teaching Grammar — **SDG 4 (Quality Education), SDG 10 (Reduced Inequalities)**
27. Teacher Agency and Curriculum Adaptation in High-stakes Testing — **SDG 4 (Quality Education)**
28. Digital Literacy, Cognitive Growth and Language Acquisition — **SDG 4 (Quality Education), SDG 9 (Innovation)**
29. Challenges in Lab-based Language Education — **SDG 4 (Quality Education)**
30. Impact of Voice Assistants on Human-Computer Interaction — **SDG 9 (Industry, Innovation & Infrastructure)**
31. AI-Driven Approaches to English Language Learning — **SDG 4 (Quality Education), SDG 9 (Innovation)**
32. Transformative Pedagogies in Higher Education — **SDG 4 (Quality Education)**
33. Integrating Formal and Cognitive Approaches to Language — **SDG 4 (Quality Education), SDG 10 (Reduced Inequalities)**
34. Transfer Learning in NLP Tasks — **SDG 9 (Industry, Innovation & Infrastructure)**
35. AI Chatbots for English Speaking Skills — **SDG 4 (Quality Education), SDG 9 (Innovation)**
36. Generational Differences in EdTech Adoption — **SDG 4 (Quality Education), SDG 10 (Reduced Inequalities)**
37. Accelerating Second Language Learning through AI — **SDG 4 (Quality Education), SDG 9 (Innovation)**
38. Attention Modulation in Reading (Extended Study) — **SDG 4 (Quality Education)**
39. Technology in Teacher-Student Communication — **SDG 4 (Quality Education), SDG 17 (Partnerships)**
40. Language, Power and Play: CDA of Judy Blume — **SDG 16 (Peace, Justice & Strong Institutions)**
41. Symbolic Power and Male Supremacy: CDA of The Stone Woman — **SDG 5 (Gender Equality), SDG 16 (Strong Institutions)**
42. CDA of Imran Khan's Speeches — **SDG 16 (Peace, Justice & Strong Institutions)**

43. Turn-Taking Strategies in The Ellen DeGeneres Show — **SDG 16 (Peace, Justice & Strong Institutions)**
44. Intercultural Study of Compliments — **SDG 10 (Reduced Inequalities), SDG 17 (Partnerships)**
45. CDA of Pakistani Diplomatic Cypher — **SDG 16 (Peace, Justice & Strong Institutions)**
46. Language Variations in News Reports of Crime against Women — **SDG 5 (Gender Equality), SDG 16 (Strong Institutions)**
47. Climate Change Communication in Scientific vs Popular Media — **SDG 13 (Climate Action)**
48. Translanguaging Pedagogy in Pakistani Classrooms — **SDG 4 (Quality Education), SDG 10 (Reduced Inequalities)**
49. Systemic Functional Interpretation of Transitivity Templates — **SDG 16 (Peace, Justice & Strong Institutions), SDG 17 (Partnerships)**
50. ☐ A Comparative-Lexical Analysis of Kinship Terminologies in Urdu and English — **SDG 10 (Reduced Inequalities), SDG 4 (Quality Education)**
51. ☐ Language of Corona Virus Pandemic: A Corpus-Based Analysis of Online Newspaper Articles — **SDG 3 (Good Health & Well-being), SDG 16 (Peace, Justice & Strong Institutions)**
52. ☐ Influence of the Audience on a Speaker's Speech Style: A Joosian Analysis — **SDG 4 (Quality Education), SDG 16 (Peace, Justice & Strong Institutions)**
53. ☐ Sadness and Joy in *Inside Out*: A Multimodal Analysis — **SDG 3 (Good Health & Well-being), SDG 4 (Quality Education)**
54. ☐ Movies are Speech-acts — **SDG 4 (Quality Education), SDG 16 (Peace, Justice & Strong Institutions)**
55. ☐ A Searlean Analysis of Film-Acts for Meaning — **SDG 4 (Quality Education), SDG 16 (Peace, Justice & Strong Institutions)**
56. ☐ The Pragmatics of Abuse in and through *Bashar Momin* — **SDG 5 (Gender Equality), SDG 16 (Peace, Justice & Strong Institutions)**
57. ☐ Intentionality and Film-Acts: A Searlean Analysis — **SDG 4 (Quality Education), SDG 16 (Peace, Justice & Strong Institutions)**
58. The Illusion of Consent: Hegemony and Resistance in *Our Sister Killjoy* — **SDG 5 (Gender Equality), SDG 10 (Reduced Inequalities), SDG 16 (Peace, Justice & Strong Institutions)**
59. An Eco-Critical Analysis into *Lines Written a Few Miles Above Tintern Abbey* — **SDG 13 (Climate Action), SDG 15 (Life on Land)**
60. Emerging Identities: An Application of ISA to *Breaking it Up* — **SDG 10 (Reduced Inequalities), SDG 4 (Quality Education)**

## FCOEW RESEARCH RECORD

### DEPARTMENT OF ENGLISH

|  | Title | Authors | Journal / Publisher | Year | Citation s |
|--|-------|---------|---------------------|------|------------|
|--|-------|---------|---------------------|------|------------|

|    |                                                                                         |                                                      |                                                                      |      |    |  |
|----|-----------------------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------|------|----|--|
|    |                                                                                         |                                                      |                                                                      |      |    |  |
| 1  | Language and Emotion: A Study of Emotional Expression in Multilinguals                  | N Fatima, HM Afzaal, Z Hussain, MKM Sajid            | Journal of Applied Linguistics and TESOL (JALT)                      | 2024 | 13 |  |
| 2  | The Role of Feedback in Enhancing Creative Writing Skills in ELT Contexts               | N Fatima, M Ehsan, MA Darazi, A Majeed, AA Chaudhary | Remittances Review                                                   | 2024 | 12 |  |
| 3  | Formulaic Language in High-Stake Research Writing                                       | N Fatima, S Ahmad                                    | Research Journal in Translation, Literature, Linguistics & Education | 2025 | 6  |  |
| 4  | Role of Communicative Language Teaching Approaches in Strengthening ESL Speaking Skills | N Fatima, Sobia, M Azeem                             | Migration Letters                                                    | 2024 | 6  |  |
| 5  | Systemic Functional Interpretation of Transitivity Templates in News Reports            | N Fatima, FA Hashmi, ZHS Hashmi                      | NUML Journal of Critical Inquiry                                     | 2018 | 6  |  |
| 6  | Visual Semiotics in Digital Communication: Memes and Emojis                             | N Fatima, SJ Ejaz, G Miran                           | Liberal Journal of Language & Literature Review                      | 2024 | 5  |  |
| 7  | Faculty Perspectives on Online Learning Resources in Academic Libraries                 | N Fatima, MM Ilyas, Maryam                           | Pakistan Journal of Law, Analysis and Wisdom                         | 2024 | 5  |  |
| 8  | Discussion Teaching Technique in Improving ESL Speaking Skills                          | N Fatima, Z Farah, U Ikram                           | Jahan-e-Tahqeeq                                                      | 2023 | 5  |  |
| 9  | AI-Powered Language Translation and Human Communication                                 | N Andleeb, N Fatima, A Ali et al.                    | Testing, Psychometrics, Methodology in Applied Psychology            | 2025 | 4  |  |
| 10 | Attention Modulation in Reading                                                         | A Sultan, N Fatima                                   | ResearchGate                                                         | 2025 | 3  |  |
| 11 | English Language Needs Analysis in Freelancing Domain                                   | N Fatima, H Faraz, N Riaz                            | Kurdish Studies                                                      | 2024 | 3  |  |
| 12 | Politics of Channels and Geography in Diplomatic Discourse                              | N Fatima, J Sahrish, M Sobia                         | Migration Letters                                                    | 2024 | 3  |  |
| 13 | Impact of Teachers' Partiality on Undergraduate Learning                                | N Fatima, G Miran                                    | Journal of Business and Social Review in Emerging Economies          | 2023 | 3  |  |
|    |                                                                                         |                                                      |                                                                      |      |    |  |

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|----|-----------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------|------|---|--|
|    |                                                                 |                                       |                                                           |      |   |  |
| 14 | Technology Integration and Learning Outcomes                    | N Fatima, AH Tarar, A Shahid, K Lodhi | Policy Research Journal                                   | 2025 | 2 |  |
| 15 | Project-Based Learning and Student Creativity                   | N Fatima, S Khan, G Miran et al.      | Contemporary Journal of Social Science Review             | 2025 | 2 |  |
| 16 | Critical Discourse Analysis of Print Media Language             | N Fatima, M Rahman, G Miran           | Policy Research Journal                                   | 2025 | 2 |  |
| 17 | Writing Activities in Pakistani ESL Context                     | MA Gul, N Fatima, H Faraz             | Kurdish Studies                                           | 2024 | 2 |  |
| 18 | Motivation Towards Second Language Learning                     | N Fatima, A Aamer, N Riaz             | Remittances Review                                        | 2024 | 2 |  |
| 19 | Process Types in News Coverage of Crimes Against Women          | N Fatima                              | Pakistan Journal of Society, Education and Language       | 2023 | 2 |  |
| 20 | Emotional Intelligence, Well-Being and Academic Achievement     | N Fatima et al.                       | Testing, Psychometrics, Methodology in Applied Psychology | 2025 | 1 |  |
| 21 | Socio-Pragmatic Effects of Code Switching and Code Mixing       | AS Durrani, A Mushtaq, N Fatima       | Contemporary Journal of Social Science Review             | 2025 | 1 |  |
| 22 | ESL Game-Based Learning in Pakistani Primary Schools            | I Ranjhani, N Fatima, F Rashid        | Journal of Applied Linguistics and TESOL                  | 2024 | 1 |  |
| 23 | Source Language Activation in Cross-Linguistic Context          | F Ahmed, E Maharvi, N Fatima, R Khan  | Migration Letters                                         | 2024 | 1 |  |
| 24 | Enhancing Listening Skills in Pakistani ESL Classrooms          | N Riaz, N Fatima, A Aamer             | Kurdish Studies                                           | 2024 | 1 |  |
| 25 | Use of AI in Social Sciences Research                           | A Shahid, N Fatima                    | —                                                         | 2024 | 1 |  |
| 26 | Translanguaging in Teaching Grammar                             | N Fatima, G Miran                     | Sustainable Business and Society in Emerging Economies    | 2023 | 1 |  |
| 27 | Teacher Agency and Curriculum Adaptation in High-stakes Testing | Z Iqbal, N Fatima et al.              | Liberal Journal of Language & Literature Review           | 2026 | — |  |
|    |                                                                 |                                       |                                                           |      |   |  |



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|----|------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------|------|---|--|
|    |                                                                  |                                 |                                                                 |      |   |  |
| 28 | Digital Literacy, Cognitive Growth and Language Acquisition      | N Fatima, Z Fatima, Z Saleem    | Journal of Applied Linguistics and TESOL                        | 2025 | — |  |
| 29 | Challenges in Lab-based Language Education                       | M Ramzan, ZK Javaid, N Fatima   | Educational Research and Innovation                             | 2025 | — |  |
| 30 | Impact of Voice Assistants on Human-Computer Interaction         | U Paracha, N Fatima, A Ikram    | Spectrum of Engineering Sciences                                | 2025 | — |  |
| 31 | AI-Driven Approaches to English Language Learning                | N Fatima, R Siddique, S Suleman | Pakistan Journal of Social Studies Review                       | 2025 | — |  |
| 32 | Transformative Pedagogies in Higher Education (Book)             | N Fatima                        | Lumina Literati Publishing                                      | 2025 | — |  |
| 33 | Integrating Formal and Cognitive Approaches to Language          | N Fatima                        | Lumina Literati Publishing                                      | 2025 | — |  |
| 34 | Transfer Learning in NLP Tasks                                   | N Fatima et al.                 | Spectrum of Engineering Sciences                                | 2025 | — |  |
| 35 | AI Chatbots for English Speaking Skills                          | N Fatima, A Firdaus, Z Saleem   | Policy Journal of Social Science Review                         | 2025 | — |  |
| 36 | Generational Differences in EdTech Adoption                      | N Fatima et al.                 | Lex Localis – Journal of Local Self Government                  | 2025 | — |  |
| 37 | Accelerating Second Language Learning through AI                 | N Fatima, H Faraz               | Liberal Journal of Language & Literature Review                 | 2025 | — |  |
| 38 | Attention Modulation in Reading (Extended Study)                 | A Sultan, N Fatima              | —                                                               | 2025 | — |  |
| 39 | Technology in Teacher-Student Communication                      | N Fatima, H Faraz, Amna         | Journal of Applied Linguistics and TESOL                        | 2024 | — |  |
| 40 | Language, Power and Play: CDA of Judy Blume                      | N Fatima                        | Journal of Applied Linguistics and TESOL                        | 2024 | — |  |
| 41 | Symbolic Power and Male Supremacy: CDA of <i>The Stone Woman</i> | Z Fatima, M Fatima, N Fatima    | International Journal of Contemporary Issues in Social Sciences | 2024 | — |  |
| 42 | CDA of Imran Khan's Speeches                                     | N Fatima et al.                 | International Journal of Human and Society                      | 2024 | — |  |
|    |                                                                  |                                 |                                                                 |      |   |  |

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|----|-----------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------|------|---|
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| 43 | Turn-Taking Strategies in <i>The Ellen DeGeneres Show</i>                               | N Fatima, A Waheed, N Riaz                           | Migration Letters                                                                       | 2024 | — |
| 44 | Intercultural Study of Compliments                                                      | A Waheed, N Fatima                                   | Bulletin of Multidisciplinary Studies                                                   | 2024 | — |
| 45 | CDA of Pakistani Diplomatic Cypher                                                      | S Bukhari, N Fatima et al.                           | Harf-o-Sukhan                                                                           | 2024 | — |
| 46 | Language Variations in News Reports of Crime against Women                              | N Fatima                                             | International SFL Conference                                                            | 2023 | — |
| 47 | Climate Change Communication in Scientific vs Popular Media                             | N Fatima                                             | International SFL Conference                                                            | 2023 | — |
| 48 | Translanguaging Pedagogy in Pakistani Classrooms                                        | N Fatima                                             | International Education and Innovative Sciences Congress                                | 2023 | — |
| 49 | Systemic Functional Interpretation of Transitivity Templates                            | N Fatima                                             | National University of Modern Languages                                                 | 2022 | — |
| #  | Title                                                                                   | Authors                                              | Journal / Conference                                                                    | Year |   |
| 1  | A Comparative-Lexical Analysis of Kinship Terminologies in Urdu and English             | Aiman Atta, Zainab Siddique, Tabassum Solehria       | Journal of Asian Development Studies                                                    | 2026 |   |
| 2  | Language of Corona Virus Pandemic: A Corpus-Based Analysis of Online Newspaper Articles | Laiba Parveen, Zainab Siddique                       | Qlantic Journal of Social Sciences and Humanities                                       | 2026 |   |
| 3  | Influence of the Audience on a Speaker's Speech Style: A Joosian Analysis               | Zainab Haroon, Zainab Siddique                       | —                                                                                       | 2023 |   |
| 4  | Sadness and Joy in <i>Inside Out</i> : A Multimodal Analysis                            | Fatima Siddique, Ubaidullah A. Qazi, Zainab Siddique | —                                                                                       | 2022 |   |
| 5  | Movies are Speech-acts                                                                  | Zainab Siddique, Muhammad Uzair                      | —                                                                                       | 2018 |   |
| 6  | A Searlean Analysis of Film-Acts for Meaning                                            | Zainab Siddique                                      | 7th International Conference on Intercultural Pragmatics and Communication (INPRA 2016) | 2016 |   |
|    |                                                                                         |                                                      |                                                                                         |      |   |

| 7 | The Pragmatics of Abuse in and through <i>Bashar Momin</i>                                                                   | Zainab Siddique  | ICLAP 2016                                                     | 2016 |           |
|---|------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------|------|-----------|
| 8 | Intentionality and Film-Acts: A Searlean Analysis                                                                            | Zainab Siddique  | New Developments in Linguistic Pragmatics (NDLP 2015)          | 2015 |           |
| # | Title                                                                                                                        | Authors          | Journal / Publisher                                            | Year | Citations |
| 1 | A Madwoman or Crippled by Society? A Study of Disability and Depression in Plath's Poems                                     | M Sher, H Riaz   | Pakistan Journal of Society, Education and Language (PJSEL)    | 2024 | 4         |
| 2 | Diasporic Consciousness: Family, History, Identity, and Language in Selected Poems by Sujata Bhatt                           | S Nazeer, M Sher | City University Research Journal of Literature and Linguistics | 2021 | 3         |
| 3 | Linguistic Sexism in 'Rishta Culture' of Peshawar: A Feminist Stylistic Analysis of Matrimonial Advertisements in Newspapers | M Sher, A Saleem | Journal of Academic Research for Humanities                    | 2023 | 2         |
| 4 | Confessions in the Investigative Interviews: A Forensic Linguistic Analysis of Robert Bryndza's <i>The Girl in the Ice</i>   | M Sher, A Saleem | Journal of Applied Linguistics and TESOL (JALT)                | 2024 | 1         |
| 5 | How Reality Is Construed in Legal Judgments: An SFL Analysis of a Pakistani Appellate Decision on Sexual Assault             | M Sher, A Saleem | International Premier Journal of Languages & Literature        | 2026 | —         |
| 6 | Female Agency and Communality: A Social Role Study of Hussain's <i>Rubies for a Dog: A Fable</i>                             | Huma, M Sher     | Pakistan Languages and Humanities Review                       | 2025 | —         |
| 7 | Depersonalization of Power: A Lexicogrammatical Analysis of a Legal Text                                                     | A Saleem, M Sher | Pakistan Languages and Humanities Review (PLHR)                | 2024 | —         |
| 8 | Quest for Survival: A 'New Racism' Perspective of Studying Immigrant Experience in Adams's <i>Harbor</i>                     | M Sher, H Riaz   | Pakistan Journal of Society, Education and Language (PJSEL)    | 2023 | —         |
| 9 | Structuralist Perspective on Chopin's <i>The Story of an Hour</i> .                                                          | M Sher           | City University Research Journal of Literature and Linguistics | 2019 | —         |

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|---|---------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------|------|--|
|   |                                                                                                         |                                              |                                          |      |  |
|   | Transformations of Eighteenth-Century American Women                                                    |                                              |                                          |      |  |
|   |                                                                                                         |                                              |                                          |      |  |
| # | Title                                                                                                   | Authors                                      | Journal                                  | Year |  |
| 1 | The Illusion of Consent: Hegemony and Resistance in Ama Ata Aidoo's <i>Our Sister Killjoy</i>           | Syeda Aliya Shah, Rabia Tariq                | Pakistan Languages and Humanities Review | 2025 |  |
| 2 | An Eco-Critical Analysis into William Wordsworth's <i>Lines Written a Few Miles Above Tintern Abbey</i> | Rabia Tariq                                  | Policy Journal of Social Science Review  | 2025 |  |
| 1 | Emerging Identities: An Application of ISA to Breaking it Up by Bapsi Sidhwa                            | Farzeen Ghazal , Tabassum Naz and Faiza khan | Pakistan Languages and Humanities Review | 2026 |  |

|   |                                                                                                                  |                                                       |                                                                                                                                     |      |
|---|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------|
|   |                                                                                                                  | Mahmood ul Hassan                                     | Control, Vol. 14, No. 2, pp. 1-5. IF 0.03.                                                                                          |      |
| 2 | Prostrate Cancer Classification: A Deep Learning Approach Deep Learning Model for Prostate Cancer Classification | Rooh Ullah, M. Salim Javed, Mahmood Ul Hassan         | Journal of Annals of the Romanian Society for Cell Biology, Vol. 25, Issue 7, pp. 1539-1545. IF 0.90.                               | 2021 |
| 3 | Semantic Query Expansion by using Knowledge based for Images search and Retrieval                                | Rooh Ullah and J. Jaafar                              | International Journal of Computer Science & Emerging Technologies, Vol. 2, No. 1, pp. 1-5                                           | 2011 |
| 4 | Exploiting the Query Expansion using knowledgebase for images                                                    | Rooh Ullah and J. Jaafar                              | Proceedings of the Second international conference on Visual informatics, Springer-Verlag Berlin, Heidelberg, Vol. 7067, pp. 93-103 | 2011 |
| 5 | Exploiting short query expansion for images retrieval                                                            | Rooh Ullah and J. Jaafar                              | International Conference of Computer Information System (ICCIS), pp. 160-166.                                                       | 2012 |
| 6 | Queries Snippet Expansion for efficient Images Retrieval                                                         | Rooh Ullah and J. Jaafar                              | Journal of Theoretical and Applied Information Technology, Vol. 40, No.1, pp. 23-28.                                                | 2012 |
| 7 | Semantic Intensity: Objects Contribution Towards Image Annotation                                                | Rooh Ullah, J. Jaafar, Abas B Md Said and Irfan Ullah | Book title: Advancees in Visual Informatics, LNCS, Springer, Vol. 9429, pp. 237-248                                                 | 2015 |
| 8 | Purify Noisy Data from Annotated Images using MontyLingua and Control Redundant Term                             | Rooh Ullah, J. Jaafar and Abas B Md Said              | Journal of ARPAN, Vol. 10, No. 23, pp. 18193-18199                                                                                  | 2015 |
| 9 | Semantic Annotation Model for Objects Classification                                                             | Rooh Ullah, J. Jaafar and Abas B Md Said              | IEEE Conference on Research and Development, pp. 87-92                                                                              | 2015 |

|    |                                         |                                                                      |                                     |      |
|----|-----------------------------------------|----------------------------------------------------------------------|-------------------------------------|------|
| 10 | Semantic Ontology for annotated images  | Rooh Ullah, J. Jaafar and Abas B Md Said, Irfan Ullah and M Q Saleem | ICCOINS, pp. 408-413                | 2016 |
| 11 | Semantic Space Expansion and Refinement | Rooh Ullah, J. Jaafar and Abas B Md Said, Irfan Ullah and M Q Saleem | ICOS, presented 10-12 October, 2016 | 2016 |

| # | Title                                                                                                                                                                                                                                    | Authors                                   | Journal                                                         | Year |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------|------|
| 1 | Ai-driven federated multi-agent actor–critic learning for secure and energy-efficient resource optimization in 6g semi-grant-free noma-based iot networks                                                                                | Maaz Ali Mumtaz, Lalina Zaib, Bashir khan | <i>Spectrum of Engineering Sciences</i> , 4(3), 366–387, IF 4.5 | 2026 |
| 2 | Machine Learning In Animal Disease Diagnosis: Developing Predictive Models For Disease Diagnosis Using Machine Learning Algorithms And Sensor Data, Such As Electrochemical Immunosensors For Detecting Opisthorchis Viverrini Infection | Saira Bibi, Bashir Khan, et al,           | Research Consortium Archive                                     | 2026 |

### LINKING WITH SDG GOALS

1. Classification of Prostate Cancer by Gleason Grading in Peshawar, Pakistan — **SDG 3 (Good Health & Well-being)**
2. Prostate Cancer Classification: A Deep Learning Approach — **SDG 3 (Good Health & Well-being), SDG 9 (Industry, Innovation & Infrastructure)**
3. Deep Learning Model for Prostate Cancer Classification — **SDG 3 (Good Health & Well-being), SDG 9 (Industry, Innovation & Infrastructure)**
4. Semantic Query Expansion by using Knowledge-based for Image Search and Retrieval — **SDG 9 (Industry, Innovation & Infrastructure)**
5. Exploiting Query Expansion using Knowledgebase for Image Retrieval — **SDG 9 (Industry, Innovation & Infrastructure)**

6. Exploiting Short Query Expansion for Image Retrieval — **SDG 9 (Industry, Innovation & Infrastructure)**
7. Query Snippet Expansion for Efficient Image Retrieval — **SDG 9 (Industry, Innovation & Infrastructure)**
8. Semantic Intensity: Objects' Contribution Towards Image Annotation — **SDG 9 (Industry, Innovation & Infrastructure)**
9. Purifying Noisy Data from Annotated Images using MontyLingua and Controlling Redundant Terms — **SDG 9 (Industry, Innovation & Infrastructure)**
10. Semantic Annotation Model for Object Classification — **SDG 9 (Industry, Innovation & Infrastructure)**
11. Semantic Ontology for Annotated Images — **SDG 9 (Industry, Innovation & Infrastructure)**
12. Semantic Space Expansion and Refinement — **SDG 9 (Industry, Innovation & Infrastructure)**
13. AI-Driven Federated Multi-Agent Actor–Critic Learning for Secure and Energy-Efficient Resource Optimization in 6G Semi-Grant-Free NOMA-Based IoT Networks — **SDG 9 (Industry, Innovation & Infrastructure), SDG 7 (Affordable & Clean Energy)**
14. Machine Learning in Animal Disease Diagnosis: Developing Predictive Models Using Sensor Data (e.g., Electrochemical Immunosensors for Detecting *Opisthorchis Viverrini* Infection) — **SDG 3 (Good Health & Well-being), SDG 2 (Zero Hunger), SDG 9 (Industry, Innovation & Infrastructure)**

#### **Department of Mathematics, AUMC Multan**

1. Sustainability practices and operational initiatives (energy conservation, waste management, water stewardship, green campus operations, sustainable procurement, etc.)

- Adoption of paperless teaching practices through LMS and e-notes.
- Efficient utilization of classrooms and computing resources to reduce energy consumption.
- Awareness among students regarding responsible use of resources.

2. Sustainability-focused projects (ongoing, completed, funded, or collaborative)

No

3. Research publications, patents, innovations, or funded research related to sustainability and climate action

- Research contributions related to SDGs

| S. No | Complete Name of Journal                    | Title of Research Article                                                                                                                                      | Vol & Issue No                    | Year/Date of Publication | URL of Published Article                                                                                                                | SDG |
|-------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1     | Scientific Reports & 2045-2322              | Design and analysis of a secure image encryption algorithm using proposed non-linear RN chaotic system and ECC/HKDF key derivation with authentication support | 15, Article number : 39951 (2025) | 14 November 2025         | <a href="https://www.nature.com/articles/s41598-025-23592-w">https://www.nature.com/articles/s41598-025-23592-w</a>                     | 4,9 |
| 2     | Journal of Thermal Analysis and Calorimetry | A numerical study of Carreau–Yasuda tri-hybrid nanofluid over a convective heated surface near a stagnation point                                              | 2025                              | 27 June 2025             | <a href="https://link.springer.com/article/10.1007/s10973-025-14386-3">https://link.springer.com/article/10.1007/s10973-025-14386-3</a> | 4,9 |
| 3     | Scientific Reports & 2045-2322              | Mathematical modeling and statistical analysis of breast cancer drugs using M-polynomial indices for the physical properties                                   | 15, Article number : 30365 (2025) | 19 August 2025           | <a href="https://www.nature.com/articles/s41598-025-07067-6">https://www.nature.com/articles/s41598-025-07067-6</a>                     | 3,4 |
| 4     | Scientific Reports & 2045-2322              | Physicochemical profiling and ranking of parkinson's disease drugs through QSPR and Fuzzy TOPSIS analysis                                                      | 15, Article number : 15527 (2025) | 03 May 2025              | <a href="https://www.nature.com/articles/s41598-025-99583-8">https://www.nature.com/articles/s41598-025-99583-8</a>                     | 3,4 |



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|---|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 5 | Frontiers in Physics                                   | Estimating the prediction ability of reverse degree-based entropy indices for the physicochemical properties of lymes disease drugs                                                                   | Volume 13 - 2025                    | 4 March 2025     | <a href="https://www.frontiersin.org/journals/physics/articles/10.3389/fphy.2025.1536995/full">https://www.frontiersin.org/journals/physics/articles/10.3389/fphy.2025.1536995/full</a> | 3,4 |
| 6 | <i>Chemometrics and Intelligent Laboratory Systems</i> | Quantitative structure properties relationship (QSPR) analysis for physicochemical properties of nonsteroidal anti-inflammatory drugs (NSAIDs) using $V_e$ degree-based reducible topological indices | <a href="#">Volume 255</a> , 105266 | 15 December 2024 | <a href="https://www.sciencedirect.com/science/article/abs/pii/S0169743924002065">https://www.sciencedirect.com/science/article/abs/pii/S0169743924002065</a>                           | 3,4 |
| 7 | Scientific Reports                                     | Exploring physicochemical characteristics of cyclodextrin through M-polynomial indices                                                                                                                | 14, Article number : 20029          | 28 August 2024   | <a href="https://www.nature.com/articles/s41598-024-68775-z">https://www.nature.com/articles/s41598-024-68775-z</a>                                                                     | 4   |
| 8 | <i>Numerical Heat Transfer, Part B: Fundamentals</i>   | Analysis of the tri-hybrid Maxwell nanofluid flow with temperature-dependent thermophysical characteristics on static and dynamic surfaces employing Levenberg-Marquardt artificial neural networks   | 1–27.                               | 05 Aug 2024      | <a href="https://www.tandfonline.com/doi/abs/10.1080/10407790.2024.2386582">https://www.tandfonline.com/doi/abs/10.1080/10407790.2024.2386582</a>                                       | 4,9 |

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|----|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 9  | <i>Chemical Papers</i>                               | Quantitative structure–property relationship (QSPR) modeling for evaluating fluorescence attributes across various aromatic heterocyclic compounds with ve-degree-based Sombor indices | Volume 78, pages 6343–6354, (2024) | 10 June 2024 | <a href="https://link.springer.com/article/10.1007/s11696-024-03539-7">https://link.springer.com/article/10.1007/s11696-024-03539-7</a>                                                                                      | 4   |
| 10 | <i>Numerical Heat Transfer, Part A: Applications</i> | Dynamic simulation of unsteady Casson–Carreau fluid flow considering temperature-dependent variable-properties and thermo-solutal mixed convection over flat and slendering sheets     | Pages 8916–8936                    | 18 Jun 2024  | <a href="https://www.tandfonline.com/doi/full/10.1080/10407782.2024.2363501">https://www.tandfonline.com/doi/full/10.1080/10407782.2024.2363501</a>                                                                          | 4,9 |
| 11 | Numerical Heat Transfer, Part B: Fundamentals        | Exploring the influence of nanolayer morphology on magnetized tri-hybrid nanofluid flow using artificial neural networks and Levenberg–Marquardt optimization                          | Pages 2617–2639                    | 07 May 2024  | <a href="#">Exploring the influence of nanolayer morphology on magnetized tri-hybrid nanofluid flow using artificial neural networks and Levenberg–Marquardt optimization: Numerical Heat Transfer, Part B: Fundamentals</a> | 4,9 |

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|----|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|    |                                                                                                                                    |                                                                                                                                                                                                    |                                                         |                | <a href="#">: Vol 86 , No 8 - Get Access</a>                                                                                                          |     |
| 12 | Ain Shams Engineering Journal,                                                                                                     | Mathematically modeling of Ge-Sb-Te superlattice to estimate the physico-chemical characteristics                                                                                                  | <a href="#">Volume 15, Issue 4</a> , April 2024, 102617 | 9 January 2024 | <a href="https://www.sciencedirect.com/science/article/pii/S2090447923005063">https://www.sciencedirect.com/science/article/pii/S2090447923005063</a> | 4,9 |
| 13 | <i>ZAMM - Journal of Applied Mathematics and Mechanics</i> / <i>Zeitschrift für Angewandte Mathematik und Mechanik</i> / 1521-4001 | Exploring the influence of morphology on magnetized Re–Eyring tri-hybrid nanofluid flow between orthogonally moving coaxial disks using artificial neural networks with Levenberg–Marquardt scheme | <a href="#">Volume 104, Issue 9</a>                     | 03 August 2024 | <a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/zamm.202400147">https://onlinelibrary.wiley.com/doi/abs/10.1002/zamm.202400147</a>           | 4,9 |
| 14 | The Journal of Supercomputing                                                                                                      | NM-polynomial based topological indices and graph entropies of Porphyrine                                                                                                                          | Volume 80, pages 27011-27033                            | Sep 01, 2024   | <a href="https://rdcu.be/dVPry">https://rdcu.be/dVPry</a>                                                                                             | 4   |
| 15 | Scientific Reports                                                                                                                 | On physical analysis of topological indices and entropy measures for porphyrine structure using logarithmic regression model                                                                       | <b>14</b> , Article number : 28669 (2024)               | 2024           | <a href="#">On physical analysis of topological indices and entropy measures for porphyrine structure using logarithmic regression model</a>          | 4   |

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|    |                                               |                                                                                                                                                                                |                                                   |           | <a href="#">Scientific Reports</a>                                                                                                                    |            |
| 16 | International Journal of Thermofluids         | <u>Numerical study on heat generation/absorption effects with activation energy and chemical reaction in tetrahedral nanoparticle flow between two orthogonal porous disks</u> | Pages<br>101359                                   | 2025/8/5  | <a href="https://www.sciencedirect.com/science/article/pii/S2666202725003052">https://www.sciencedirect.com/science/article/pii/S2666202725003052</a> | 4,9        |
| 17 | Romanian Journal of Acoustics and Vibration   | <u>Two-Dimensional Symmetric Digital Waveguide Model for the Vocal Tract</u>                                                                                                   | Volume<br>22<br>Issue<br>1<br>Pages<br>3-13       | 2025/6/30 | <a href="https://rjav.sra.ro/index.php/rjav/article/view/373">https://rjav.sra.ro/index.php/rjav/article/view/373</a>                                 | 4,9        |
| 18 | Numerical Heat Transfer, Part A: Applications | <u>Heat and mass transfer phenomena for fractal interfacial layer model on metallic-nanomaterials nanofluids flow with chemical reaction effect</u>                            | Volume<br>86<br>Issue<br>11<br>Pages<br>3640-3663 | 2025/6/3  | <a href="https://www.tandfonline.com/doi/abs/10.1080/10407782.2024.2302961">https://www.tandfonline.com/doi/abs/10.1080/10407782.2024.2302961</a>     | 4,9        |
| 19 | Journal of Physics: Conference Series         | <u>Exploring the Impact of Interfacial Cluster MHD Nano-Lubricant Fluid</u>                                                                                                    | Volume<br>3044<br>Issue                           | 2025/6/1  | <a href="https://iopscience.iop.org/article/10.1088/1742-">https://iopscience.iop.org/article/10.1088/1742-</a>                                       | <b>4,9</b> |

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|----|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|    |                                                       | <u>Flow on Swirling Porous Disks: A Parametric Study</u>                                                                                                                            | 1<br>Pages<br>012004                             |           | 6596/3044/1/012004/meta                                                                                                                               |            |
| 20 | Numerical Heat Transfer, Part A: Applications         | <u>Heat and mass transfer phenomenon and aligned entropy generation with simultaneous effect for magnetized ternary nanoparticles induced by ferro and nano-layer fluid flow of</u> | Volume<br>86<br>Issue<br>9<br>Pages<br>2635-2663 | 2025/5/3  | <a href="https://www.tandfonline.com/doi/abs/10.1080/10407782.2023.2292767">https://www.tandfonline.com/doi/abs/10.1080/10407782.2023.2292767</a>     | <b>4,9</b> |
| 21 | Discover Applied Sciences                             | <u>Modeling magnetohydrodynamic ternary nanofluid flow over rotating porous discs with interfacial morphology effects</u>                                                           | Volume<br>7<br>Issue<br>5<br>Pages<br>422        | 2025/4/29 | <a href="https://link.springer.com/article/10.1007/s42452-025-06862-0">https://link.springer.com/article/10.1007/s42452-025-06862-0</a>               | <b>4,9</b> |
| 22 | Partial Differential Equations in Applied Mathematics | <u>Evaluating formation of interfacial nanolayer of Au/Cu with graphene nanoparticles along with magnetic-morphologies by considering</u>                                           | Volume<br>13<br>Pages<br>101020                  | 2025/3/1  | <a href="https://www.sciencedirect.com/science/article/pii/S2666818124004066">https://www.sciencedirect.com/science/article/pii/S2666818124004066</a> | <b>4,9</b> |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|    |                                                                                                                                                | <u>CattaneoChristov</u><br><u>heat flux dynamics</u>                                                                                                                                                                                                                                                      |                                                        |          |                                                                                                                                                       |            |
| 23 | ZAMM-<br>Journal of<br>Applied<br>Mathemat<br>ics and<br>Mechanic<br>s/Zeitschri<br>ft für<br>Angewan<br>dte<br>Mathemat<br>ik und<br>Mechanik | <u>Thermal</u><br><u>performance of</u><br><u>DispersedInorgani</u><br><u>c magnetic hybrid</u><br><u>nanomaterials into</u><br><u>mixed convective</u><br><u>flow through</u><br><u>flexible porous</u><br><u>disks</u>                                                                                  | Volume<br>105<br>Issue<br>1<br>Pages<br>e20230<br>1049 | 2025/1   | <a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/zamm.202301049">https://onlinelibrary.wiley.com/doi/abs/10.1002/zamm.202301049</a>           | <b>4,9</b> |
| 24 | Chaos,<br>Solitons &<br>Fractals                                                                                                               | <u>Bifurcation and</u><br><u>chaos control in a</u><br><u>heterogeneous</u><br><u>Cournot-Bertrand</u><br><u>duopoly game</u><br><u>model</u>                                                                                                                                                             | Volume<br>190<br>Pages<br>115757                       | 2025/1/1 | <a href="https://www.sciencedirect.com/science/article/pii/S0960077924013092">https://www.sciencedirect.com/science/article/pii/S0960077924013092</a> | <b>4,9</b> |
| 25 | Mathemat<br>ical<br>Sciences                                                                                                                   | <u>Mathematical</u><br><u>analysis of</u><br><u>hybridized</u><br><u>ferromagnetic</u><br><u>nanofluid with</u><br><u>induction of copper</u><br><u>oxide</u><br><u>nanoparticles in</u><br><u>permeable channel</u><br><u>by incorporating</u><br><u>Darcy–</u><br><u>Forchheimer</u><br><u>relation</u> | Volume<br>18<br>Issue<br>4<br>Pages<br>533-<br>549     | 2024/12  | <a href="https://link.springer.com/article/10.1007/s40096-021-00421-5">https://link.springer.com/article/10.1007/s40096-021-00421-5</a>               | <b>4,9</b> |

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| 26 | Modern Physics Letters B | <u>Computing of temperature-dependent thermal conductivity and viscosity correlation for solar energy and turbulence appliances via artificial neuro network algorithm</u> | Volume 38<br>Issue 14<br>Pages 2450104 | 2024/5/20         | <a href="https://www.worldscientific.com/doi/abs/10.1142/S0217984924501045">https://www.worldscientific.com/doi/abs/10.1142/S0217984924501045</a> | <b>4,9</b>   |
| 27 | Modern Physics Letters B | <u>Significance role of dual porosity and interfacial nanolayer mechanisms on hybrid nanofluids flow: a symmetry flow model</u>                                            | Volume 38<br>Issue 08<br>Pages 2450022 | 2024/3/20         | <a href="https://www.worldscientific.com/doi/abs/10.1142/S0217984924500222">https://www.worldscientific.com/doi/abs/10.1142/S0217984924500222</a> | <b>4,9</b>   |
| 28 | Canadian Acoustics       | <u>Application of a Non-Uniform Structured Mesh in a Three-Dimensional Digital Waveguide Model of the Vocal Tract</u>                                                      | Volume 52<br>Issue 4                   | 2024              | <a href="https://jcaa.ca/aca.ca/index.php/jcaa/article/view/3936">https://jcaa.ca/aca.ca/index.php/jcaa/article/view/3936</a>                     | <b>3,4,9</b> |
| 29 | Physica Scripta          | Exploring complex dynamics in a Stackelberg Cournot duopoly game model                                                                                                     | Volume 99, number 11                   | Oct. 30, 2024     | <a href="https://doi.org/10.1088/1402-4896/ad881b">https://doi.org/10.1088/1402-4896/ad881b</a>                                                   |              |
| 30 | Journal of Mathematics   | Stability, Bifurcation, and Chaos Control in a Discrete-Time Predator–Prey                                                                                                 | Volume 2026                            | January, 16, 2026 | <a href="https://doi.org/10.1155/jom/2568891">https://doi.org/10.1155/jom/2568891</a>                                                             | 4, 15        |

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|    |                              | Model With Gompertz Growth and Ivlev Functional Response Under Proportional Harvesting                |                    |      |                                                                                                                                                               |             |
| 31 | Chaos, Solitons and Fractals | Stability and bifurcation analysis in a discrete plant–herbivore system under proportional harvesting | Volume 208, Part 3 | 2026 | <a href="https://www.sciencedirect.com/science/article/abs/pii/S0960077926003930">https://www.sciencedirect.com/science/article/abs/pii/S0960077926003930</a> | <b>4.15</b> |

4. Academic programs, courses, or curriculum integration addressing sustainability, Sustainable Development Goals (SDGs), or environmental responsibility

- Integration of sustainability concepts through:
- Mathematical modeling courses
- Use of case/thesis/final year studies related to Sustainable Development Goals (SDGs).

5. Conferences, seminars, workshops, trainings, awareness campaigns, and outreach activities on sustainability themes

No

6. Student engagement initiatives, community service, volunteer programs, or partnerships promoting sustainable development

No

7. Carbon footprint reduction measures, renewable energy initiatives, or environmental monitoring systems

- Promotion of digital tools to minimize paper usage.
- Reduced reliance on printed materials in teaching and assessment.
- Encouragement of efficient use of computing resources.

8. Biodiversity conservation, green infrastructure, or campus greening activities

- Participation in institutional tree plantation campaigns.

9. Sustainable transportation initiatives and mobility programs

- Encouragement of university transport use.



10. Social sustainability initiatives (inclusion, equity, wellbeing, community impact, and ethical practices)

- Ensuring inclusive education practices and equal learning opportunities.
- Academic mentoring and student support programs.
- Promotion of ethical academic conduct and collaboration.

11. Institutional policies, frameworks, or strategic plans supporting sustainability

- Alignment with university policies promoting:
  - o Sustainability awareness
  - o Ethical research practices
  - o Digital transformation in education

12. Collaborations with industry, government, or international partners on sustainability-related work

- Academic collaborations for interdisciplinary sustainability research.

13. Awards, recognitions, or measurable impact indicators demonstrating sustainability performance

- Student achievements in academic competitions.

1. Research publications, patents, innovations, or funded research related to sustainability and climate action

| S. No. | Research Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Type (publication/ patent/ innovation) | SDGs targeted |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------|
| 1      | The research article “Invisible Eyes: Real-Time Activity Detection Through Encrypted WiFi Traffic Without Machine Learning” proposes a lightweight, real-time method for monitoring network activity without inspecting content, reducing computational load and energy use. This approach enables smarter and more responsive monitoring in homes, buildings, and critical environments while keeping operations efficient and secure. By enhancing anomaly detection and digital system reliability, it supports safer and more | Publication                            | 7, 9, 11, 16  |

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|   | resilient infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |              |
| 2 | The research publication “RGV2: A Framework for Crypto-Ransomware Detection Using FastText and Neural Networks” proposes an intelligent cybersecurity solution for early detection of ransomware attacks, helping protect digital systems and critical information assets. By enabling faster and more reliable threat identification, it supports secure, resilient, and efficient digital infrastructure for organizations and essential services. This contributes to safer technological environments and reduces the risk of disruption, data loss, and operational damage                                                                        | Publication | 9, 11, 16    |
| 3 | The MS thesis titled “Dialing into deception: the hidden persuasive power of vishing” proposes policy recommendations for government sectors, educational training programs for schools and universities, organizational training, and public awareness campaigns to reduce the risk of cyber and social engineering attacks. By strengthening cybersecurity knowledge, preparedness, and responsible digital behavior across institutions and society, it supports safer and more resilient digital environments. This contributes to secure infrastructure, informed communities, and stronger institutional capacity against evolving cyber threats | Thesis      | 4, 9, 11, 16 |
| 4 | The MS thesis “Bullying Bytes: Analyzing Cyberbullying Patterns and Impacts on Adolescents in Pakistan” investigates the prevalence, patterns, and psychological and social impacts of cyberbullying among adolescents. Its findings can support awareness programs, educational interventions, and policy recommendations                                                                                                                                                                                                                                                                                                                             | Thesis      | 3, 4, 10, 16 |

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|   | to promote safer and more inclusive digital spaces for young people. This contributes to youth well-being, responsible digital engagement, and stronger institutional responses to online harm.                                                                                                                                                                                                                                                                                                                                                                                                                              |             |               |
| 5 | The MS thesis “A Novel Framework for Detection of Fuzzy Attacks in Autonomous Vehicles” proposes a cybersecurity framework to detect malicious or deceptive attacks that can compromise the safe operation of autonomous vehicles. By improving the reliability, security, and resilience of intelligent transportation systems, it supports the development of safer and more trustworthy smart mobility solutions. This contributes to secure technological innovation and the protection of critical transportation infrastructure.                                                                                       | Thesis      | 9, 11, 16     |
| 6 | The publication “Social Resource Consumption-Based Message Forwarding in Delay Tolerant Network for Urban Areas,” focuses on improving communication efficiency in delay-tolerant networks by optimizing the use of resources such as bandwidth, energy, and node interactions. The proposed approach ensures reliable data delivery while reducing unnecessary resource consumption in urban environments. This work contributes to sustainable and resilient digital infrastructure, aligning with the United Nations Sustainable Development Goals by promoting efficient and responsible use of technological resources. | Publication | 9, 11, 12, 16 |
| 7 | Thesis “Ransomware Detection with Bagging and Blending Ensemble Learning,” focuses on enhancing cybersecurity by using advanced machine learning techniques to accurately detect ransomware attacks. By combining                                                                                                                                                                                                                                                                                                                                                                                                            | Thesis      | 9, 16         |

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|   | multiple models through bagging and blending, the system improves detection accuracy, reduces false positives, and ensures more reliable threat identification. This helps protect sensitive data, systems, and users from malicious attacks, contributing to safer digital environments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |           |
| 8 | Thesis “A Lightweight Hybrid Deep Learning Model for Efficient DDoS Detection in SDN,” focuses on developing an efficient and resource-optimized model to detect Distributed Denial-of-Service (DDoS) attacks in Software-Defined Networking environments. By combining deep learning techniques in a lightweight architecture, the model ensures high detection accuracy while minimizing computational overhead, making it suitable for real-time and scalable network security. This work enhances the reliability and resilience of modern network infrastructures by preventing service disruptions and ensuring continuous availability. It aligns with the United Nations Sustainable Development Goals by supporting secure, efficient, and sustainable digital systems. | Thesis       | 9, 16     |
| 9 | Research on collective intelligence for task offloading in vehicular fog computing, along with federated multi-agent deep reinforcement learning, supports sustainability by enabling energy-efficient, low-latency, and resource-optimized intelligent transportation systems. By offloading computational tasks to nearby fog nodes rather than distant cloud servers, the approach reduces energy consumption, communication overhead, and associated carbon emissions. Additionally, the use of federated learning limits data transfer and reliance on centralized processing, further enhancing environmental efficiency. Improved traffic                                                                                                                                 | Publications | 9, 11, 13 |

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|     | flow, reduced congestion, and real-time decision-making in vehicular networks also contribute to more sustainable and intelligent urban mobility, positioning this research as an important step toward Green AI and resilient digital infrastructure.                                                                                                                                                                                                                                                  |             |           |
| 10  | Recent research publication focusses on improving communication efficiency in delay-tolerant networks by optimizing the use of resources such as bandwidth, energy, and node interactions. The proposed approach ensures reliable data delivery while reducing unnecessary resource consumption in urban environments. This work contributes to sustainable and resilient digital infrastructure, aligning with the UN SDGs by promoting efficient and responsible use of technological resources.      | Publication | 9, 12, 13 |
| 11. | The paper “Metassi: Framework for Privacy & Cybersecurity in Metaverse (2024)” proposes a framework to enhance privacy and cybersecurity in metaverse environments using advanced protection mechanisms. It addresses risks in virtual reality platforms by ensuring secure personal data handling and user identity protection. The framework strengthens trust and governance in emerging digital ecosystems. It contributes to building secure and resilient next-generation digital infrastructure. | Publication | 9, 16     |
| 12. | The publication “Zero trust vpn (zt-vpn): A systematic literature review and cybersecurity framework for hybrid and remote work” presents a Zero Trust-based VPN framework for securing hybrid and remote work environments. It eliminates implicit trust and enforces strict identity verification and access control. The model enhances enterprise cybersecurity while                                                                                                                               | Publication | 8, 9, 16  |

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|     | supporting secure remote productivity. It enables organizations to adopt modern work models without compromising data security.                                                                                                                                                                                                                                                                                                                                 |             |       |
| 13. | <p>Advancing Reversible LSB Steganography:</p> <p>The study introduces advanced techniques in reversible LSB steganography to improve secure data hiding. It addresses limitations in traditional methods by enhancing accuracy, reversibility, and robustness. The proposed improvements strengthen secure communication and data protection mechanisms. This contributes to innovation in information security and digital communication systems.</p>         | Publication | 9     |
| 14  | <p>Analyzing Tor Browser Artifacts for Web Forensics:</p> <p>This paper investigates forensic artifacts of the Tor browser to support cybercrime investigations. It provides methods for identifying traces in anonymized environments without compromising privacy principles. The research enhances digital forensic capabilities for law enforcement and cybersecurity professionals. It contributes to accountability and secure cyberspace governance.</p> | Publication | 9, 16 |
| 15  | <p>Smart and Sustainable Threat Intelligence (Book Chapter):</p> <p>The work explores intelligent and sustainable approaches to cyber threat intelligence using modern technologies. It emphasizes efficient data processing and proactive threat detection mechanisms. The study promotes sustainable cybersecurity practices by optimizing resource utilization. It contributes to</p>                                                                        | Publication | 9, 13 |

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|    | environmentally responsible and intelligent digital defense systems.                                                                                                                                                                                                                                                                                                                                                     |             |          |
| 16 | <p>IoT Threats Assessment and Mitigation Survey:</p> <p>This survey provides a comprehensive analysis of security threats in IoT environments and corresponding mitigation strategies. It categorizes vulnerabilities and proposes layered defense mechanisms. The study supports the development of secure IoT ecosystems across industries. It enhances resilience and trust in connected infrastructure.</p>          | Publication | 9, 16    |
| 17 | <p>Android Stealth Rooting Technique:</p> <p>This research explores stealth rooting techniques in Android systems and their security implications. It highlights potential misuse while also contributing to understanding system vulnerabilities. The findings support the development of stronger mobile security defenses. It aids in improving secure software and device ecosystems.</p>                            | Publication | 9, 16    |
| 18 | <p>Deepfake Image Forensics using Deep Learning:</p> <p>This paper proposes a deep learning-based approach for detecting AI-generated images using facial landmark analysis. It addresses the growing threat of deepfakes in misinformation and digital fraud. The model improves accuracy in identifying manipulated media content. It contributes to digital trust, media authenticity, and cybercrime prevention.</p> | Publication | 9, 16    |
| 19 | Development of an AI-Driven Cyber Threat Intelligence (CTI) Tool for Proactive Threat Detection and Analysis" by National                                                                                                                                                                                                                                                                                                | Project     | 8, 9, 16 |

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|  | Database and Registration Authority<br>(NADRA) |  |  |
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April, 2026

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