LIST OF PUBLICATIONS
(Dr. Ghulam Mustafa)

1. Haider, S., Ali, T. M., Shaikh, M., **Mustafa, G**., & Giuffrè, A. M. (2026). Investigation of Morphological, Structural, Rheological and Digestibility Characteristics of Common Buckwheat Starch Modified via Physical and Chemical Methods. Journal of Food Process Engineering, 49(3), e70428. **(I.F: 3.5, Q2, HEC-W, SCIE)**

2. Zafar, R., Kamran, M., Malik, T., Karera, K., Humayon, M., **Mustafa, G**., & Mubashir Khan, M. (2025). Randomness from radiation: evaluation and analysis of radiation-based random number generators. The European Physical Journal Plus, 140(5), 463. **(I.F: 2.9, Q2, HEC-W, SCIE)**

3. Zehra, N., Ali, T. M., & **Mustafa, G.** (2024). Impact of hydroxypropylation coupled with extrusion treatment on the morphological, structural, and rheological properties of sorghum and corn starch. International Journal of Biological Macromolecules, 277, 134173. **(I.F:7.7, Q1, HEC-W, SCIE)**

4. Nadeem, S., Muhbat, S., Zakaria, K., & **Mustafa, G**. (2024). Arduino Controlled Catalytic Pyrolysis of Plastic/Municipal Waste to Higher Hydrocarbons. Journal of the Chemical Society of Pakistan, 46(2). **(I.F: 0.6, Q4, HEC-Y, SCIE)**

5. Quddus, A., Hashmi, S. Z. H., **Mustafa, G**., Khalid, M., Ashiq, M. G. B., Nazir, G., ... & Naz, K. (2023). Sol-Gel synthesis of Ni-doped Zn-based spinel nanoferrites with structural and dielectric characterizations along with magnetic analysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 676, 132074. **(I.F: 4.9, Q2, HEC-W, SCIE)**

6. Hashmi, S. Z. H., Khalid, M., **Mustafa, G**., Ashiq, M. G. B., Younas, M., Quddus, A., ... & Javid, M. M. (2023). Synthesis of Nickel-doped Magnesium spinel ferrites (NixMg1-xFe2O4) nanomaterials and study of their structural, electrical and magnetic properties. Materials Chemistry and Physics, 305, 127912. **(I.F: 4.3, Q2, HEC-W, SCIE)**

7. **Mustafa, G**., Khalid, M., Khan, J. K., Uddin, Z., Ashiq, M. G. B., & Somaily, H. H. (2023). Lanthanum doped Manganese-Zinc spinel ferrite nanoparticles for microwave and soft magnet applications. Journal of Materials Science: Materials in Electronics, 34(4), 249. **(I.F: 2.8, Q2, HEC-W, SCIE)**

8. Hafeezullah, M. M., Rafay, A., **Mustafa, G**., Khalid, M., Kalhoro, Z. A., Shaikh, A. W., & Rajput, A. A. (2023). Prediction of Viscosity of Cobalt Ferrite/SAE50 Engine Oil based Nanofluids using well Trained Artificial Neutral Network (ANN) and Response Surface Methodology (RSM). East European Journal of Physics, (3), 479-489. **(I.F: 1.0, Q3, HEC-Y, ESCI)**

9. Naqvi, S. A. A., **Mustafa, G**., Khan, J. K., Raza, S. M., Faraz, S., & Uddin, Z. (2022). Synthesis, morphology and optical characterisation of transition metal oxide (Mn3O4) nanostructures and its antibacterial activities. International Journal of Nanotechnology, 19(12), 1093-1104. **(I.F: 0.3, Q4, HEC-Y, SCIE)**
10. Khan, J. K., Khalid, M., **Mustafa, G**., Uddin, Z., Saleem, M., & Azam, A. A. (2022). Study of lanthanum ions (La3+) doped Manganese-Cobalt (Mn-Co) based spinel ferrite nanoparticles for technological applications. Applied Physics A, 128(11), 961. **(I.F: 2.5, Q2, HEC-X, SCIE)**

11. Zehra, N., Mohsin Ali, T., **Mustafa, G**., & Hasnain, A. (2022). Characterization of Citric Acid Treated Partially Cold-Water Swellable Sorghum and Corn Starch Extrudates; A Green Approach. Starch-Stärke, 74(9-10), 2100291. **(I.F: 2.6, Q2, HEC-X, SCIE)**

12. Ahmad, J., Khalid, M., **Mustafa, G**., AlObaid, A. A., Al-Muhimeed, T. I., Akhtar, M. S., ... & Abd-Rabboh, H. S. (2021). A facile strategy for the preparation of bismuth ferrite nanoparticles: Influence of calcination temperature on structural, dielectric, and morphological characteristics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 628, 127328. **(I.F: 4.9, Q2, HEC-W, SCIE)**

13. Muniba, Khalid, M., Chandio, A. D., Akhtar, M. S., Khan, J. K., **Mustafa, G**., Channa, N. U., ... & Asghar, H. N. U. H. K. (2021). Aluminum substitution in Ni-Co based spinel ferrite nanoparticles by sol–gel auto-combustion method. Journal of Electronic Materials, 50, 3302-3311. **(I.F: 2.2, Q3, HEC-X, SCIE)**

14. Faiza Shaikh, Tahira Mohsin Ali, **Ghulam Mustafa**, and Abid Hasnain. Comparative Study on the Effects of Citric Acid Modification and Hydroxypropylation on the Physiochemical and Digestibility Characteristics of Acid-Hydrolyzed Corn and Sorghum Starches. Starch-Stärke 2021, 2000241-Wiley Online Library. DOI: 10.1002/star.202000241. **(I.F: 2.6, Q2, HEC-X, SCIE)**

15. Channa N, Khalid M, Chandio AD, Akhtar MS, Khan JK, **Mustafa G**, Gilani ZA. Structural, dielectric, impedance, and electric modulus properties of Cu 2+-

substituted Cu x Mn 1-x Fe 2 O 4 spinel ferrites nanoparticles. Journal of Materials Science: Materials in Electronics. 2021 Feb 6:1-3. **(I.F: 2.8, Q2, HEC-W, SCIE)**

16. Faiza Shaikh, Tahira Mohsin Ali, **Ghulam Mustafa**, and Abid Hasnain. Comparative Study on Effects of Xanthan Gum at Different Concentrations on the Functional, Thermal, and Digestibility Characteristics of Corn and Sorghum Starch Extrudates. Starch-Stärke 2020, 2000206 - Wiley Online Library. DOI: 10.1002/star.202000206. **(I.F: 2.6, Q2, HEC-X, SCIE)**

17. Junaid Kareem Khan, Muhammad Khalid[3], Ali Dad Chandio[4], Kiran Shahzadi1 Zaheer Uddin[2], **Ghulam Mustafa[1,2]**, Muhammad Saeed Akhtar[5], Naimat Ullah Channa[6], Zaheer Abbas Gilani[3]. Properties of Al^{3+} substituted nickel ferrite ($NiAl_xFe_{2-x}O_4$) nanoparticles synthesised using wet sol-gel auto-combustion. Journal of Sol-Gel Science and Technology. https://doi.org/10.1007/s10971-020-05426-5. 11 November 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020 **(I.F: 2.05, Q2, HEC-X, SCIE)**

18. Faiza Shaikh, Tahira Mohsin Ali, **Ghulam Mustafa**, Abid Hasnain. Structural, functional and digestibility characteristics of sorghum and corn starch extrudates (RS3) as affected by cold storage time. International Journal of Biological Macromolecules. https://doi.org/10.1016/j.ijbiomac.2020.08.105. **(I.F: 5.6, Q1, HEC-W, SCIE)**

19. **Ghulam Mustafa**. Muhammad Khalid. Ali Dad Chandio. Kiran Shahzadi. Zaheer Uddin. Junaid Kareem Khan. Naimat Ullah Channa. Zaheer Abbas Gilani. H. M. Noor ul Huda Khan Asghar. Dielectric, impedance, and modulus spectroscopic studies of lanthanum-doped nickel spinel ferrites $NiLaxFe_{2-x}O_4$ nanoparticles. Journal of Sol-Gel Science and Technology. https://doi.org/10.1007/s10971-020-05359-z . 29 June 2020 © Springer Science+Business Media, LLC, part of Springer Nature 2020. **(I.F: 2.05, Q2, HEC-X, SCIE)**

20. Kiran Shahzadi, Ali Dad Chandio, **Ghulam Mustafa,** Muhammad Khalid, Junaid Kareem Khan, Muhammad Saeed Akhtar, Zaheer Abbas Gilani, H. M. Noor ul Huda Khan Asgar. Impact of aluminum substitution on the structural and dielectric properties of Ni–Cu spinel ferrite nanoparticles synthesized via sol–gel route. Optical and Quantum Electronics (2020) 52:190 https://doi.org/10.1007/s11082-020-02304-w. **(I.F: 1.61, Q2, HEC-X, SCIE)**

21. Naimatullah Channa, Muhammad Khalid, Ali Dad Chandio, **Ghulam Mustafa**, Muhammad Saeed Akhtar, Junaid Kareem Khan, Jamshed Ahmad, Kashif Ali Kalhoro. Nickel-substituted Manganese Spinel Ferrite nanoparticles for high-frequency applications. Journal of Materials Science: Materials in

Electronics https://doi.org/10.1007/s10854-019-02684-0. Springer Science+Business Media, LLC, part of Springer Nature 2020. **(I.F: 2.22, Q2, HEC-W, SCIE)**

22. M. Khalid, J. K. Khan, **G. Mustafa**, M. S. Akhtar, Z. A. Gilani, H. M. N. ul Huda Khan Asghar, S. Riaz, S. Naseem. Design and Analysis of normally on 4h sic vertical junction field effect transistor (vjfet) using sentaurus TCAD simulation. Journal of Ovonic Research. Vol. 15, No. 5 September – October 2019, p. 335 – 343. **(I.F: 0.68, Q4, HEC-Y, SCIE)**

23. Faiza Shaikh, Tahira Mohsin Ali, **Ghulam Mustafa**, Abid Hasnain. Comparative study on effects of citric and lactic acid treatment on morphological, functional, resistant starch fraction and glycemic index of corn and sorghum starches. International Journal of Biological Macromolecules 135 (2019) 314–327. **(I.F: 5.16, Q1, HEC-W, SCIE)**

24. Muhammad Khalid, Saira Riaz, Junaid K. Khan, **Ghulam Mustafa** and Shahzad Naseem. Optimization Of Breakdown Voltage Characteristics in Normally-Off 4h-Sic Vjfet Using Sentaurus Tcad Simulation", Science International, 7595766484019-4022(Sep-Oct,2015).