



د. علياء عبد الجواد عمر برقان

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التخصص العام/ التخصص الدقيق

رياضيات/ الجبر (مصفوفات وتحولات خطية)

الرتبة الأكاديمية: أستاذ مشارك

العضويات:

عضو مجلس الاعتماد و ضمان الجودة - جامعة الزرقاء (عدة مرات)
عضو لجنة التدقيق الداخلي - جامعة الزرقاء (عدة مرات)
عضو اللجنة التحضيرية للمؤتمر الثاني لعلوم الرياضيات - جامعة الزرقاء
عضو اللجنة التحضيرية للمؤتمر الثالث لعلوم الرياضيات - جامعة الزرقاء
عضو اللجنة التحضيرية للمؤتمر العربي الدولي الرابع لعلوم الرياضيات - جامعة الزرقاء
عضو اللجنة التحضيرية للمؤتمر العربي الدولي الخامس لعلوم الرياضيات - جامعة الزرقاء
رئيس اللجنة التنظيمية للمؤتمر العربي الدولي السادس لعلوم الرياضيات - جامعة الزرقاء
رئيس اللجنة التنظيمية للمؤتمر العربي الدولي السابع لعلوم الرياضيات - جامعة الزرقاء
رئيس اللجنة التنظيمية للمؤتمر العربي الدولي الثامن لعلوم الرياضيات - جامعة الزرقاء
عضو مجلس كلية العلوم (عدة مرات)
رئيس قسم وحدة المساقات الخدمية 5/2015 – 9/2017
نائب عميد كلية العلوم 9/2017-9/2018
عميد كلية العلوم 02/2024 - 09/2018

المؤهلات العلمية:

2013 - 2009	البرنامج : دكتوراه رياضيات التخصص : رياضيات عنوان الرسالة : Young and Heinz norm inequalities for Hilbert space operators الجامعة : الجامعة الأردنية - الأردن التقدير : ممتاز	1
2005 – 2002	البرنامج : ماجستير رياضيات التخصص : رياضيات عنوان الرسالة : Inequalities for eigenvalues الجامعة : الجامعة الأردنية – الأردن التقدير : ممتاز	2



2002 – 1998	3
البرنامج : بكالوريوس رياضيات	
الجامعة : الجامعة الأردنية - الأردن	
التقدير : ممتاز	

الخبرات التدريسية:

الآن	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

الأبحاث المنشورة والمقبولة للنشر:

السنة	جهة النشر	عنوان البحث	ت
(2014)	International Arab Conference on Mathematics and Computations	Refinements of the Heinz Inequality for Operators via the Hermite-Hadamard Inequality	1
(2015)	Journal of Mathematical Inequalities	Reverses of Young Type Inequalities	2
(2016)	Journal of Mathematical Inequalities	Improved Cauchy-Schwarz Norm Inequality for Operators	3
(2016)	Journal of Mathematical and Computational Science	Best ∞ -Simultaneous Approximation in Banach Lattice Function Spaces	4
(2017)	Electronic Journal of Linear Algebra	Singular Value and Norm Inequalities Associated with 2×2 Positive Semidefinite Block Matrices	5
(2018)	Far East Journal of Mathematical Sciences	Further Results Involving Positive Semidefinite Block Matrices	6
(2019)	Malaysian Journal of Science	Comparisons of Heinz Operator Means with Different Parameters	7
(2019)	Filomat	Generalizations of numerical radius inequalities related to block matrices	8
(2021)	Journal of Computational Analysis and Applications	Results on Sequential Conformable Fractional Derivatives with Applications	9
(2020)	Symmetry	A New Integral Transform: ARA Transform and Its Properties and Applications	10
(2021)	Filomat	Best Simultaneous Approximation on Metric Spaces via	11



		Monotonous Norms	
(2021)	Mathematics	A New Attractive Method in Solving Families of Fractional Differential Equations by a New Transform	12
(2022)	Symmetry	A Novel Numerical Approach in Solving Fractional Neutral Pantograph Equations via the ARA Integral Transform	13
(2022)	WSEAS Transactions on Mathematics	New Results for Arithmetic–Geometric Mean Inequality and Singular Values of Matrices	14
(2022)	Alexandria Engineering Journal	A new efficient technique using Laplace transforms and smooth expansions to construct a series solution to the time-fractional Navier-Stokes equations	15
(2022)	Journal of Mathematical Inequalities	New ordering relations for the Heinz means via hyperbolic functions.	16
(2022)	Alexandria Engineering Journal	Reliable solutions to fractional Lane-Emden equations via Laplace transform and residual error function	17
(2022)	Axioms	New Theorems in Solving Families of Improper Integrals	18
(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)	Fractl and Fractional	Analytical Solutions of the Nonlinear Time-Fractional Coupled Boussinesq-Burger Equations Using Laplace Residual Power Series Technique	23
(2022)	Fractl 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)	Fractl and Fractional	Using Laplace Residual Power Series Method in Solving Coupled Fractional Neutron Diffusion Equations with Delayed Neutrons System	30
(2023)	Fractl 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
Accepted	Progress in Fractional Differentiation and Applications	Semi-Analytical Technique for Solving the Time-Fractional Kaup-Kupershmidt Equation	48
Accepted	Journal of Mathematical Inequalities	Some Singular Value Inequalities for Matrices	49
Accepted	Filomat	Interpolating Numerical Radius Inequalities for Positive Semidefinite Block Matrices.	50
(2024)	AIP Conference Proceedings	New Algebraic Insights to the Goldbach Conjecture	51

الكتب:

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



المؤتمرات العلمية:

ت	اسم المؤتمر	الجهة المنظمة	طبيعة المشاركة	فترة المؤتمر
1	International Arab Conference on Mathematics and Computations	Zarqa University	Refinements of the Heinz Inequality for Operators via the Hermite-Hadamard Inequality	23-25/04/2014
2	International Conference on Mathematical Sciences and Statistics 2018	Putra University Malaysia	Comparison of Heinz Operators Means with Different Parameters	06-08/02/2018
3	The 6 th International Arab Conference on Mathematics and Computations	Zarqa University	Conference Chairman	24-26/04/2019
4	The 7 th International Arab Conference on Mathematics and Computations	Zarqa University	Conference Chairman	11-13/05/2022
5	The 8 th International Arab Conference on Mathematics and Computations	Zarqa University	Conference Chairman	10-12/05/2023
6	The 5th International Conference on Mathematical Sciences 2023	UKM	New Algebraic Insights to the Goldbach Conjecture	16-17/05/2023



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 سنينه	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

المعلومات الشخصية:

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