

Ministry of Education
Kingdom of Saudi Arabia
Northern Border University
College of Science
Department of Mathematics

جامعة الحدود الشمالية
NORTHERN BORDER UNIVERSITY
كلية العلوم



وزارة التعليم
المملكة العربية السعودية
جامعة الحدود الشمالية
كلية العلوم
قسم الرياضيات



DEPARTMENT OF MATHEMATICS
Bachelor in Mathematics Program

Mathematics Department Scientific Publications

2024



Mathematics Department Scientific Publications - 2024

#	Title	Author(s)	Journal/Conference	Link/DOI
		Dr. Nawaf Alsowait		
1	Exploring Commutativity via Generalized (α, β) -Derivations Involving Prime Ideals	Nawaf Alsowait , Radwan M Al-omary, Zakia Al-Amery, Mohammed Al-Shomrani	Mathematics/MDPI	https://doi.org/10.3390/math12152325
2	On finite groups with certain maximal CSS-subgroups	N Alsowait , AA Heliel, MM Al-Shomrani, AH Zailai	Communications in Algebra\ Taylor & Francis	https://doi.org/10.1080/00927872.2024.2418028
		Dr. Khalaf M Alanazi		
3	Traveling wave solutions of a susceptible-infectious model	Khalaf M Alanazi	Annals of Mathematics and Computer Science	https://doi.org/10.56947/amcs.v24.354

4	A Prey-Predator Mathematical Model With Diffusion and Home Ranges	Khalaf M Alanazi	International Journal of Analysis and Applications	https://doi.org/10.28924/2291-8639-22-2024-111
5	Modeling and Simulating an Epidemic in Two Dimensions with an Application Regarding COVID-19	Khalaf M Alanazi	computation	https://doi.org/10.3390/computation12020034
6	The asymptotic spreading speeds of COVID-19 with the effect of delay and quarantine	Khalaf M Alanazi	aims mathematics	https://doi.org/10.3934/math.2024945
	Dr. Nawaf Alsowait			
7	Finite Groups with Certain Weakly S-permutable Subgroups	Nawaf Alsowait , Abdelrahman A Heliel, Mohammed Al-Shomrani, Areej AS Allehyani	European Journal of Pure and Applied Mathematics	https://doi.org/10.29020/nvbg.ejpam.v17i2.5120
8	Synergistic Impact of Active Case Detection and Early Hospitalization for Controlling the Spread of Yellow Fever Outbreak in Nigeria: An Epidemiological Modeling and Optimal Control Analysis	Nawaf L Alsowait , Mohammed M Al-Shomrani, Ismail Abdulrashid, Salihu S Musa	Mathematics/MDPI	https://doi.org/10.3390/math12233817
	Dr. Hanen Louati			

9	Optimizing control efficiency in discrete-time multi-agent systems via event-triggered containment techniques combining disturbance handling and input delay management	Hanen Louati , Azmat Ullah Khan Niazi, Mhassen EE Dalam, Waqar UI Hassan, Khawer Hameed Khan, Mohammed Alhagyan	Heliyon	https://www.cell.com/heliyon/fulltext/S2405-8440(24)10006-0
10	Analysis of Entropy Generation via Non-Similar Numerical Approach for Magnetohydrodynamics Casson Fluid Flow with Joule Heating	Hanen Louati , Sajid Khan, Muavia Mansoor, Shreefa O Hilali, Ameni Gargouri	Entropy	https://www.mdpi.com/1099-4300/26/8/702
11	Securing bipartite nonlinear fractional-order multi-agent systems against false data injection attacks (FDIAs) considering hostile environment	Hanen Louati , Saadia Rehman, Farhat Imtiaz, Nafisa A AlBasheir, Afrah Y Al-Rezami, Mohammed MA Almazah, Azmat Ullah Khan Niazi	Fractal and Fractional	https://www.mdpi.com/2504-3110/8/7/430
12	Analysis of octane isomer properties via topological descriptors of line graphs	Tariq Alraqad, Abdu Alameri, Mohammed Alsharafi, Hanen Louati , Khaled A Aldwoah, Hicham Saber, Ivan Gutman	Scientific Reports	https://www.nature.com/articles/s41598-024-75454-6
13	Applications of a q-Integral Operator to a Certain Class of Analytic Functions Associated with a Symmetric Domain	Adeel Ahmad, Hanen Louati , Akhter Rasheed, Asad Ali, Saqib Hussain, Shreefa O Hilali, Afrah Y Al-Rezami	Symmetry	https://www.mdpi.com/2073-8994/16/11/1443
14	Defining and Analyzing New Classes Associated with (λ, γ) -Symmetrical Functions and Quantum Calculus	Hanen Louati , Afrah Y Al-Rezami, Abdulbasit A Darem, Fuad Alsarari	Mathematics	https://www.proquest.com/openview/86c5015430fd47acf2244c733ba564f9/1?pq-origsite=gscholar&cbl=2032364

15	Stochastic analysis and soliton solutions of the Chaffee–Infante equation in nonlinear optical media	Alwaleed Kamel, Hanen Yossef Louati , Khaled Aldwoah, Faez Alqarni, Mohammed Almalahi, Manel Hleili	Boundary Value Problems	https://link.springer.com/article/10.1186/s13661-024-01930-7
16	Application of η -starlike and η -convex functions under η -symmetrical constraints	Hanen Louati , Afrah Al-Rezami, Erhan Deniz, Abdulbasit Darem, Robert Szasz,	AIMS Mathematics	chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.aimspress.com/aimspress-data/math/2024/12/PDF/math-09-12-1591.pdf
	Dr. Ramlah Albayyat			
17	A new estimator of between study variance of standardized mean difference in meta-analysis	Ramlah H. Albayyat , Hajar S. Aljohani, Dalia K. Alnagar	PLOS ONE	https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0308628
	Dr. Walid Abdelfattah			
18	How does governance quality affect the shadow economy-sustainable development nexus? New insights from a dynamic threshold analysis	Assidi, Nadia; Nouira, Ridha; Saafi, Sami; Abdelfattah, Walid ; Ben Mim, Sami	Journal of economic studies	DOI: 10.1108/JES-09-2023-0469
19	Non-cooperative game theory with generative adversarial network for effective decision-making in military cyber warfare	Ma, X., Abdelfattah, W. , Luo, D. et al	Ann Oper Res	https://doi.org/10.1007/s10479-024-06406-6

20	Triple weak solution for $p(x)$ -Laplacian like problem involving no flux boundary condition	Kefi, Khaled, Chung, Nguyen Thanh and Abdelfattah, Walid	Georgian Mathematical Journal	https://doi.org/10.1515/gmj-2024-2043
21	A Framework for Efficient and Accurate Automated CLO and PLO Assessment	Zayani, H.M., Abdelfattah, W. , Sellami, R., Slimane, J.B. and Kachoukh, A	Engineering, Technology & Applied Science Research	https://doi.org/10.48084/etasr.6846
22	Feature Imputation using Neutrosophic Set Theory in Machine Learning Regression Context	El Touati, Y. and Abdelfattah, W	Engineering, Technology & Applied Science Research	https://doi.org/10.48084/etasr.7052
23	Application of Data Envelopment Analysis to Evaluate Health Regions Efficiency in Saudi Arabia	Abdelfattah, W. and Alanazi, B.S	Engineering, Technology & Applied Science Research	https://doi.org/10.48084/etasr.7176
24	A smart electricity consumption management framework using internet of things (IoT) to optimize electricity demand	Kuldeep Sharma, Arun Malik, Walid Abdelfattah , Isha Batra, Mohammad Shabaz	Measurement: Sensors	doi.org/10.1016/j.measen.2024.101218
25	Thermally-switchable adsorbent for selective uranium extraction from wastewater	Zuo, Ruoyu Wang, Jiayu Zuo, Walid Abdelfattah , Mohamed H. Helal, Guoze Yan, Shaoqing Liu, Tao Wang, Jinyang Bao, Liang Bai, Lijuan Feng, Zeinhom M. El-Bahy, Xingtao Xu	Chemical Engineering Journal	doi.org/10.1016/j.cej.2024.156484
26	Function-oriented design principles for adsorbent materials of uranium extraction from seawater	Shaoqing Liu, Binbin Tao, Bin Zuo, Kaidan Zheng, Walid Abdelfattah , Jinyang Bao, Guoze Yan, Tao Wang, Ruoyu Wang, Zhengtong Li, Saad	Chemical Engineering Journal	doi.org/10.1016/j.cej.2024.156783

		Melhi, Wafa A. Alshahrani, Xingtao Xu		
	Dr. Ahmad Ayyad Alharbi			
27	Thermal analysis of heat transport in a slip flow of ternary hybrid nanofluid with suction upon a stretching/shrinking sheet	Ahmad Ayyad Alharbi	Case Studies in Thermal Engineering	doi.org/10.1016/j.csite.2023.103965
28	A COMSOL-Based Numerical Simulation of Heat Transfer in a Hybrid Nanofluid Flow at the Stagnant Point across a Stretching/Shrinking Sheet: Implementation for Understanding and Improving Solar Systems	Ahmad Ayyad Alharbi , Ali Rashash R. Alzahrani	mathematics	doi.org/10.3390/math12162493
29	Enhancement in the electrical efficiency of a photovoltaic thermal system through ternary nanofluids application: Nanomaterial shape effects and phase change material encased in a rectangular block	Ahmad Ayyad Alharbi , Ali Rashash R. Alzahrani	Engineering Science and Technology, an International Journal	doi.org/10.1016/j.jestch.2024.101919
	Dr. A. M. Abd El-latif			

30	New soft operators related to supra soft δ -open sets and applications	A. M. Abd El-latif and M. H. Alqahtani	AIMS Math	https://doi.org/10.3934/math.2024150
31	Novel types of supra soft operators via supra soft sd-sets and applications	A. M. Abd El-latif	AIMS Math.	https://doi.org/10.3934/math.2024321
32	Novel categories of supra soft continuous maps via new soft operators, =	A. M. Abd El-latif and M. H. Alqahtani	AIMS Math.	https://doi.org/10.3934/math.2024361
33	Novel categories of spaces in the frame of fuzzy soft topologies	T. M. Al-shami, Salem Saleh, A. M. Abd El-latif and Abdelwaheb Mhemdi	AIMS Math.	https://doi.org/10.3934/math.2024307
34	Strictly wider class of soft sets via supra soft δ -closure operator	A. M. Abd El-latif , M. H. Alqahtani and Fatouh A. Gharib	Int. J. Anal. Appl.	https://doi.org/10.28924/2291-8639-22-2024-47
35	Finite soft-open sets: characterizations, operators and continuity	T. M. Al-shami, Abdelwaheb Mhemdi, A. M. Abd El-latif , and Fuad A. Abu Shaheen	AIMS Math.	https://doi.org/10.3934/math.2024507
36	Separation axioms via novel operators in the frame of topological spaces and applications	M. H. Alqahtani and A. M. Abd El-latif	AIMS Math.	https://doi.org/10.3934/math.2024690
37	Topologically indistinguishable relations and separation axioms	S. Demiralp, T. M. Al-shami, Fuad A. Abushaheen and A. M. Abd El-latif	AIMS Math.	https://doi.org/10.3934/math.2024758
38	Fractional generalized cumulative residual entropy: Properties, testing uniformity, and	A. M. Abd El-latif , Hanan H. Sakr and M.S. Mohamed	AIMS Math.	https://doi.org/10.3934/math.2024881

	applications to euro area daily smoker data			
39	New versions of maps and connected spaces via supra soft sd-operators	A. M. Abd El-latif , A. A. Azzam , Radwan Abu-Gdairi, M. Aldawood and Mesfer H. Alqahtani,	PLOS ONE	https://doi.org/10.1371/journal.pone.0304042
40	Applications on soft somewhere dense sets	A. M. Abd El-latif , A. A. Azzam , Radwan Abu-Gdairi, Mesfer H. Alqahtani and Gehad M. Abd-Elhamed	J. Interdiscip. Math.,	https://www.tarupublications.com/doi/10.47974/JIM-2007
	Dr. Fathia M. Al Samman			
41	Neural intelligent approach for heat transfer applications of trihybrid cross bio-nano ^o uid over wedge geometry	Assad Ayub*, Zahoor Iqbal †, , Syed Zahir Hussain Shah*, Fathia M. Al Samman ‡, Ha ⁻ z Abdul Wahab*, Mhassen E. E. Dalam§ and Ameni Gargouri	Modern Physics Letters B	https://www.worldscientific.com/action/doSearch?AllField=Neural+intelligent+&SeriesKey=mplb
42	Influence of baff le size and position on natural convective heat transport in a skewed cavity by fnite element method	Md. Shamim Hasan*, Md. Fayz-Al-Asad*,†, Zahoor Iqbal ‡, **, Md. Manirul Alam Sarker*, Fathia M. Al Samman §, Mohammed Alhagyan¶, M. M. Alqarni and Ameni Gargouri	Modern Physics Letters B	https://www.worldscientific.com/action/doSearch?AllField=Influence+of+Baffle+Size+&SeriesKey=mplb



43	An optimal estimation approach in stratified random sampling utilizing two auxiliary attributes with application in agricultural, demography, finance, and education sectors	Almulhim, FA (Almulhim, F. A.) ; Iqbal, K (Iqbal, Kanwal) ; Al Samman, FM (Al Samman, Fathia M.) ; Ali, A (Ali, Asad) ; Almazah, MMA (Almazah, Mohammed M. A.)	Heliyon	https://www.sciencedirect.com/search?q=s=An%20Optimal%20Estimation
44	Improving drought monitoring using climate models with biascorrected under Gaussian mixture probability models	Naz, R (Naz, Rubina) ; Ali, Z (Ali, Zulfiqar) ; Kartal, V (Kartal, Veysi) ; Alshahrani, MA (Alshahrani, Mohammed A.) ; Hilali, SO (Hilali, Shreefa O.) ; Al Samman, FM (Al Samman, Fathia Moh.)	International Journal of Climatology	https://rmets.onlinelibrary.wiley.com/action/doSearch?AllField=Improving+Drought+&SeriesKey=10970088
45	Efficient Graph Algorithms in Securing Communication Networks	Syed Ahtsham Ul Haq Bokhary, Athar Kharal, Fathia M. Al Samman , Mhassen. E. E. Dalam and Ameni Gargouri	Symmetry	https://www.mdpi.com/search?q=Efficient+Graph+Algorithms+in+Securing+&journal=symmetry
46	Double extreme-cum-median ranked set sampling	Muhammad Zubair, Seyab Yasin, Afrah Al-Bossly, Asad Ali, Fathia Moh. Al Samman , Mohammed M. A. Almazah, Kanwal Iqbal	Plos One	https://journals.plos.org/plosone/search?filterJournals=PLoSONE&q=Double%20Extreme-Cum-Median%20Ranked%20Set%20Sampling
47	Exploring Symmetry in an Epidemiological Model: Numerical Analysis of Backward Bifurcation and Sensitivity Indices	Fathia Moh. Al Samma , N. Avinash, P. Chellamani, Nafisa A. Albasheir, Ameni Gargouri, G. Britto Antony Xavier and Mohammed M. A. Almazah	Symmetry	https://www.mdpi.com/search?q=Exploring+Symmetry+in+a+Epidemiological+&journal=symmetry

48	Deep learning multilayer stochastic intelligent computing for the analysis of irregular heat source of Carreau nanofluid within the vicinity of an exponentially expanding cylinder	Zahoor Shah , Nafisa A. Albasheir, Muhammad Asif Zahoor Raja, Mohammed M.A. Almazah, Fathia Moh. Al Samman , Muhammad Talha, Attika Jamil, M. Waqas	Tribology International	https://www.sciencedirect.com/search?qs=Deep%20learning%20multilayer
	Dr. Bader Salamah Alanazi			
49	Effective vague soft environment-based decision-making	Hanan H. Sakr, Bader S Alanazi	AIMS Mathematics	doi: 10.3934/math.2024467
50	A Statistical Model for Analyzing the Impact of GDP Components on the Manufacturing Sector in Saudi Arabia	Bader S Alanazi	Statistics, Optimization and Information Computing (SOIC)	DOI: https://doi.org/10.19139/soic-2310-5070-2261
51	Application of Data Envelopment Analysis to Evaluate Health Regions Efficiency in Saudi Arabia	Walid Abdelfattah, Bader S Alanazi	Engineering, Technology & Applied Science Research	https://doi.org/10.48084/etasr.7176
	Dr. Bader Saad Alshammari			
52	Numerical analysis of coupled dynamical biological networks: Modeling electrical information exchange among nerve cells using finite volume method	Muzammal Saleem ; Taofeek O. Alade; Muhammad Saqib; Shahid Hasnain; Badar Saad Alshammari ; Muhammad Farman	AIP Advances	DOI: 10.1063/5.0215819

53	Numerical Identification of Boundary Condition for Reaction-Advection-Diffusion Partial Differential Equation	Bader Saad Alshammari	International Journal of Analysis and Applications	DOI: 10.28924/2291-8639-22-2024-212
54	Numerical investigation for a boundary optimal control of reaction-advection-diffusion equation using penalization technique	<u>Bader Saad Alshammari, Daoud Suleiman Mashat, Fouad Othman Mallawi</u>	Mathematical Modelling and Control	DOI: 10.3934/mmc.2024027
	Dr. Abdelhamid Zaghdani			
55	Analysis of a Weak Galerkin Mixed Formulation for Modified Maxwell's Equations	Abdelhamid Zaghdani & Abdelhalim hasnoui	MDPI Mathematics	
56	Chiti-type Reverse Hölder Inequality and Saint-Venant Theorem for Wedge Domains on Spheres	Abdelhalim hasnaoui & Abdelhamid Zaghdani	International Journal of Analysis and Applications	
57	An Augmented Mixed DG Scheme for the Electric Field	Abdelhamid Zaghdani	International Journal of Analysis and Applications	
58	Analysis of a Weak Galerkin Mixed Formulation for Maxwell's Equations	Abdelhamid Zaghdani, A. hasnoui & Sayed Sayari	Kragujevac journal of Mathematics.	
	Dr. Khaled Hleili			

59	Some results of pseudo-differential operators related to the spherical mean operator	Khaled Hleili and Manel Hleili	Journal of Pseudo-Differential Operators and Applications	
60	QUANTITATIVE UNCERTAINTY PRINCIPLES FOR THE CANONICAL FOURIER BESSEL TRANSFORM	Khaled Hleili and Manel Hleili	Kragujevac journal of Mathematics.	
61	On generalized distributions associated with singular partial differential operators	Khaled Hleili and Manel Hleili	Hacettepe Journal of Mathematics and Statistics	
62	Strictly wider class of soft sets via supra soft δ -closure operator	A. M. Abd El-latif , M. H. Alqahtani and Fatouh A. Gharib	Int. J. Anal. Appl.	https://doi.org/10.28924/2291-8639-22-2024-47
	Dr. Amel Touati			
63	Uncertainty Principles for the Weinstein Wavelet Transform	Amel Touati , I Kallel, A Saoudi	International Journal of Analysis and Applications	https://doi.org/10.28924/2291-8639-22-2024-211
64	Ai-powered Levenberg-Marquardt neural networks for implementation of novel flux conditions in Carreau nanomaterial stagnation-point flow considering magnetic field and heat source effects	Nafisa A. Albasheir , Zahoor Shah, Muhammad Asif Zahoor Raja , Amel A. Touati , Mohammed M. A. Almazah, Maryam Jawaid , M. Waqas	Measurement	https://doi.org/10.1016/j.measurement.2024.116304

65	COEFFICIENT PROPERTIES FOR A SUBCLASS OF SPIRAL-LIKE SYMMETRICAL FUNCTIONS ASSOCIATED WITH THE q-DERIVATIVE OPERATOR	M. TOUATI, A, ALSARARI F, AL-REZAMI, A. Y ERHAN, D ABDULBASIT A. DAREM	Journal of applied Mathematics & Informatics	
	Dr. Amani Alrumayh			
66	Bernoulli Poisson Moment Exponential Distribution: Mathematical Properties, Regression Model, and Applications	Amani Alrumayh	International Journal of Mathematics and Mathematical Sciences	https://doi.org/10.1155/2024/5687958
67	A New Flexible Extension of the XLindley Distribution with Properties and Application on Income Tax and Carbon Fibers Data	Amani Alrumayh	International Journal of Analysis and Applications	https://doi.org/10.28924/2291-8639-22-2024-202
68	New Advanced Trigonometric Modeling of COVID-19 Cases in Saudi Arabia	Hazar A. Khogeer and Amani Alrumayh	Journal of Mathematics	https://doi.org/10.1155/jom/5309854
69	Statistical Analysis and Several Estimation Methods of New Alpha Power-Transformed Pareto Model with Applications in Insurance	Meshayil M. Alsolmi, Fatimah A. Almulhim, Meraou Mohammed Amine, Hassan M. Aljohani, Amani Alrumayh and Fateh Belouadah	Symmetry	https://doi.org/10.3390/sym16101367
70	Bayesian estimation and prediction under progressive-stress	Amulya Kumar Mahto, Yogesh Mani Tripathi, Sanku Dey, Basim S.O. Alsaedi, Marwan H. Alhelali, Fatimah M.	Alexandria Engineering Journal	https://doi.org/10.1016/j.aej.2024.05.045

	accelerated life test for a log-logistic model	Alghamdi, Amani Alrumayh , Etaf Alshawarbeh		
71	Inference for Compound Exponential XLindley Model with Applications to Lifetime Data	Fatimah M. Alghamdi, Mohammed Amine Meraou, Hassan M. Aljohani, Amani Alrumayh , Fathy H. Ryad, Sara Mohamed Ahmed Alsheikh and Meshayil M. Alsolmi	Symmetry	https://doi.org/10.3390/sym16050625
	Dr. Ahmed Saudi			
72	Uncertainty Principles for the Fractional Dunkl Transform	Imen Kallel Ahmed Saudi ,	International Journal of Analysis and Applications	10.28924/2291-8639-22-2024-224
73	Multidimensional continuous Bessel wavelet transform: properties and applications	Wafa Chabeh, Ahmed Saudi	Transforms and Integral Special Functions	10652469.2024.2427276/10.1080
74	Uncertainty Principles for the Weinstein Wavelet Transform	Amel Touati, Imen Kallel, Ahmed Saudi	International Journal of Applications Analysis and	211-2024-22-8639-2291/10.28924
75	On the fractional Opdam–Cherednik transform	Fida Bahba, Ahmed Saudi	Journal of Analysis The	10.1007/s41478-024-00772-x
76	Uncertainty Principle for the Weinstein-Gabor Transforms	Ahmed Saudi , Imen Kallel	International Journal of Applications Analysis and	94-2024-22-8639-2291/10.28924

77	Linear canonical Fourier–Bessel wavelet transform: properties and inequalities	Hassen Ben Mohamed, Ahmed Saudi	Transforms and Integral Special Functions	10652469.2024.2317724/10.1080
78	Hardy Type Theorems for Linear Canonical Dunkl Transform	Ahmed Saudi	Complex Analysis and Operator Theory	s11785-023-01478-x/10.1007
79	A Variation of Lp Local Uncertainty Principles for Weinstein Transform	Ahmed Saudi , Imen Kallel	of the Proceedings Romanian Academy, Series A: Mathematics, Physics, Technical Information ,Sciences Science	PRA-SER.A.25.1.01/10.59277
	Dr. Imen Kallel			
80	Uncertainty Principles for the Fractional Dunkl Transform	Imen Kallel Ahmed Saudi,	International Journal of Analysis and Applications	10.28924/2291-8639-22-2024-224
81	Adequate dynamical perspective of traveling wave solutions to the perturbed Boussinesq equation appearing in ocean engineering	Muhammad Zain Yousaf, Muhammad Abbas, Muhammad Kashif Iqbal, Imen Kallel	Journal of Ocean Engineering and Marine Energy	10.1007/s40722-024-00359-5
82	Uncertainty Principles for the Weinstein Wavelet Transform	Amel Touati, Imen Kallel , Ahmed Saudi	International Journal of Analysis and Applications	10.28924/2291-8639-22-2024-211
83	A Variation of Lp Local Uncertainty Principles for Weinstein Transform	Imen Kallel Ahmed Saudi,	Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical	10.59277/PRA-SER.A.25.1.01

			Sciences, Information Science	
84	Uncertainty Principle for the Weinstein-Gabor Transforms	Imen Kallel Ahmed Saoudi,	International Journal of Analysis and Applications	10.28924/2291-8639-22-2024-94
85	Solution of an algebraic linear system of equations using fixed point results in c*-algebra valued extended branciari sb-metric spaces	Khairul Habib Alam, Yumnam Rohen, Imen Ali Kallel, Junaid Ahmad	International Journal of Analysis and Applications	10.28924/2291-8639-22-2024-139
	Dr. M. I. Elashiry			
86	Existence and uniqueness of well-posed fractional boundary value problem	Yuanheng Wang, Barrira Jurrat, Muddasir Ejaz, Muhammad Azeem, M. I. Elashiry	Plos one	https://doi.org/10.1371/journal.pone.0303848
87	Decision Algorithm With Interval-Valued Intuitionistic Fuzzy Hamy Mean Aggregation Operators for Assessment of Agricultural Education Practice	FENGSHAN XIONG , WASEEM ABBAS , ABRAR HUSSAIN , KIFAYAT ULLAH , SHI YIN , NAN ZHANG , AND M. I. ELASHIRY	IEEE Access	https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10521635
88	Eigenvalues of Relatively Prime Graphs Connected with Finite Quasigroups	Muhammad Nadeem, Nwazish Ali, Hafiz Muhammad Bilal, Md. Ashraful Alam, M. I. Elashiry, Kholood Alnefaie	Journal of Mathematics	https://doi.org/10.1155/2024/7922914

89	An Algebraic Approach of Topological Indices Connected with Finite Quasigroups	Muhammad Nadeem, Md. Ashraful Alam, Nwazish Ali, M. I. Elashiry	Journal of Function Spaces	https://doi.org/10.1155/2024/7922914
90	Tubular surface generated by a curve lying on a regular surface and its characterizations	A. A. Abdel-Salam, M. I. Elashiry , and M. Khalifa Saad	AIMS Mathematics	http://www.aimspress.com/journal/Math
	Dr. Munirah Aljuaid			
91	Numerical solutions of boundary value problems via fixed point iteration	Mohammad Saif, Barakah Almarri, Munirah Aljuaid, Izhar Uddin	Computational and Applied Mathematics	https://link.springer.com/article/10.1007/s40314-024-02933-x
92	Norms of Composition Operators from Weighted Harmonic Bloch Spaces into Weighted Harmonic Zygmund Spaces	Munirah Aljuaid , M. A. Bakhit	Journal of Function Spaces	https://onlinelibrary.wiley.com/doi/10.1155/2024/5581805
93	Composition operators from harmonic H^{\wedge} space into harmonic Zygmund space	Munirah Aljuaid , M. A. Bakhit	AIMS Mathematics	https://www.aimspress.com/article/doi/10.3934/math.20231175?viewType=HTML
94	COMPOSITION OPERATORS ON THE SPACE OF HARMONIC MAPPING $V H$	Munirah Aljuaid	Journal of Mathematical Analysis	https://doi.org/10.54379/jma-2023-2-3
95	The Möbius Invariant QTH Spaces	Munirah Aljuaid	International Journal of Analysis and Applications	https://doi.org/10.28924/2291-8639-21-2023-21
	P. Abdellaziz Harrabi	-		

96	On a $m(x)$ $m(x)$ -polyharmonic Kirchhoff problem without any growth near 0 and Ambrosetti-Rabinowitz conditions	Harrabi, Abdellaziz ; Karim Hamdani, Mohamed search by orcid ; Fiscella, Alessio	Mathematical Methods in the Applied Sciences,	https://ui.adsabs.harvard.edu/abs/2024MMAS...47.8490H/abstract
97	MULTIPLICITY OF SOLUTIONS FOR A HIGHER m -POLYHARMONIC KIRCHHOFF TYPE EQUATION ON UNBOUNDED DOMAINS	Harrabi, Abdellaziz ; Karim Hamdani, Mohamed search by orcid ; Fiscella, Alessio	Discrete and Continuous Dynamical Systems -	2024. Doi: 10.3934/dcdss.2024089
98	Classification of stable solutions of p -polyharmonic problem	Abdellaziz Harrabi	Rev. Real Acad. Cienc. Exactas Fis. Nat. Ser. A-Mat. (https://link.springer.com/article/10.1007/s13398-024-01698-6
	Dr. Elzain Ahmed Elzain Gumma			
99	Analytical solutions of the space-time fractional Kadomtsev-Petviashvili equation using the (G'/G) -expansion method	Hassaballa, Abaker; Salih, Mohyaldein; Khamis, Gamal Saad Mohamed; Gumma, Elzain; Adam, Ahmed M. A.; Satty, Ali	Frontiers in Applied Mathematics and Statistics	DOI: 10.3389/FAMS.2024.1379937
100	Comparative Analysis of Machine Learning Algorithms for Investigating Myocardial Infarction Complications	Satty, Ali; Salih, Mohyaldein M. Y.; Hassaballa, Abaker A.; Gumma, Elzain A. E.; Abdallah, Ahmed; Khamis, Gamal Saad Mohamed	Engineering, Technology & Applied Science Research	DOI: 10.48084/ETASR.6691

101	Multiple and Singular Soliton Solutions for Space - Time Fractional Coupled Modified Korteweg - De Vries Equations	Hassaballa, Abaker A.; Birkea, Fathea M. O.; Adam, Ahmed M. A.; Satty, Ali; Gumma, Elzain A. E. ; Abdel-Salam, Emad A. - B.; Yousif, Eltayeb A.; Nouh, Mohamed I.	International Journal of Analysis and Applications	DOI: 10.28924/2291-8639-22-2024-68
102	Statistical Analysis of Factors Associated with Diarrhea in Yemeni Children under Five: Insights from the 2022-2023 Multiple Indicator Cluster Survey	Satty, Ali; Salih, Mohyaldein; Abdalla, Faroug A.; Mahmoud, Ashraf F. A.; Gumma, Elzain A. E. ; Khamis, Gamal Saad Mohamed; Adam, Ahmed M. A.; Hassaballa, Abaker A.; Hamed, Omer M. A.; Mohammed, Zakariya M. S.	Journal of Epidemiology and Global Health	DOI: 10.1007/S44197-024-00253-1
103	Exact solutions of the nonlinear space-time fractional Schamel equation	Elzain A. E. Gumma ; Abaker A. Hassaballa; Fathea M. O. Birkea; Ahmed M. A. Adam; Ali Satty; Emad A. B. Abdel-Salam; Eltayeb A. Yousif; Mohamed I. Nouh	International Journal of ADVANCED AND APPLIED SCIENCES	DOI: 10.21833/ijaas.2024.08.010
104	A Study on the Two Forms of (2+1)-Fractional Order Burgers Equation	Fathea M. O. Birkea; Ali Satty; Abaker A. Hassaballa; Ahmed M. A. Adam; Elzain A. E. Gumma ; Emad A-B. Abdel-Salam; Eltayeb A. Yousif; Mohamed I. Nouh	International Journal of Analysis and Applications	DOI: 10.28924/2291-8639-22-2024-134

105	A derivative-free algorithm for non-linear optimization with linear equality constraints	Gumma, E. A. E. ; Ali, M. Montaz; Hashim, M. H. A.	Optimization	DOI: 10.1080/02331934.2019.1690491
106	Analytical solution of nonlinear space-time fractional differential equations using the improved fractional Riccati expansion method	Abdel-Salam, Emad A-B.; Gumma, Elzain A. E.	Ain Shams Engineering Journal	DOI: 10.1016/J.ASEJ.2014.10.014
107	A derivative-free algorithm for linearly constrained optimization problems	Gumma, E. A. E. ; Hashim, M. H. A.; Ali, M. Montaz	Computational Optimization and Applications	DOI: 10.1007/S10589-013-9607-Y
108	Solution of Moving Boundary Space-Time Fractional Burger's Equation	Abdel-Salam, E. A-B; Yousif, E. A.; Arko, Y. A. S.; Gumma, E. A. E.	Journal of Applied Mathematics	DOI: 10.1155/2014/218092
	Dr. Mnahil M.Bashier			
109	Dual-phase-lag model on reflection of p- and SV- magneto-thermoplastic waves from half- of a isothermal boundary space	,S.M.Abo, A.EAbouelregal Mnahil M.Bashier ,Maha.M	Mechanics of Solids	http://doi.org/10.1134/S0025654424604567
110	and Hall Current on Rotation Rayleigh Waves in Transversely Visco-Thermoelastic Isotropic Half-Space with and without Energy Dissipation	M.Saif ,S.M.Abo-Dahab Mnahil M.Bashier . AIDien	Mechanics of Solids	DOI: 10.1134/S0025654424605020

111	Electrical Properties of Selenium Tellurium Chalcogenide Glass Doped with Antimony	A.Z. Mahmoud, Lamiaa Galal Amin, Safwat A.Mahmoud, Mnahil M. Bashier	International Journal of Thin Film science and Technology	http://dx.doi.org/10.18576/ijtfst/140101
112	Predictive Modeling of Breast Cancer Incidence: A Comparative Study of Fuzzy Time Series and Machine Learning Techniques	Ibtisam Daqqa, Abdullah M.Almarashi, Mnahil M. Bashier	Journal of Statistics Applications & Probability	https://www.naturalspublishing.com/Article.asp?ArtclD=30617
113	The profile of soliton molecules for integrable complex coupled Kuralay equations	Akhtar Hussain, Tarek F Ibrahim, Mnahil M. Bashier	Physica Scripta	https://doi.org/10.1088/1402-4896/ad999d
	Dr. Faizah J Alanazi			
114	Pattern recognition tools for output-based classification of synchronised Kuramoto states	Faizah J Alanazi , Markus Mueller , Stuart Townley	Elsevier IFAC-PapersOnLine	https://doi.org/10.1016/j.ifacol.2024.10.105
115	Learning and Phase Tracking by Frequency and Weight Adaptation for Coupled Networks of Kuramoto Oscillators	Faizah J Alanazi , Markus Mueller , Stuart Townley	SIAM Journal on Applied Dynamical Systems	https://doi.org/10.1137/23M1590639
	Dr. F. M. Osman Birkea			
116	A discussion on the Lie symmetry analysis, travelling wave solutions and conservation laws of new generalized stochastic potential-KdV equation	RAT Naseem Abbas , Akhtar Husain, Muhmmad Bilal Raiz , Tarek F. Ibrahim , F. M. Osman Birkea	Results in Physics	https://doi.org/10.1016/j.rinp.2023.107302

117	Exact solutions for the Cahn–Hilliard equation in terms of Weierstrass-elliptic and Jacobi-elliptic functions	Akhtar Hussain, Tarek F. Ibrahim, F. M. Osman Birkea , Abeer M. Alotaibi, Bushra R. Al-Sinan & Herbert Mukalazi	Scientific Reports	https://doi.org/10.1016/j.rinp.2023.107302
118	Optimal system, invariant solutions and dynamics of the solitons for the Wazwaz Benjamin Bona Mahony equation	Naseem Abbas, Firdous Bibi, Akhtar Hussain, Tarek F Ibrahim, Arafa A Dawood, Fathea M Osman Birkea , Ahmed M Hassan	Alexandria Engineering Journal	https://www.sciencedirect.com/science/article/pii/S1110016824001625
119	Dynamical behavior of analytical soliton solutions to the Kuralay equations via symbolic computation	Akhtar Hussain, Tarek F Ibrahim, Fathea M Osman Birkea , Bushra R Al-Sinan	Nonlinear Dynamics	https://link.springer.com/article/10.1007/s11071-024-10101-3
120	Early detection of chronic kidney disease using eurygasters optimization algorithm with ensemble deep learning approach	Sulima M Awad Yousif, Hanan T Halawani, Ghada Amoudi, Fathea M Osman Birkea , Arwa MR Almunajam, Azhari A Elhag	Alexandria Engineering Journal	https://www.sciencedirect.com/science/article/pii/S1110016824004800
121	Dynamic processes of quartic autocatalysis chemical reaction in Williamson nanofluid flow over a parabolic surface	Noor Saeed Khan, Shaheen Akhter, Imen Kebaili, Fathea M Osman Birkea , Ria H Egami	Thermal Science and Engineering Progress	https://www.researchgate.net/publication/383364048_Dynamic_processes_of_quartic_autocatalysis_chemical_reaction_in_Williamson_nanofluid_flow_over_a_parabolic_surface
122	Abundant analytical solutions and diverse solitonic patterns for the complex Ginzburg–Landau equation	Akhtar Hussain, Tarek F Ibrahim, Fathea MO Birkea , BR Al-Sinan, Abeer M Alotaibi	Chaos, Solitons & Fractals	https://www.sciencedirect.com/science/article/abs/pii/S0960077924006234

123	Improvement of cold storage efficiency with loading hybrid nanoparticles and utilizing porous media	Fathea M Osman Birkea , Adel Almarashi, Hussein AZ AL-bonsrulah, M Saif Aldien, Amani Hassan Makkawi, Sherain MY Mohamed	Case Studies in Thermal Engineering	https://www.sciencedirect.com/science/article/pii/S2214157X2400916X#:~:text=Specifically%2C%20the%20addition%20of%20hybrid,storage%20time%20of%20around%2090.69%20%25.
124	Analyzing a Dynamical System with Harmonic Mean Incidence Rate Using Volterra–Lyapunov Matrices and Fractal-Fractional Operators	Muhammad Riaz, Faez A Alqarni, Khaled Aldwoah, Fathea M Osman Birkea , Manel Hleili	Fractal and Fractional	https://www.mdpi.com/2504-3110/8/6/321
125	Intelligent faculty evaluation and ranking system based on N-framed plithogenic fuzzy hypersoft set and extended NR-TOPSIS	Usman Afzal, Muhammad Rayees Ahmad, Nazek Alessa, Nauman Raza, Fathea MO Birkea , Salem Alkhalaf, Nader Omer	Alexandria Engineering Journal	https://www.sciencedirect.com/science/article/pii/S1110016824009591
126	Symmetry analysis, conservation laws and exact soliton solutions for the -dimensional modified Zakharov–Kuznetsov equation in plasmas with magnetic fields	Akhtar Hussain, Naseem Abbas, Tarek F Ibrahim, Fathea M Osman Birkea , Bushra R Al-Sinan	Optical and Quantum Electronics	
127	On modified Mittag–Leffler coupled hybrid fractional system constrained by Dhage hybrid fixed point in Banach algebra	Mohammed A Almalahi, Khaled Aldowah, Faez Alqarni, Manel Hleili, Kamal Shah, Fathea MO Birkea	Scientific Reports	https://www.nature.com/articles/s41598-024-81568-8
128	A Study on the Two Forms of (2+1)-Fractional Order Burgers Equation	Fathea MO Birkea , Ali Satty, Abaker A Hassaballa, Ahmed MA Adam, Elzain AE Gumma, Emad AB Abdel-	International Journal of Analysis and Applications	https://www.etamaths.com/index.php/ijaa/article/view/3330



		Salam, Eltayeb A Yousif, Mohamed I Nouh		
	Dr. Asma Alanazy			
129	Thermal case exploration of electromagnetic radiative tri-hybrid nanofluid flow in Bi-directional stretching device in absorbent medium: SQLM analysis	M.D. Shamsuddin ^a , S.O. Salawu ^b , Subhajit Panda ^c , S.R . Mishra ^d , Asma Alanazy ^e , Mohamed R. Eid	Case Studies in Thermal Engineering	https://www.sciencedirect.com/science/article/pii/S2214157X24007652
130	A Novel Procedure in Scrutinizing a Cantilever Beam with Tip Mass: Analytic and Bifurcation	Asma Alanazy Galal M. Moatimid T. S. Amer Mona A. A. Mohamed and M. K. Abohamer	Axioms	https://www.mdpi.com/2075-1680/14/1/16A