

## **CURRICULUM VITAE**



### **PERSONAL**

Name:	Fuad A. Kittaneh
Place and Date of Birth:	Nazleh Garbieh, September 20, 1955
Nationality:	Jordanian
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### **EDUCATION**

1. B.Sc. in Mathematics, The University of Jordan, 1976.
2. M.Sc. in Mathematics, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 1978.
3. Ph.D. in Mathematics, Indiana University, Bloomington, Indiana, U.S.A. 1982.

Title of M.Sc. Thesis: Conditions Implying Normality in Hilbert Space.

Title of Ph.D. Thesis: Commutators of  $C_p$  Type.

Fields of Specialization: Functional Analysis, Matrix Analysis, and Operator Theory.

### **EXPERIENCE**

1. Research Assistant, King Fahd University of Petroleum and Minerals, 1976-1977.
2. Instructor, King Fahd University of Petroleum and Minerals, 1977-1978.
3. Associate Instructor, Indiana University, 1978-1982.
4. Assistant Professor, United Arab Emirates University, 1982-1987.
5. Assistant Professor, Kuwait University, 1987-1989.
6. Associate Professor, Kuwait University, 1989-1990.
7. Visiting Scholar, Indiana University, 1990-1991.
8. Associate Professor, The University of Jordan, 1991-1994.
9. Professor, The University of Jordan, 1994-Present.
10. Professor, Jordan University for Women (Petra University), 1998-1999 (On Sabbatical Leave).

11. Professor, Al-Zaytoonah University, 2005-2006 (On Sabbatical Leave).
12. Professor, Al-Ahliyya Amman University, 2013-2014 (On Sabbatical Leave).

### ***TEACHING RECORD***

I have taught the following courses

I- At the University of Jordan

1. Calculus I
2. Mathematics for Business
3. Foundations of Mathematics
4. Linear Algebra I and II
5. Mathematical Analysis I and II
6. Real Analysis
7. Matrix Theory
8. Matrix Analysis
9. Advanced Matrix Analysis
10. Complex Analysis
11. Functional Analysis
12. Advanced Functional Analysis
13. Operator Theory
14. Theory of Inequalities
15. Selected Topics in Mathematics

II- At Al-Ahliyya Amman University

1. Calculus I and II

III- At Al-Zaytoonah University

1. Calculus I
2. Linear Algebra I and II
3. Set Theorey
4. Special Functions
5. Functional Analysis
6. Selected Topics in Mathematics

IV- At Jordan University for Women (Petra University)

1. Linear Algebra I and II
2. Calculus III
3. Real Analysis
4. Applied Mathematics
5. Calculus of Variations

V- At Indiana University

1. Finite Mathematics
2. Calculus I
3. Linear Algebra

VI- At Kuwait University

1. Calculus I and II
2. Linear Algebra
3. Differential Equations
4. Real Analysis I and II

VII- At the United Arab Emirates University

1. Precalculus Mathematics
2. Calculus I
3. Mathematics for Medicine
4. Mathematics for Engineering III and IV
5. Linear Algebra I and II
6. Abstract Algebra I and II
7. Real Analysis
8. Complex Analysis
9. Differential Geometry
10. Measure Theory
11. Selected Topics in Mathematics

VIII- At King Fahd University of Petroleum and Minerals

1. Precalculus Mathematics
2. Calculus II

IX- I have supervised the theses of more than seventy M.Sc. and Ph.D. students.

X- I have been invited to give talks at several international leading universities and institutes, including Tohokou University, the University of Toronto, the Indian Statistical Institute, and the Institute of Mathematics of the Polish Academy of Sciences.

**CONFERENCES**

1. The American Mathematical Society Annual Meeting, Louisville, Kentucky, U.S.A., January 1984.
2. The Mathematical Analysis and Its Applications Conference, Department of Mathematics, Kuwait University, Kuwait, February 1985.
3. The Workshop on Global Differential Geometry, International Center for Theoretical Physics, Trieste, Italy, September 1986.
4. The American Mathematical Society Annual Meeting, Phoenix, Arizona, U.S.A., January 1989.
5. The Third International Linear Algebra Society Meeting, Pensacola, Florida, U.S.A., March 1993.
6. The First Annual Conference of the Palestinian Society of Mathematical Sciences, Birzeit University, Palestine, June 1993.
7. The Fourth International Linear Algebra Society Meeting, Rotterdam, The Netherlands, August 1994.
8. The Second Jordanian Mathematical Conference, Mutah University, Jordan, September 1994.
9. The Second Annual Conference of the Palestinian Society of Mathematical Sciences, Birzeit University, Palestine, August 1998.
10. The Conference in Mathematical Analysis and Applications, American University of Sharjah, U.A.E., May 2001.
11. The 19<sup>th</sup> International Conference on Operator Theory, Timisoara, Romania, June 2002.
12. The Joint AMS-India Mathematics Meeting, Bangalore, India, December 2003.
13. The Second International Conference on Mathematical Sciences, Al-Ain, U.A.E., December 2004.

14. The Third Seminar on Linear Algebra and Its Applications, Kerman, Iran, December 2004.
15. The 2005 KOTAC International Conference: Operator Theory and Its Applications, Daegu, Korea, June 2005.
16. The Conference on Operator Theory and Operator Algebras, Tohokou University, Japan, November 2006.
17. Conference on Ordered Statistical Data and Inequalities, The University of Jordan, Jordan, June 2007.
18. Conference on Inequalities and Applications 0'7, Noszvaj, Hungary, September 2007.
19. The Fifth Linear Algebra Workshop, Kranjska Gora, Slovenia, May 2008.
20. Conference on Numerical Matrix Analysis and Operator Theory, Helsinki, Finland, September 2008
21. Ukrainian Mathematical Congress-2009, Kiev, Ukraine, August 2009.
22. Operator Theory and Applications: Perspectives and Challenges, Jurata, Poland, March 2010.
23. World Innovation Summit for Education, Doha, Qatar, December 2010.
24. Operator Theory and Its Applications, Gothenburg, Sweden, April 2011.
25. The Annual Meeting of the Society of Colleges of Science in Arab Universities, Kaslik, Lebanon, February 2012.
26. Fifth Saudi Science Conference, Makkah, Saudi Arabia, April 2012.
27. International Conference on Discrete Mathematics and Computer Science, Beirut, Lebanon, November 2012.
28. The 6<sup>th</sup> International Conference on Information Technology, Al-Zaytoonah University, Jordan, May 2013.
29. The 18<sup>th</sup> International Linear Algebra Society Meeting, Providence, Rhode Island, U.S.A., June 2013.
30. International Congress in Honour of Professor Ravi P. Agarwal, Bursa, Turkey, June 2014.
31. Mat Triad 2015, Coimbra, Portugal, September 2015.
32. International Conference of the Euro-Maghreb Laboratory of Mathematics and their Interactions, Hammamet, Tunisia, April 2016.
33. Second International Congress on Operator Theory and Applications, El-Oued, Algeria, November 2016.
34. The 21<sup>st</sup> International Linear Algebra Society Meeting, Ames, Iowa, U.S.A., July 2017.
35. The International Conference on Algebra and Related Topics (ICART 2018), Rabat, Morocco, July 2018.

### ***MEMBERSHIP IN MATHEMATICAL SOCIETIES AND EDITORIAL BOARDS***

I am a member of the American Mathematical Society, a reviewer for Mathematical Reviews and Zentralblatt MATH, and a referee for many leading mathematical journals of highest international reputation. I am on the editorial boards of twenty international mathematical journals, most of which are indexed in Scopus or ISI, including Algebra, Banach Journal of Mathematical Analysis, Bulletin of the Malaysian Mathematical Society, Bulletin of Mathematical Analysis and Application, Filomat, ISRN Algebra, Journal of Inequalities and Applications, Journal of Inequalities in Pure and Applied Mathematics, Journal of Inequalities and Special Functions, Konuralp Journal of Mathematics, Operators and Matrices, The Scientific World Journal, and Special Issues of Linear Algebra and its Applications in honor of Rajendra Bhatia and Roger Horn.

## ***HONORS AND AWARDS***

1. Winner of the Abdul Hameed Shoman Prize for Young Arab Scientists, June 1987.
2. Winner of TWAS Associate Membership Scheme at Centers of Excellence in the South, August 1995.
3. Member of the Selection Committee of the King Faisal International Prize in Science, November 2001 and December 2005.
4. Winner of the Ministry of Higher Education Prize for Distinguished Scientific Research, May 2003.
5. Participant in the EU Marie Curie Program of Transfer of Knowledge at the Institute of Mathematics of the Polish Academy of Sciences, August-September 2008 and May-June 2009.
6. Winner of Scopus Certificate Award, April 2009.
7. Winner of the University of Jordan Prize for Distinguished Researcher, June 2012.
8. Winner of the Ali Mango Award for Distinguished Researcher, June 2014.
9. Winner of the Faculty of Science Award for Distinguished Researcher, March 2015.

## ***ADMINISTRATION AND COMMITTEE SERVICE***

1. Chairman of the Mathematics Department at the University of Jordan, 2000-2005.
2. Dean of Academic Research at the University of Jordan, 2009-2010.
3. Acting Vice President for Scientific Research, Graduate Studies, and Quality at the University of Jordan, September-October 2010.
4. Dean of the Faculty of Science at the University of Jordan, 2011-2012.
5. President of Hamdi Mango Center for Scientific Research at the University of Jordan, 2008-2012.
6. Dean of Graduate Studies and Scientific Research at Al-Ahliyya Amman University, 2013-2014.
7. I have served on the following committees:

### **I- At the University of Jordan**

1. Graduate Studies Committee
2. Scientific Research Committee
3. Curriculum Committee
4. Colloquium Committee
5. Library Committee
6. Council of Faculty of Science Committee
7. Journal Accreditation Committee
8. Appointment and Promotion Committee
9. Supreme Committee to Develop a Research Strategy
10. Several Ad Hoc Committees

### **II- Al-Ahliyya Amman University**

1. Scientific Research Committee
2. Graduate Studies Committee
3. Appointment and Promotion Committee
4. Curriculum Committee
5. Supreme Committee for Quality Assurance

III- At Al-Zaytoonah University

1. Scientific Research Committee
2. Curriculum Committee

IV- At Jordan University for Women (Petra University)

1. Council of Faculty of Science Committee
2. Research Committee

IV- At Kuwait University

1. Arabization Committee
2. Textbooks Committee

VI- At the United Arab Emirates University

1. Graduate Studies Committee
2. Curriculum Committee
3. Colloquium Committee
4. Search Committee

**PUBLICATIONS**

I have published one hundred and thirty eight research papers in ISI mathematical journals of high quality. Some of these papers were written jointly with very famous mathematicians as shown in the attached list.

**REFERENCES**

1. Professor Tsuyoshi Ando  
Hokusei Gakuen University  
Faculty of Economics, Atsubetsu-Ku  
Sapporo 004, Japan  
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2. Professor Rajendra Bhatia  
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3. Professor Chandler Davis  
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4. Professor Roger A. Horn  
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5. Professor Joseph G. Stampfli  
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## **Research Record of Fuad Kittaneh**

1. Some conditions on an operator implying normality, *Math. Sem. Notes* 7 (1979), 629-631.
2. Linear operators for which  $(\operatorname{Re} T)^2 \leq |T|^2$ , *Tamkang J. Math.* 11 (1980), 111-115.
3. On nearly  $\theta$ -operators, *Math. Sem. Notes* 10 (1982), 411-415.
4. On generalized Fuglede-Putnam theorems of Hilbert-Schmidt type, *Proc. Amer. Math. Soc.* 88 (1983), 293-298.
5. On normality of operators, *Rev. Roumaine Math. Pures Appl.* 29 (1984), 703-705.
6. Some characterizations of self-adjoint operators, *Acta Sci. Math. (Szeged)* 47 (1984), 441-444.
7. On the structure of polynomially normal operators, *Bull. Austral. Math. Soc.* 30 (1984), 11-18.
8. Inequalities for the Schatten  $p$ -norm, *Glasgow Math. J.* 26 (1985), 141-143.
9. On Lipschitz functions of normal operators, *Proc. Amer. Math. Soc.* 94 (1985), 416-418.
10. On the commutants modulo  $C_p$  of  $A^2$  and  $A^3$ , *J. Austral. Math. Soc. (Series A)* 41 (1986), 47-50.
11. Inequalities for the Schatten  $p$ -norm III, *Commun. Math. Phys.* 104 (1986), 307-310.
12. On zero-trace commutators, *Bull. Austral. Math. Soc.* 34 (1986), 119-126.
13. Inequalities for the Schatten  $p$ -norm IV, *Commun. Math. Phys.* 106 (1986), 581-585.
14. A note on hyponormal operators, *Math. Rep. Toyama Univ.* 9 (1986), 105-107.
15. (with H. Kosaki) Inequalities for the Schatten  $p$ -norm V, *Publ. RIMS, Kyoto Univ.* 23 (1986), 433-443.
16. Inequalities for the Schatten  $p$ -norm II, *Glasgow Math. J.* 29 (1987), 99-104.
17. On normal derivations of Hilbert-Schmidt type, *Glasgow Math. J.* 29 (1987), 245-248.
18. Linear operators for which  $\|T\| = \|\operatorname{Re} T\|$ , *Kyungpook Math. J.* 27 (1987), 163-168.
19. Notes on some inequalities for Hilbert space operators, *Publ. RIMS, Kyoto Univ.* 24 (1988), 283-293.
20. On the operator equation  $AX = XV^*$ , *Chinese J. Math.* 16 (1988), 29-40.
21. (with R. Bhatia) On some perturbation inequalities for operators, *Linear Algebra Appl.* 106 (1988), 271-279.
22. On the continuity of the absolute value map in the Schatten classes, *Linear Algebra Appl.* 118 (1989), 61-68.
23. (with P. Szeptycki) On operators with positive real parts, *Math. Japon.* 34 (1989), 933-939.
24. (with R. Bhatia) On the singular values of a product of operators, *SIAM J. Matrix Anal. Appl.* 11 (1990), 272-277.

25. On some equivalent metrics for bounded operators on Hilbert space, Proc. Amer. Math. Soc. 110 (1990), 789-798.
26. (with R. Younis) Smooth points of certain operator spaces, Integral Equations Operator Theory 13 (1990), 849-855.
27. (with R. Bhatia) Norm inequalities for partitioned operators and an application, Math. Ann. 287 (1990), 719-726.
28. (with R. Bhatia and R. Horn) Normal approximants to binormal operators, Linear Algebra Appl. 147 (1991), 169-179.
29. On zero-trace matrices, Linear Algebra Appl. 151 (1991), 119-124.
30. On the selfadjointness of certain compact operators, Linear and Multilinear Algebra 28 (1991), 203-206.
31. Some trace class commutators of trace zero, Proc. Amer. Math. Soc. 113 (1991), 655-661.
32. (with R. Bhatia and C. Davis) Some inequalities for commutators and an application to spectral variation, Aequationes Math. 41 (1991), 70-78.
33. On the normality of operator products, Linear and Multilinear Algebra 30 (1991), 1-4.
34. (with R. Bhatia) Approximation by positive operators, Linear Algebra Appl. 161 (1992), 1-9.
35. A note on the arithmetic-geometric mean inequality for matrices, Linear Algebra Appl. 171 (1992), 1-8.
36. Trace norm inequalities for hyponormal pairs of operators, Boll. UMI. (7) 6-A (1992), 333-338.
37. Norm inequalities for fractional powers of positive operators, Lett. Math. Phys. 27 (1993), 279-285.
38. On some operator inequalities, Linear Algebra Appl. 208/209 (1994), 19-28.
39. (with D. Jocić) Some perturbation inequalities for self-adjoint operators, J. Operator Theory 31 (1994), 3-10.
40. Normal derivations in norm ideals, Proc. Amer. Math. Soc. 123 (1995), 1779-1785.
41. Singular values of companion matrices and bounds on zeros of polynomials, SIAM J. Matrix Anal. Appl. 16 (1995), 333-340.
42. Operators that are orthogonal to the range of a derivation, J. Math. Anal. Appl. 203 (1996), 868-873.
43. Norm inequalities for certain operator sums, J. Funct. Anal. 143 (1997), 337-348.
44. Inequalities for weighted means and applications to positive definite matrices, J. Math. Anal. Appl. 214 (1997), 307-313.
45. (with R. Bhatia) Some inequalities for norms of commutators, SIAM J. Matrix Anal. Appl. 18 (1997), 258-263.
46. (with R. Bhatia and R.-C. Li) Some inequalities for commutators and an application to spectral variation II, Linear and Multilinear Algebra 43 (1997), 207-219.
47. (with R. Bhatia) Norm inequalities for positive operators, Lett. Math. Phys. 43 (1998), 225-231.
48. (with R. Horn) Two applications of a bound on the Hadamard product with a Cauchy matrix, Electron. J. Linear Algebra 3 (1998), 4-12.



49. (with R. Bhatia and R.-C. Li) Eigenvalues of symmetrizable matrices, BIT. 38 (1998), 1-11.
50. Some norm inequalities for operators, Canad. Math. Bull. 42 (1999), 87-96.
51. (with O. Hirzallah) Matrix Young inequalities for the Hilbert-Schmidt norm, Linear Algebra Appl. 308 (2000), 77-84.
52. (with R. Bhatia) Notes on matrix arithmetic-geometric mean inequalities, Linear Algebra Appl. 308 (2000), 203-211.
53. (with R. Bhatia) Cartesian decomposition and Schatten norms, Linear Algebra Appl. 318 (2000), 109-116.
54. (with O. Hirzallah) Norm inequalities for weighted power means of operators, Linear Algebra Appl. 341 (2002), 181-193.
55. (with O. Hirzallah) Non-commutative Clarkson inequalities for unitarily invariant norms, Pacific J. Math. 202 (2002), 363-369.
56. Commutator inequalities associated with the polar decomposition, Proc. Amer. Math. Soc. 130 (2002), 1279-1283.
57. (with O. Hirzallah) Commutator inequalities for the Hilbert-Schmidt norm, J. Math. Anal. Appl. 268 (2002), 67-73.
58. (with O. Hirzallah) On the chordal transforms of Hilbert space operators, Glasgow Math. J. 44 (2002), 275-284.
59. Norm inequalities for sums of positive operators, J. Operator Theory 48 (2002), 95-103.
60. A numerical radius inequality and an estimate for the numerical radius of the Frobenius companion matrix, Studia Math. 158 (2003), 11-17.
61. Bounds for the zeros of polynomials from matrix inequalities, Arch. Math. 81 (2003), 601-608.
62. Norm inequalities for sums and differences of positive operators, Linear Algebra Appl. 383 (2004), 85-91.
63. (with R. Bhatia) Clarkson inequalities with several operators, Bull. London Math. Soc. 36 (2004), 820-832.
64. Numerical radius inequalities for Hilbert space operators, Studia Math. 168 (2005), 73-80.
65. Spectral radius inequalities for Hilbert space operators, Proc. Amer. Math. Soc. 134 (2006), 385-390.
66. Norm inequalities for sums of positive operators. II, Positivity 10 (2006), 251-260.
67. (with K. Shebrawi) Some decomposition results for companion matrices, J. Math. Anal. Appl. 318 (2006), 626-633.
68. Some intertwining relations modulo operator ideals, Glasgow Math. J. 48 (2006), 111-117.
69. Bounds and a majorization for the real parts of the zeros of polynomials, Proc. Amer. Math. Soc. 135 (2007), 659-664.
70. (with K. Shebrawi) Bounds for the zeros of polynomials from matrix inequalities. II, Linear and Multilinear Algebra 55 (2007), 147-158.
71. (with O. Hirzallah) Inequalities for sums and direct sums of Hilbert space operators, Linear Algebra Appl. 424 (2007), 71-82.
72. (with M. El-Haddad) Numerical radius inequalities for Hilbert space operators. II, Studia Math. 182 (2007), 133-140

73. Inequalities for commutators of positive operators, *J. Funct Anal.* 250 (2007), 132-143.
74. (with R. Bhatia, R. Mathias, and X. Zhan) Preface: Special issue dedicated to Roger Horn, *Linear Algebra Appl.* 424 (2007), 1-2.
75. Norm inequalities for commutators of positive operators and applications, *Math. Z.* 258 (2008), 845-849.
76. (with R. Bhatia) The matrix arithmetic-geometric mean inequality revisited, *Linear Algebra Appl.* 428 (2008), 2177-2199.
77. (with R. Bhatia) Commutators, pinchings, and spectral variation, *Oper. Matrices* 2 (2008), 143-151.
78. (with O. Hirzallah) Non-commutative Clarkson inequalities for  $n$ -tuples of operators, *Integral Equations Operator Theory* 60 (2008), 369-379.
79. (with W. Bani-Domi) Norm equalities and inequalities for operator matrices, *Linear Algebra Appl.* 429 (2008), 57-67.
80. Norm inequalities for commutators of self-adjoint operators, *Integral Equations Operator Theory* 62 (2008), 129-135.
81. Norm inequalities for commutators of normal operators, *Inequalities and Applications' 07*, *Internat. Ser. Numer. Math.*, Birkhäuser Verlag, Basel, Vol. 157 (2008), 147-154.
82. Singular value inequalities for commutators of Hilbert space operators, *Linear Algebra Appl.* 430 (2009), 2362-2367.
83. (with K. Shebrawi) Bounds and majorization relations for the zeros of polynomials, *Numer. Funct. Anal. Optim.* 30 (2009), 98-110.
84. (with W. Bani-Domi) Numerical radius inequalities for operator matrices, *Linear and Multilinear Algebra* 57 (2009), 421-427.
85. (with R. Bhatia) The singular values of  $A + B$  and  $A + iB$ , *Linear Algebra Appl.* 431 (2009), 1502-1508.
86. (with O. Hirzallah and M. Moslehian) Schatten  $p$ -norm inequalities related to a characterization of inner product spaces, *Math. Inequal. Appl.* 13 (2010), 235-241.
87. (with Y. Manasrah) Improved Young and Heinz inequalities for matrices, *J. Math. Anal. Appl.* 361 (2010), 262-269.
88. (with J.-C. Bourin and O. Hirzallah) Jensen matrix inequalities and direct sums, *Linear and Multilinear Algebra* 58 (2010), 645-652.
89. (with O. Hirzallah) Singular values, norms, and commutators, *Linear Algebra Appl.* 432 (2010), 1322-1336.
90. On the convexity of the Heinz means, *Integral Equations Operator Theory* 68 (2010), 519-527.
91. (with Y. Manasrah) Reverse Young and Heinz inequalities for matrices, *Linear and Multilinear Algebra* 59 (2011), 1031-1037.
92. (with O. Hirzallah and K. Shebrawi) Numerical radius inequalities for commutators of Hilbert space operators, *Numer. Funct. Anal. Optim.* 32 (2011), 739-749.
93. (with O. Hirzallah and K. Shebrawi) Numerical radius inequalities for certain  $2 \times 2$  operator matrices, *Integral Equations Operator Theory* 71 (2011), 129-147.

94. (with O. Hirzallah, M. Krnic, N. Lovricevic, and J. Pecaric) Eigenvalue inequalities for differences of means of Hilbert space operators, *Linear Algebra Appl.* 436 (2012), 1516-1527.
95. (with M. Adm) Bounds and majorization relations for the critical points of polynomials, *Linear Algebra Appl.* 436 (2012), 2494-2503.
96. (with M. Krnic, N. Lovricevic, and J. Pecaric) Improved arithmetic-geometric and Heinz means inequalities for Hilbert space operators, *Publ. Math. Debrecen* 80/3-4 (2012), 465-478.
97. (with W. Audeh) Singular value inequalities for compact operators, *Linear Algebra Appl.* 437 (2012), 2516-2522.
98. (with O. Hirzallah and K. Shebrawi) Numerical radius inequalities for  $2 \times 2$  operator matrices, *Studia Math.* 210 (2012), 99-115.
99. (with O. Hirzallah, M. Krnic, N. Lovricevic, and J. Pecaric) Refinements and reverses of means inequalities for Hilbert space operators, *Banach. J. Math. Anal.* 7 (2013), 15-29.
100. (with S. Hayajneh) Lieb-Thirring trace inequalities and a question of Bourin, *J. Math. Phys.* 54 (2013), 033504, 8 pp.
101. (with M. Krnic) Refined Heinz operator inequalities, *Linear and Multilinear Algebra* 61 (2013), 1148-1157.
102. (with A. Abu-Omar) Numerical radius inequalities involving the generalized Aluthge transform, *Studia Math.* 216 (2013), 69-75.
103. (with S. Hayajneh) Trace inequalities and a question of Bourin, *Bull. Austral. Math. Soc.* 88 (2013), 384-389.
104. (with O. Hirzallah) Numerical radius inequalities for several operators, *Math. Scand.* 114 (2014), 110-119.
105. (with A. Abu-Omar) Estimates for the numerical radius of the Frobenius companion matrix and bounds for the zeros of polynomials, *Ann. Funct. Anal.* 5 (2014), 56-62.
106. (with A. Abu-Omar) Numerical radius inequalities for products of Hilbert space operators, *J. Operator Theory* 72 (2014), 521-527.
107. (with I. Gumus and O. Hirzallah) Eigenvalue localization for complex matrices, *Electron. J. Linear Algebra* 27 (2014), 892-906.
108. (with A. Abu-Omar) Numerical radius inequalities for  $n \times n$  operator matrices, *Linear Algebra Appl.* 468 (2015), 18-26.
109. (with M. Moslehian and T. Yamazaki) Cartesian decomposition and numerical radius inequalities, *Linear Algebra Appl.* 471 (2015), 46-53.
110. (with A. Abu-Omar) Upper and lower bounds for the numerical radius with an application to involution operators, *Rocky Mountain J. Math.* 45 (2015), 1055-1065.
111. (with A. Abu-Omar) Numerical radius inequalities for products and commutators of operators, *Houston J. Math.* 41 (2015), 1163-1173.
112. Numerical radius inequalities associated with the Cartesian decomposition, *Math. Inequal. Appl.* 18 (2015), 915-922.
113. (with Y. Al-Manasrah) A generalization of two refined Young inequalities, *Positivity* 19 (2015), 757-768.
114. (with A. Abu-Omar) Notes on some spectral radius and numerical radius inequalities, *Studia Math.* 227 (2015), 97-109.

115. (with A. Abu-Omar) Generalized spectral radius and norm inequalities for Hilbert space operators, *Internat. J. Math.* 26 (2015), 1550097, 9 pp.
116. Norm inequalities for commutators of  $G_1$  operators, *Complex Anal. Oper. Theory* 10 (2016), 109-114.
117. Bounds and majorization relations for the zeros of a class of Fibonacci-type polynomials, *Numer. Funct. Anal. Optim.* 37 (2016), 225-237.
118. (with A. Bottcher) The limit of the zero set of polynomials of the Fibonacci type, *J. Number Theory* 163 (2016), 89-100.
119. (with I. Gumus and O. Hirzallah) Estimates for the real and imaginary parts of the eigenvalues of matrices and applications, *Linear and Multilinear Algebra* 64 (2016), 2431-2445.
120. (with M. Hayajneh and S. Hayajneh) Remarks on some norm inequalities for positive semidefinite matrices and questions of Bourin, *Math. Inequal. Appl.* 20 (2017), 225-232.
121. (with M. Hayajneh and S. Hayajneh) On the Ando-Hiai-Okubo trace inequality, *J. Operator Theory* 77 (2017), 77-86.
122. (with Y. Al-Manasrah) Further generalizations, refinements, and reverses of the Young and Heinz inequalities, *Results Math.* 71 (2017), 1063-1072.
123. (with I. Gumus and O. Hirzallah) Norm inequalities involving accretive-dissipative  $2 \times 2$  block matrices, *Linear Algebra Appl.* 528 (2017), 76-93.
124. (with M. Al-khlyleh) Interpolating inequalities related to a recent result of Audenaert, *Linear and Multilinear Algebra* 65 (2017), 922-929.
125. (with M. Moslehian and M. Sababheh) Unitarily invariant norm inequalities for elementary operators involving  $G_1$  operators, *Linear Algebra Appl.* 513 (2017), 84-95.
126. (with M. Lin) Trace inequalities for positive semidefinite block matrices, *Linear Algebra Appl.* 524 (2017), 153-158.
127. (with A. Burqan) Singular value and norm inequalities associated with  $2 \times 2$  positive semidefinite block matrices, *Electron. J. Linear Algebra* 32 (2017), 116-124.
128. (with K. Audenaert) Problems and conjectures in matrix and operator inequalities, *Banach Center Publications* 112 (2017), 15-31.
129. (with M. Hayajneh and S. Hayajneh) Norm inequalities for positive semidefinite matrices and a question of Bourin, *Internat. J. Math.* 28 (2017), 1750102, 7 pp.
130. (with R. Bapat, S. Friedland, J. Holbrook, and R. Horn) Preface: Special issue dedicated to Rajendra Bhatia, *Linear Algebra Appl.* 528 (2017), 1-16.
131. (with M. Moslehian and M. Sababheh) Quadratic interpolation of the Heinz means, *Math. Inequal. Appl.* 21 (2018), 739-757.
132. (with F. Al-Rimawi and O. Hirzallah) Norm inequalities related to Clarkson inequalities, *Electron. J. Linear Algebra* 34 (2018), 163-169.
133. (with M. Hayajneh and S. Hayajneh) Norm inequalities related to the arithmetic-geometric mean inequalities for positive semidefinite matrices, *Positivity* 22 (2018), 1311-1324.
134. (with M. Sakkijha) Inequalities for accretive-dissipative matrices, *Linear and Multilinear Algebra* 67 (2019), 1037-1042.

135. (with M. Hayajneh and S. Hayajneh) On Some classical trace inequalities and a new Hilbert-Schmidt norm inequality, *Math. Inequal. Appl.* 21 (2018), 1175-1183.
136. (with A. Al-Natoor and O. Hirzallah) Interpolating inequalities for functions of positive semidefinite matrices, *Banach J. Math. Anal.* 12 (2018), 955-969.
137. (with A. Abu-Omar) A generalization of the numerical radius, *Linear. Algebra Appl.* 569 (2019), 323-334.
138. (with M. Bakherad) Numerical radius inequalities involving commutators of  $G_1$  operators, *Complex Anal. Oper. Theory*, in press.
139. (with F. Al-Rimawi and O. Hirzallah) Inequalities for certain powers of positive definite matrices, *Math. Inequal. Appl.*, in press.
140. (with F. Al-Rimawi and O. Hirzallah) Norm inequalities involving convex and concave functions of operators, *Linear and Multilinear Algebra*, in press.
141. (with H. Guelfen) On numerical radius inequalities for operator matrices, *Numer. Funct. Anal. Optim.*, in press.
142. (with A. Jaradat) Bounds for the eigenvalues of monic matrix polynomials form numerical radius inequalities, preprint.
143. (with A. Aldalabih) Hilbert-Schmidt numerical radius inequalities for operator matrices, preprint.
144. (with M. Odeh and K. Shenrawi) Some bounds for the zeros of polynomials, preprint.