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التخصص العام/ التخصص الدقيق

رياضيات/ الجبر (مصفوفات وتحويلات خطية)

الرتبة الأكاديمية: أستاذ دكتور

المؤهلات العلمية:

1	2009 - 2013 البرنامج : دكتوراه رياضيات التخصص : رياضيات عنوان الرسالة : Young and Heinz norm inequalities for Hilbert space operators المعدل التراكمي : ٣.٨٨ من ٤ الجامعة : الجامعة الأردنية - الأردن
2	2002 - 2005 البرنامج : ماجستير رياضيات التخصص : رياضيات عنوان الرسالة : Inequalities for eigenvalues المعدل التراكمي : ٤ من ٤ الجامعة : الجامعة الأردنية - الأردن
3	1998 - 2002 البرنامج : بكالوريوس رياضيات المعدل التراكمي : ٣.٦٩ من ٤ (ممتاز) الجامعة : الجامعة الأردنية - الأردن



جامعة الزرقاء - الأردن

السيرة الذاتية

العضويات:

عميد كلية العلوم/ جامعة الزرقاء 09/2024-الآن
عميد كلية العلوم/ جامعة الزرقاء 02/2024- 09/2018
نائب عميد كلية العلوم/ جامعة الزرقاء 09/2018- 09/2017
رئيس قسم وحدة المساقات الخدمية/ جامعة الزرقاء 5/2015-9/2017
عضو مجلس العمداء/ جامعة الزرقاء (عدة مرات)
عضو لجنة التعيين والترقية / جامعة الزرقاء ٢٠٢٦/٢٠٢٥
عضو مجلس الاعتماد و ضمان الجودة / جامعة الزرقاء (عدة مرات)
عضو لجنة التدقيق الداخلي/ جامعة الزرقاء (عدة مرات)
عضو مجلس كلية العلوم/ جامعة الزرقاء (عدة مرات)
رئيس اللجنة التنظيمية للمؤتمر العربي الدولي السادس لعلوم الرياضيات، جامعة الزرقاء
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الخبرات التدريسية:

الآن	2025	أستاذ دكتور، كلية العلوم- جامعة الزرقاء
2025	2020	أستاذ مشارك، كلية العلوم- جامعة الزرقاء
2020	2013	أستاذ مساعد، كلية العلوم- جامعة الزرقاء
2013	2006	محاضر متفرغ، كلية العلوم- جامعة الزرقاء
	عدة مرات	محاضر غير متفرغ في الجامعة الأردنية

المواد الدراسية:

مقررات البكالوريوس:

التفاضل والتكامل، الجبر الخطي، تحليل المصفوفات، التحليل الحقيقي، نظرية الأعداد، الجبر المجرد، المعادلات التفاضلية العادية، المعادلات التفاضلية الجزئية، مواضيع خاصة في الرياضيات.

مقررات الدراسات العليا:

تحليل المصفوفات، الجبر المجرد، مواضيع خاصة في الرياضيات.





الأبحاث المنشورة والمقبولة للنشر:

ت	عنوان البحث	جهة النشر	السنة
1	Refinements of the Heinz Inequality for Operators via the Hermite-Hadamard Inequality	International Arab Conference on Mathematics and Computations	(2014)
2	Reverses of Young Type Inequalities	Journal of Mathematical Inequalities	(2015)
3	Improved Cauchy-Schwarz Norm Inequality for Operators	Journal of Mathematical Inequalities	(2016)
4	Best ∞ -Simultaneous Approximation in Banach Lattice Function Spaces	Journal of Mathematical and Computational Science	(2016)
5	Singular Value and Norm Inequalities Associated with 2×2 Positive Semidefinite Block Matrices	Electronic Journal of Linear Algebra	(2017)
6	Further Results Involving Positive Semidefinite Block Matrices	Far East Journal of Mathematical Sciences	(2018)
7	Comparisons of Heinz Operator Means with Different Parameters	Malaysian Journal of Science	(2019)
8	Generalizations of numerical radius inequalities related to block matrices	Filomat	(2019)
9	Results on Sequential Conformable Fractional Derivatives with Applications	Journal of Computational Analysis and Applications	(2021)
10	A New Integral Transform: ARA Transform and Its Properties and Applications	Symmetry	(2020)
11	Best Simultaneous Approximation on Metric Spaces via Monotonous Norms	Filomat	(2021)
12	A New Attractive Method in Solving Families of Fractional Differential Equations by a New Transform	Mathematics	(2021)
13	A Novel Numerical Approach in Solving Fractional Neutral Pantograph Equations via the ARA Integral Transform	Symmetry	(2022)
14	New Results for Arithmetic-Geometric Mean Inequality and Singular Values of Matrices	Wseas Transactions on Mathematics	(2022)
15	A new efficient technique using Laplace transforms and smooth expansions to construct a series solution to the time-fractional Navier-Stokes equations	Alexandria Engineering Journal	(2022)
16	New ordering relations for the Heinz means via hyperbolic functions.	Journal of Mathematical Inequalities	(2022)
17	Reliable solutions to fractional Lane-Emden equations via Laplace transform and residual error function	Alexandria Engineering Journal	(2022)
18	New Theorems in Solving Families of Improper Integrals	Axioms	(2022)



(2022)	Mathematics	On the Double ARA-Sumudu Transform and Its Applications	19
(2022)	Symmetry	Applications on Double ARA-Sumudu Transform in Solving Fractional Partial Differential Equations	20
(2022)	Mathematical Problems in Engineering	Application of ARA-Residual Power Series Method in Solving Systems of Fractional Differential Equations	21
(2022)	Alexandria Engineering Journal	ARA-residual power series method for solving partial fractional differential equations	22
(2022)	Fractal and Fractional	Analytical Solutions of the Nonlinear Time-Fractional Coupled Boussinesq-Burger Equations Using Laplace Residual Power Series Technique	23
(2022)	Fractal and Fractional	Constructing Analytical Solutions of the Fractional Riccati Differential Equations Using Laplace Residual Power Series Method	24
(2023)	Filomat	New efficient and accurate bounds for zeros of a polynomial based on similarity of companion complex matrices	25
(2023)	Filomat	Some generalizations of numerical radius inequalities including the off-diagonal parts of block matrices	26
(2023)	Journal of Applied Mathematics	Improvements of Logarithmic and Identric Mean Inequalities for Scalars and Operators	27
(2023)	In the Implementation of Smart Technologies for Business Success and Sustainability	The Effectiveness Degree of Distance Learning at Zarqa University in Light of Corona Pandemic from Faculty Members' and Students' Point of View	28
(2023)	CMES-Computer Modeling in Engineering & Sciences	On Time Fractional Partial Differential Equations and Their Solution by Certain Formable Transform Decomposition Method	29
(2023)	Fractal and Fractional	Using Laplace Residual Power Series Method in Solving Coupled Fractional Neutron Diffusion Equations with Delayed Neutrons System	30
(2023)	Fractal and Fractional	A Novel Scheme of the ARA Transform for Solving Systems of Partial Fractional Differential Equations	31
(2023)	European Journal of Pure and Applied Mathematics	New bounds for the Eigenvalues of Matrix Polynomials	32
(2023)	Journal of Mathematical Inequalities	Generalization of Some Unitarily Invariant Norm Inequalities for Matrices	33
(2023)	Mathematical Methods in the Applied Sciences	Adapting a new formula to generalize multidimensional transforms	34
(2023)	Mathematical Methods in the Applied Sciences	A study of double general transform for solving fractional partial differential equations	35
(2023)	Appl. Math	Applications of the ARA-Residual Power Series Technique to Physical Phenomena	36





(2023)	In International Conference on Mathematics and Computations	Estimations of the Bounds for the Zeros of Polynomials Using Matrices	37
(2023)	In International Conference on Mathematics and Computations	New Estimations for Zeros of Polynomials Using Numerical Radius and Similarity of Matrices	38
(2023)	AIMS Mathematics	Analytical Solutions to The Coupled Fractional Neutron Diffusion Equations with Delayed Neutrons System Using Laplace Transform Method	39
(2023)	Journal of Mathematical Inequalities	Generalized Numerical Radius Inequalities Involving Positive Semidefinite Block Matrices	40
(2023)	European Journal of Pure and Applied Mathematics	Adapting Integral Transforms to Create Solitary Solutions for Partial Differential Equations via A New Approach	41
(2023)	Frontiers in Physics	A Solution for the Neutron Diffusion Equation in the Spherical and Hemispherical Reactors Using the Residual Power Series	42
(2023)	Applied and Computational Mathematics	Trustworthy Analytical Technique for Generating Multiple Solutions to Fractional Boundary Value Problems	43
(2024)	Journal of Applied Mathematics	Analytical Approximate Solutions of Caputo Fractional KdV-Burgers Equations Using Laplace Residual Power Series Technique	44
(2024)	Fractals	A Modern Traveling Wave Solution for Caputo Fractional Klein–Gordon Equations	45
(2024)	Atoms	The Optical Model Absorption Term in the Frame of Fractional Derivatives	46
(2024)	Fractals	A New Algorithm for Generating Power Series Solutions for A Broad Class of Fractional Pdes: Applications to Interesting Problems	47
(2024)	Journal of Mathematical Inequalities	Some Singular Value Inequalities for Matrices	48
(2024)	Filomat	Interpolating Numerical Radius Inequalities for Positive Semidefinite Block Matrices.	49
(2024)	AIP Conference Proceedings	New Algebraic Insights to the Goldbach Conjecture	50
(2025)	Progress in Fractional Differentiation and Applications	Semi-Analytical Technique for Solving the Time-Fractional Kaup-Kupershmidt Equation	51
(2025)	European Journal of Pure and Applied Mathematics,	Refinements of Reverse Young Inequality for Scalars and Matrices	52
(2025)	The European Physical Journal Plus	Limit residual function method and applications to PDE models	53
(2025)	Partial Differential Equations in Applied Mathematics	An Analytical Solution to the Fractional Fredholm–Volterra Integro-Differential Equation Using the Limit Residual Function Technique	54
(2025)	European Journal of Pure and Applied Mathematics	Employing the Limit Residual Function Method to Solve Systems of Fractional Differential Equations	55





(2025)	Alexandria Engineering Journal	A professional semi-analytical method to construct series solution to singular and nonsingular differential equations	56
(2025)	Progress in Fractional Differentiation and Applications	Limit-Residual Function Method: A New Approach to Creating a Power Series Solution for Fractional Differential Equations	57
(2025)	Fractals	An Innovative Analytical Method for Solving the Fractional Caudrey Dodd Gibbon Equation	58
(2025)	Journal of Mathematics and Computer Science	Constructing Series Approximate Solutions of Ordinary Differential Equations Using the Limit Residual Function Method	59

الكتب:

ت	عنوان الكتاب	جهة النشر	السنة
1	Computational Mathematics and Applications	Springer Nature	2020
2	Mathematics and Computation	Springer Nature	2023
3	Mathematical Analysis and Numerical Methods	Springer Nature	2024

المؤتمرات العلمية:

ت	اسم المؤتمر	الجهة المنظمة	طبيعة المشاركة
1	International Arab Conference on Mathematics and Computations 23-25/04/2014	Zarqa University	Refinements of the Heinz Inequality for Operators via the Hermite-Hadamard Inequality
2	International Conference on Mathematical Sciences and Statistics 60-08/02/2018	Putra University Malaysia	Comparison of Heinz Operators Means with Different Parameters
3	The 6 th International Arab Conference on Mathematics and Computations 24-26/04/2019	Zarqa University	Conference Chairman
4	The 7 th International Arab Conference on Mathematics and Computations 11-13/05/2022	Zarqa University	Conference Chairman
5	The 8 th International Arab Conference on Mathematics and Computations 10-12/05/2023	Zarqa University	Conference Chairman



New Algebraic Insights to the Gold Bach Conjecture	UKM	The 5th International Conference on Mathematical Sciences 2023 16-17/05/2023	6
Further Results Related to the Numerical Radius of Block Matrices	American University of Sharjah	The 4th International Conference on Mathematics and Statistics 20-22/02/2025	7
Conference Chairman	Zarqa University	The 9th International Arab Conference on Mathematics and Computations 07-09/05/2025	8
Efficient Implementation of The Residual Function for Solving Systems of Ordinary Differential Equations	Agri Ibrahim Cecen University	The 8th International conference on Advances in Natural and Applied Sciences 28-31/11/2025	9

الإشراف على الرسائل الجامعية:

السنة	الجامعة	عنوان الرسالة	اسم الطالب	ت
2016	جامعة الزرقاء	Spectral radius, numerical radius and unitarily invariant norm inequalities in Hilbert space	دعاء السعافين	1
2017	جامعة الزرقاء	Comparison of various means for numbers and matrices	وفاء نصار المرشد	2
2018	جامعة الزرقاء	Inequalities related to positive semidefinite block matrices	أحمد أبو رحمة	3
2020	جامعة الزرقاء	Inequalities of means for numbers and matrices	فاطمة السعافين	4
2020	جامعة الزرقاء	Bounds for zeros of polynomials	أحمد الصوافطة	5
2022	جامعة الزرقاء	New Estimation for the Zeros of Polynomials Using Refinements of Numerical Radius Inequalities	سعيد الخليلي	6
2022	جامعة الزرقاء	Location Eigenvalues of Matrix Polynomials	حمدان دبابش	7
2022	جامعة الزرقاء	Generalized Hyperbolic Function and Matrix Means	عبير أبو سنيته	8
2023	جامعة الزرقاء	Generalizations on Numerical Radius and Some Related Inequalities	بهاء الدين النداف	9
2023	جامعة الزرقاء	Refinements of Some Classical Inequalities for Scalars and Matrices	علا رمضان	10
2023	جامعة الزرقاء	The Numerical Radius of Block Matrices and Some Applications	عارف سرحان	11
2023	جامعة الزرقاء	Application on Singular Value Decomposition of Matrices	روان أبو حفيظة	12





2024	جامعة الزرقاء	Singular Value and Norm Inequalities for Functions of Matrices	روان صمادي	13
2025	جامعة الزرقاء	Adapting The Cartesian Decomposition Of Matrices To Locate The Zeros Of Polynomials	محمد أبو سيف	14
2025	جامعة الزرقاء	On Cauchy-Schwarz Inequality and Applications	صهيب جبر	15
2025	جامعة الزرقاء	Constructing An Analytical Method to Determine the Coefficients in a Power Series Solution	مالك أبو خروب	16

المعلومات الشخصية:

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