

# Ana Maria Acu

## Publications

1. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Commutativity and spectral properties for a general class of Szász–Mirakjan–Durrmeyer operators, *Journal of Mathematical Analysis and Applications*, 555(2), 2026. DOI10.1016/j.jmaa.2025.130052
2. Acu, A.M., Ilina, M., Sofonea, F., Travaglini, A., Vinti, G. (2026). A Comparison Between Neural Network and Sampling Kantorovich Operators in Terms of Image denoising. In: Gervasi, O., et al. *Computational Science and Its Applications – ICCSA 2025 Workshops. ICCSA 2025. Lecture Notes in Computer Science*, vol 15892. Springer, Cham. [https://doi.org/10.1007/978-3-031-97638-4\\_24](https://doi.org/10.1007/978-3-031-97638-4_24)
3. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, On Some Cauchy Problems and Positive Linear Operators, *Mediterranean Journal of Mathematics*, 22(1), 2025. DOI10.1007/s00009-024-02778-y
4. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Commutativity and spectral properties for a general class of Szász–Mirakjan–Durrmeyer operators, *Advances in Operator Theory*, 10(1), 2025. DOI10.1007/s43036-024-00403-z
5. A.M. Acu, M. Heilmann, I. Rasa, AE Steopoaie, Voronovskaja type results for the Aldaz–Kounchev–Render versions of generalized Baskakov operators, *Applicable Analysis and Discrete Mathematics* 2024, 18 (2), 408–417. (WOS)
6. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Asymptotic expansions for variants of the gamma and Post–Widder operators preserving 1 and  $x^j$ , *Math. Meth. Appl. Sci.* 2024;47:13718–13733. (WOS)
7. AM. Acu, I. Rasa, A.E. Steopoaie, Bernstein–Kantorovich operators, approximation and shape preserving properties. *Rev. Real Acad. Cienc. Exactas Fis. Nat. Ser. A-Mat.* 118, 107 (2024) (WOS)
8. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Voronovskaja formula for Aldaz–Kounchev–Render operators: uniform convergence, *Analysis and Mathematical Physics*, 14(1), Article Number 2, 2024 (WOS)
9. A.M. Acu, J.A. Adell, I. Rasa, Explicit upper bounds for Touchard polynomials and Bell numbers, *Acta Mathematica Hungarica*, 172 (1) (2024), 255–263 (WOS)
10. A.M. Acu, S. De Marchi, I. Rasa, Aldaz–Kounchev–Render operators on simplices, *Journal of Mathematical Analysis and Applications*, Volume 533, Issue2, Article Number 128072, 2024 (WOS)
11. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Genuine Bernstein–Durrmeyer type operators preserving 1 and  $x_j$ , *Annals of Functional Analysis*, Volume15, Issue1, Article Number 4, 2024 (WOS)
12. A.M. Acu, N. Cetin, G. Tachev, Approximation by perturbed Baskakov-type operators, *Journal of Mathematical Inequalities*, 18(2), (2024), 551–563. (WOS)
13. A.M. Acu, H. Gonska, Overiteration of d-variate tensor product Bernstein operators: A quantitative result, *Studia Universitatis Babes-Bolyai Mathematica*, 69(4), 895–903. (WOS)
14. A.M. Acu, J.A. Adell, I. Rasa, Rates of convergence for Jakimovski–Leviatan operators in terms of the Ditzian–Totik modulus, *Banach Journal of Mathematical Analysis*, Volume 17, Issue 4, Article Number 66, 2023
15. A.M. Acu, M. Heilmann, I. Rasa, A. Seserman, Poisson approximation to the binomial distribution: extensions to the convergence of positive operators, *RACSAM*, Volume 117, Issue 4, Article Number 162, 2023
16. A.M. Acu, M. Heilmann, I. Rasa, Some results for the inverse of a Bernstein–Schnabl type operator. *Anal.Math.Phys.* 13, 15 (2023). (WoS)

17. A.M. Acu, G. Mutlu, B. Çekim, S. Yazıcı, A new representation and shape-preserving properties of perturbed Bernstein operators, *Mathematical Methods in the Applied Sciences*, Volume 47, Issue 1, Page 5-14, 2023
18. U. Abel, A.M. Acu, M. Heilmann, I. Rasa, Positive linear operators preserving certain monomials on  $[0, \infty)$ , *Dolomites Reserch Notes on Approximation*, Volume 16, Issue 3, Page1-9, Special Issue 2, 2023
19. A.M. Acu, I. Rasa, A. Seserman, Positive linear operators and exponential functions, *Mathematical Foundations of Computing*, Volume 6, Issue 3, Page 313-319, 2023
20. F. Öz Saraç, A.M. Acu, A. Aral, I. Raşa, On the Modification of Mellin Convolution Operator and Its Associated Information Potential, *Numerical Functional Analysis and Optimization*, Volume 44, Issue 11, Page 1194-1208, ISSN 0163-0563
21. AM Acu, I. Rasa, A Discrete Probability Distribution and Some Applications. *Mediterr. J. Math.* 20, 34 (2023). (WoS)
22. AM Acu, S. De Marchi, I. Raşa, Aldaz–Kounchev–Render Operators and Their Approximation Properties. *Results Math* 78, 21 (2023). (WoS)
23. A.M. Acu, M. Heilmann, I. Rasa, Some results for the inverse of a Bernstein–Schnabl type operator. *Anal.Math.Phys.* 13, 15 (2023)
24. A.M. Acu, I. Rasa, H. Srivastava, Some Functionals and Approximation Operators Associated with a Family of Discrete Probability Distributions, *Mathematics* 2023, 11(4), 805
25. A.M. Acu, I. Rasa, A. Seserman, Composition and Decomposition of Positive Linear Operators (VIII), *Axioms* 2023, 12(3), 228
26. A.M. Acu, M. Heilmann, I. Rasa, et al. Convergence of Linking Durrmeyer-Type Modifications of Generalized Baskakov Operators. *Bull. Malays. Math. Sci. Soc.* 46, 113 (2023)
27. A.M. Acu, I. Rasa, A.E. Steopoaie, Strongly convex squared norms, *Dolomites Research Notes on Approximation*, Volume 16, 2023, 23-25.
28. AM Acu, A. Aral, I. Rasa, New properties of operators preserving exponentials. *Rev. Real Acad. Cienc. Exactas Fis. Nat. Ser. A-Mat.* 117, 1 (2023). (WoS)
29. AM Acu, M Dancs, M Heilmann, V Pasca, I Rasa, A Bernstein-Schnabl type operator: Applications to difference equations, *Applicable Analysis and Discrete Mathematics* 2022, 16 (2), 495-507. (WoS)
30. P. N. Agrawal, A. M. Acu and R. Chauhan, Weighted A-statistical convergence and Bögel approximation by operators of exponential type, *Journal of Mathematical Inequalities*, 16 (3), 827-828, 2022. (WoS)
31. AM Acu, V Gupta, I Rasa, F Sofonea, Convergence of Special Sequences of Semi-Exponential Operators, *Mathematics* 2022, 10(16), 2978. (WoS)
32. AM Acu, I Rasa, Functional equations related to Appell polynomials and Heun functions. *Anal. Math. Phys.* 12, 77 (2022). (WoS)
33. AM Acu, I. Rasa, Nonlinear algebraic systems with positive coefficients and positive solutions. *J. Appl. Math. Comput.* 69, 19–35 (2023). (WoS)
34. AM Acu, I. Rasa, AE Steopoaie, Algebraic Systems with Positive Coefficients and Positive Solutions, *Mathematics* 2022, 10(8), 1327. (WoS)
35. M. Dhamija, N. Deo, R. Pratap, AM Acu, Generalized Durrmeyer operators based on inverse Pólya–Eggenberger distribution. *Afr. Mat.* 33, 9 (2022). (WoS)
36. V Bratian, AM Acu, DM Mihaiu, RA Serban, Geometric Brownian Motion (GBM) of Stock Indexes and Financial Market Uncertainty in the Context of Non-Crisis and Financial Crisis Scenarios, *Mathematics* 2022, 10(3), 309. (WoS)
37. AM Acu, IC Buscu, I Rasa, Generalized Kantorovich modifications of positive linear operators. *Mathematical Foundations of Computing*, 2023, 6(1): 54-62. (WoS)
38. AM Acu, A Kajla, Blending type approximation by modified Bernstein operators. *Adv. Oper. Theory* 7, 9 (2022). (WoS)
39. AM Acu, A Aral, I Raşa, Generalized Bernstein Kantorovich operators: Voronovskaya type results, convergence in variation, *Carpathian J. Math.* 38(1), (2022), 1 – 12 (WoS)

40. AM Acu, M Dancs, M Heilmann, V Pasca, I Rasa, Voronovskaya type results for special sequences of operators. *RACSAM* 116, 19 (2022). (WoS)
41. AM Acu, I Rasa, Iterates and Invariant Measures for Markov Operators. *Results Math* 76, 218 (2021). (WoS)
42. P. N. Agrawal, Ana Maria Acu and Neha Bhardwaj, Quantitative Voronovskaya type results for a sequence of Stancu type operators, *Journal of Mathematical Inequalities*, Volume 15, Number 4 (2021), 1519–1532 (WoS)
43. P. N. Agrawal, Ana Maria Acu, Ruchi Chauhan and Tarul Garg, Approximation of Bögel continuous functions and deferred weighted A-statistical convergence by Bernstein-Kantorovich type operators on a triangle, *Journal of Mathematical Inequalities*, Volume 15, Number 4 (2021), 1695–1711. (WoS)
44. AM Acu, G. Tachev, Yet Another New Variant of Szász–Mirakyan Operator, *Symmetry* 2021, 13(11), 2018. (WoS)
45. V Bratian, AM Acu, C Oprean-Stan, E Dinga, GM Ionescu, Efficient or Fractal Market Hypothesis? A Stock Indexes Modelling Using Geometric Brownian Motion and Geometric Fractional Brownian Motion, *Mathematics* 2021, 9(22), 2983. (WoS)
46. AM Acu, I Rasa, R Srivastava, Modified Operators Interpolating at Endpoints, *Mathematics* 2021, 9(17), 2051. (WoS)
47. AM Acu, G Bascanbaz-Tunca, I Rasa, Voronovskaja-Type Quantitative Results for Differences of Positive Linear Operators, *Symmetry* 2021, 13(8), 1392. (WoS)
48. A.M. Acu, G. Bascanbaz-Tunca, I. Rasa, Information potential for some probability density functions, *Applied Mathematics and Computation*, Article Number: 125578, Volume 38, 2021. (WoS)
49. F. Dirik, K. Demirci, S. Yildiz, A.M. Acu, The uniform convergence of a double sequence of functions at a point and Korovkin-type approximation theorems, *Georgian Mathematical Journal*, 28(4), 2021, 567-573. (WoS)
50. A.M. Acu, I.C. Buscu, I. Rasa, A sequence of Appell polynomials and the associated Jakimovski-Leviatan operators, *Analysis and Mathematical Physics*, 11 (2), Article Number 88, 2021. (WoS)
51. N. Cetin, A.M. Acu, Approximation by alpha-Bernstein-Schurer- Stancu operators, 15(2), 2021, pp.845-860. (WoS)
52. A.M. Acu, M. Heilmann, I. Rasa, Eigenstructure and iterates for uniquely ergodic Kantorovich modifications of operators II, *Apr 2021 Positivity*. (WoS)
53. A.M. Acu, I. Rasa, On the composition and decomposition of positive linear operators (VII), *Applicable Analysis and discrete Mathematics* 15(1), 2021, 213-232. (WoS)
54. A.M. Acu, G. Bascanbaz-Tunca, I Rasa, Bounds for indices of coincidence and entropies, *Mathematical Inequalities & Applications*, 24 (2), 2021, pp.307-321 (WoS)
55. AM Acu, G. Bascanbaz-Tunca, I Rasa, Differences of Positive Linear Operators on Simplices, *Journal of Function Spaces*, Article Number 5531577, 2021.
56. Pooja Gupta, Ana Maria Acu, P.N. Agrawal, Jakimovski-Leviatan operators of Kantorovich type involving multiple Appell polynomials, *Georgian Mathematical Journal*, *Georgian Math. J.* 2021; 28(1): 73–82, DOI: 10.1515/gmj-2019-2013 (WoS)
57. Ana Maria Acu, Margareta Heilmann and Ioan Rasa, Linking Baskakov Type Operators, *Constructive Theory of Functions*, Sozopol 2019 (B. Draganov, K. Ivanov, G. Nikolov and R. Uluchev, Eds.), pp. 23-38 Prof. Marin Drinov Publishing House of BAS, Sofia, 2020
58. A.M. Acu, M. Heilmann, I. Rasa, Strong Converse Results for Linking Operators and Convex Functions, *Journal of Function Spaces*, Volume: 2020, Article Number: 4049167, 2020. (WoS)
59. A.M. Acu, I. Rasa, Elementary hypergeometric functions, Heun functions, and moments of MKZ operators, *Revista de la Real Academia de Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, 115(1) 2020, Article Number: 20. (WoS)
60. A.M. Acu, I. Rasa, A C-0-Semigroup of Ulam Unstable Operators, *Symmetry-Basel* 12(11) 2020, Article Number: 1844. (WoS)

61. A.M. Acu, A. Maduta, D. Otrocol, I. Rasa, Inequalities for Information Potentials and Entropies, *Mathematics*, 8(11) 2020, Article Number: 2056 . (WoS)
62. A.M. Acu, H. Gonska, Perturbed Bernstein-type operators, *Analysis and Mathematical Physics*, 10(4) 2020, Article Number: 49. (WoS)
63. A.M. Acu, M. Dancs, V.A. Radu, Representations for the inverses of certain operators, *Communications on Pure and Applied Analysis*, 19(8) 2020, 4097-4109. (WoS)
64. A.M. Acu, G. Bascanbaz-Tunca, Approximation by Complex Perturbed Bernstein-Type Operators, *Results in Mathematics*, 75(3) 2020, Article Number: 120. (WoS)
65. A.M. Acu, I. Rasa, Ulam Stability for the Composition of Operators, *Symmetry-Basel*, 12(7) 2020, Article Number: 1159. (WoS)
66. A.M. Acu, G. Bascanbaz-Tunca, N. Cetin, Approximation by certain linking operators, *Annals of Functional Analysis*, 11(4) 2020, 1184-1202. (WoS)
67. A.M. Acu, M. Heilmann, I. Rasa, Iterates of convolution-type operators, 2020, *Positivity*.
68. A.M. Acu, L. Hodis, I. Rasa, Multivariate weighted Kantorovich operators, *Mathematical Foundations of Computing*, 3(2) 2020, 117-124. (WoS)
69. V. Gupta, A.M. Acu, H.M. Srivastava, Difference of Some Positive Linear Approximation Operators for Higher-Order Derivatives, *Symmetry-Basel*, 12(6) 2020, Article Number: 915 . (WoS)
70. A.M. Acu, S. Hodis, I. Rasa, Estimates for the Differences of Certain Positive Linear Operators, *Mathematics*, 8(5) 2020, Article number 798. (WoS)
71. T. Neer, A.M. Acu, P.N. Agrawal, Baskakov-Durrmeyer type operators involving generalized Appell Polynomials, *Mathematical Methods in the Applied Sciences*, 43(6) 2020, 2911-2923. (WoS)
72. P.N. Agrawal, A.M. Acu, R. Ruchi, q-Generalized Bernstein-Durrmeyer Polynomials, *Journal of Mathematical Inequalities*, Volume: 14 Issue: 1 Pages: 211-235 Published: MAR 2020. (WoS)
73. Acu A.M., Radu V.A. (2020) Approximation by Certain Operators Linking the  $\alpha$ -Bernstein and the Genuine  $\alpha$ -Bernstein-Durrmeyer Operators. In: Deo N., Gupta V., Acu A., Agrawal P. (eds) *Mathematical Analysis I: Approximation Theory. ICRAPAM 2018. Springer Proceedings in Mathematics & Statistics*, vol 306. Springer, Singapore. [https://doi.org/10.1007/978-981-15-1153-0\\_7](https://doi.org/10.1007/978-981-15-1153-0_7)
74. A. Ratiu, A.M. Acu, T. Acar, D.F. Sofonea, Certain positive linear operators with better approximation properties, *Mathematical Methods in the applied sciences*, Volume: 42 Issue: 16 Special Issue: SI Pages: 5133-5142 Published: NOV 15 2019
75. A.M. Acu, T. Acar, C.V. Muraru, V.A. Radu, Some approximation properties by a class of bivariate operators, *Mathematical Methods in The Applied Sciences*, Volume: 42 Issue: 16 Special Issue: SI Pages: 5551-5565 Published: NOV 15 2019.
76. A.M. Acu, H. Gonska, Classical Kantorovich operators revisited, *Ukrainian Mathematical Journal*, Volume: 71 Issue: 6, Pages: 843-852 Published: NOV 2019
77. A.M. Acu, I. Rasa, Estimates for the differences of positive linear operators and their derivatives, *Numerical Algorithms*, (2019). <https://doi.org/10.1007/s11075-019-00809-4>
78. Neer, Trapti; Acu, Ana Maria; Agrawal, P. N., Degree of approximation by Chlodowsky variant of Jakimovski-Leviatan-Durrmeyer type operators, *Revista De La Real Academia De Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, Volume: 113 Issue: 4 Pages: 3445-3459 Published: OCT 2019.
79. T. Garg, A.M. Acu, P.N. Agrawal, Weighted approximation and GBS of Chlodowsky-Szasz-Kantorovich type operators, *Analysis and Mathematical Physics*, Volume: 9 Issue: 3 Pages: 1429-1448 Published: SEP 2019
80. A.M. Acu, O. Dogru, C.V. Muraru, V.A. Radu, Approximation properties of certain Bernstein-Stancu type operators, *Journal of Mathematical Inequalities*, Volume: 13 Issue: 3 Pages: 687-702 Published: SEP 2019.
81. A.M. Acu, V. Gupta, G. Tachev, Better Numerical Approximation by Durrmeyer Type Operators, *Results in Mathematics*, Volume: 74 Issue: 3 Article Number: UNSP 90 Published: SEP 2019

82. Rahman, Shagufta; Mursaleen, Mohammad; Acu, Ana Maria, Approximation properties of lambda-Bernstein-Kantorovich operators with shifted knots, *Mathematical Methods in the Applied Sciences*, Volume: 42 Issue: 11 Pages: 4042-4053 Published: JUL 30 2019
83. T. Garg, A.M. Acu, P.N. Agrawal, Further results concerning some general Durrmeyer type operators, *Revista De La Real Academia De Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, Volume: 113 Issue: 3 Pages: 2373-2390 Published: JUL 2019
84. A.M. Acu, T. Acar, V.A. Radu, Approximation by modified U-n (rho) operators, *Revista De La Real Academia De Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, Volume: 113 Issue: 3 Pages: 2715-2729 Published: JUL 2019
85. Vijay Gupta, Gancho Tachev, Ana-Maria Acu, Modified Kantorovich operators with better approximation properties, *Numerical Algorithms*, Volume: 81 Issue: 1 Pages: 125-149 Published: MAY 2019 (WoS)
86. N. Rao, A. Wafi, A.M. Acu, q-Szasz-Durrmeyer Type Operators Based on Dunkl Analogue, *Complex Analysis and Operator Theory*, Volume: 13 Issue: 3 Pages: 915-934 Published: APR 2019
87. A.M. Acu, N. Manav, A. Ratiu, Convergence Properties of Certain Positive Linear Operators, *Results in Mathematics*, Volume: 74 Issue: 1 Article Number: UNSP 8 Published: MAR 2019
88. Acu, Ana-Maria; Radu, Voichita Adriana, About the Iterates of Some Operators Depending on a Parameter and Preserving the Affine Functions, *Iranian Journal of Science and Technology Transaction A-Science*, Volume: 43 Issue: A1 Pages: 265-271 Published: FEB 2019
89. V. Gupta, A.M. Acu, On Difference of Operators with Different Basis Functions, *FILOMAT* Volume: 33 Issue: 10 Pages: 3023-3034 Published: 2019
90. A.M. Acu, P.N. Agrawal, D. Kumar, Approximation properties of modified q-Bernstein-Kantorovich operators, *Communications Faculty of Sciences University of Ankara-Series A1 Mathematics and Statistics*, Volume: 68 Issue: 2 Pages: 2170-2197 Published: 2019
91. A.M. Acu, P.N. Agrawal, Better approximation of functions by genuine Bernstein-Durrmeyer type operators, *Carpathian Journal of Mathematics*, Volume: 35 Issue: 2 Pages: 125-136 Published: 2019
92. P.N. Agrawal, A.M. Acu, M. Sidharth, Approximation degree of a Kantorovich variant of Stancu operators based on Polya-Eggenberger distribution, *Revista De La Real Academia De Ciencias Exactas Fisicas Y Naturales Serie A-Matematicas*, Volume: 113 Issue: 1 Pages: 137-156 Published: JAN 2019
93. A.M. Acu, A.M., S. Hodis, I. Rasa, A survey on estimates for the differences of positive linear operators, *Constr. Math. Anal.* 1(2), 113–127 (2018).
94. Florin Sofonea, Ioan Tincu, Acu Ana Maria, Convex sequences of higher order, *Filomat* 32:13 (2018) (WoS)
95. A.M. Acu, Nesibe Manav, Florin Sofonea, Approximation properties of  $\lambda$ -Kantorovich operators, *Journal of Inequalities and Applications*, 2018:202, <https://doi.org/10.1186/s13660-018-1795-7> (WoS)
96. Ana Maria Acu, Tuncer Acar and Nesibe Manav, Approximation of functions by genuine Bernstein-Durrmeyer type operators, *Journal of Mathematical Inequalities*, 12(4), 975-987, 2018. (WoS)
97. Sheetal Deshwal, Ana Maria Acu and P.N. Agrawal, Pointwise approximation Bezier variant of an operator based on Laguerre polynomials, *Journal of Mathematical Inequalities*, 12(3), 2018, 693–707 (WoS)
98. S. Deshwal, A.M. Acu, P.N. Agrawal, Rate of convergence of q-analogue of a class of new Bernstein type operators, *Miskolc Mathematical Notes*, 19(1) (2018), 211–234, (WoS)
99. A.M. Acu, C. Muraru, Certain Approximation Properties of Srivastava Gupta operators, *Journal of Mathematical Inequalities*, Volume 12, Number 2 (2018), 583–595 (WoS)
100. T Neer, AM Acu, P Agrawal, Approximation of functions by bivariate q-Stancu-Durrmeyer type operators, *Mathematical Communications*, 23(2018), 161–180. (WoS)
101. A.M. Acu, V. Gupta, On Baskakov-Szasz-Mirakyan-type operators preserving exponential type functions, *Positivity*, 22(3), 2018, 919–929, DOI: 10.1007/s11117-018-0553-x (WoS)
102. AM Acu, V Gupta, N Malik, Local and Global Approximation for Certain (p, q)-Durrmeyer Type Operators, *Complex Analysis and Operator Theory*, Volume: 12 Issue: 8, 1973-1989, 2018, <https://doi.org/10.1007/s11785->

017-0714-0 (WoS)

103. Ana Maria Acu, V. Radu, C. Muraru, On the monotonicity of  $q$ -Schurer-Stancu type polynomials, *Miskolc Mathematical Notes*, 19(1), (2018), 19-28, DOI: 10.18514/MMN.2018.1785 (WoS)
104. Manjari Sidharth, Ana-Maria Acu, P.N. Agrawal, Chlodowsky-Szasz-Appel type operators for functions of two variables, *Annals of Functional Analysis* 8(4). 2017, 446-459. (WoS)
105. T. Neer, A.M. Acu, P.N. Agrawal, Bezier variant of genuine-Durrmeyer type operators based on Polya distribution, *Carpathian Journal of Mathematics*, Vol. 33, No 1, 2017, Pages: 73-86. (WoS)
106. A.M. Acu, Properties and applications of  $P_n$ -simple functionals, *Positivity* ISSN: 1385-1292, DOI 10.1007/s11117-016-0420-6, 21 (1), 2017, 283-297. (WoS)
107. Ana Maria Acu, P.N. Agrawal, Trapti Neer, Approximation properties of the modified Stancu operators, *Numerical Functional Analysis and Optimization*, Doi:10.1080/01630563.2016.1248564, 38 (3), Pages: 279-292, 2017 (WoS)
108. Young Chel Kwun , Ana-Maria Acu, Arif Rafiq, Voichita Adriana Radu, Faisal Ali and Shin Min Kang, Bernstein-Stancu type operators which preserve polynomials, *J. Computational Analysis and Applications*, 23(4), 2017, 758-770. (WoS)
109. A.M. Acu, H. Gonska, Generalized Alomari functionals, *Mediterranean Journal of Mathematics*, 14(1), 2017, Article Number: UNSP 1, DOI: 10.1007/s00009-016-0833-2. (WoS)
110. A.M. Acu, V. Gupta, Direct results for certain summation-integral type Baskakov-Szasz operators, *Results in Mathematics*, 72(3), 2017, 1161–1180, DOI: 10.1007/s00025-016-0603-2 (WoS)
111. V. Gupta, A.M. Acu, D.F. Sofonea, Approximation Baskakov type Polya-Durrmeyer operators, *Applied Mathematics and Computations*, 294( 1), 2017, 318–331 (WoS)
112. Arun Kajla, Ana Maria Acu, and P. N. Agrawal, Baskakov–Szász-type operators based on inverse Pólya–Eggenberger distribution, *Annals of Functional Analysis* 8 (1), 2017, 106-123. (WoS I)
113. Dan Barbosu, Ana-Maria Acu, Carmen Violeta Muraru, Some bivariate Durrmeyer operators based on  $q$ -integers, *Journal of Mathematical Inequalities*, 11( 1), 2017, 59–75 (WoS)
114. D. Bărbosu, A.M. Acu, C. V. Muraru, On certain GBS-Durrmeyer operators based on  $q$ -integers, *Turkish Journal of Mathematics*, 41(2) (2017), 368 – 380 (WoS)
115. A.M. Acu, I. Rasa, New estimates for the differences of positive linear operators, *Numerical Algorithms*, 73(3), 775–789, 2016. (WoS)
116. Shin Min Kang, Arif Rafiq, Ana-Maria Acu, Faisal Ali, Young Chel Kwun, Some approximation properties of  $(p, q)$ -Bernstein operators, *Journal of Inequalities and Applications*, 2016, Article 169, DOI: 10.1186/s13660-016-1111-3. (WoS)
117. A.M. Acu, C. Muraru, V. Radu, F. Sofonea, Some approximation properties of a Durrmeyer variant of  $q$ -Bernstein–Schurer operators, *Mathematical Methods in the Applied Sciences*, 39(18), 2016, 5636–5650. (WoS)
118. Ana Maria Acu, Heiner Gonska, Composite Bernstein Cubature, *Banach Journal of Mathematical Analysis*, *Banach Journal of Mathematical Analysis*, Vol. 10, No.2, 235-250, 2016 (WoS)
119. Ana Maria Acu, F. Sofonea, D. Barbosu, Note on a  $q$ -analogue of Stancu-Kantorovich operators, *Miskolc Mathematical Notes*, Vol. 16, no.1, 2015, 3-15. (WoS)
120. Ana Maria Acu, Improvement of Gruss and Ostrowski Type Inequalities, *Filomat*, 29:9, 2015, 2027-2035 (WoS)
121. Ana Maria Acu, Heiner Gonska, Weighted Ostrowski-Gruss type inequalities, *Stud. Univ. Babeş-Bolyai Math.*, 60(2015), No. 2, 183–192
122. Shin Min Kang, Ana Maria Acu, Arif Rafiq, Young Chel Kwun, Approximation properties of  $q$ -Kantorovich-Stancu operator , *Journal of Inequalities and Applications*, Article Number: 211, Published: Jun 27 2015 (WoS)
123. Shin Min Kang, Ana Maria Acu, Arif Rafiq and Young Chel Kwun, On  $q$ -analogue of Stancu-Schurer-Kantorovich operators based on  $q$ -Riemann integral, *Journal of Computational Analysis and Applications*, Vol. 21, No. 3, 2016, 564-577 . (WoS)

124. Ana Maria Acu, Muraru Carmen, Approximation Properties of Bivariate Extension of  $q$ -Bernstein–Schurer–Kantorovich operators, *Results in Mathematics*, 67 (3) , 265-279, 2015, DOI: 10.1007/s00025-015-0441-7 (WoS)
125. Ana Maria Acu, Stancu–Schurer–Kantorovich operators based on  $q$ -integers, *Applied Mathematics and Computation*, 259, 896–907, 2015, DOI: 10.1016/j.amc.2015.03.032 (WoS)
126. Alina Babos, Ana Maria Acu, Note on Corrected Optimal Quadrature Formulas in Sense Nikolski, *Appl. Math. Inf. Sci.* 9, No. 3, 1231-1238 (2015).
127. Ana Maria Acu, D.F. Sofonea, Approximation Properties of Bivariate Extension of  $q$ -Stancu- Kantorovich Operators, *Journal of Advances in Applied & Computational Mathematics*, 2015, 2(1), 13-18
128. Ana Maria Acu, Maria Daniela Rusu, New results concerning Chebyshev-Grusstype inequalities via discrete oscillations, *Applied Mathematics and Computation*, 243, pp. 585-593, 2014 (WoS)
129. Ana Maria Acu, Heiner Gonska, On Bullen’s and related inequalities, *General Mathematics Vol. 22, No. 1* (2014), 19-26.
130. Ana Maria Acu, Maria Daniela Rusu, Improvement and generalization of some Ostrowski-type inequalities, *J. Applied Functional Analysis*, Vol.9, No. 3-4, pp. 216-229, 2014
131. Ana Maria Acu, Daniel Florin Sofonea, Some numerical integration methods based on interpolation polynomials, *Carpathian J.*, 29, No. 1, pg.1-8., 2013. (WoS)
132. Ana Maria Acu, Daniel Florin Sofonea, Carmen Muraru, Gruss and Ostrowski type inequalities and their applications, "Vasile Alecsandri" University of Bacau, Faculty of Sciences, Scientific Studies and Research Series Mathematics and Informatics, Vol. 23, No. 1, pp. 5 – 14, 2013.
133. Acu Ana Maria, Sofonea Florin, Muraru Carmen, Aspecte didactice privind utilizarea softului GeoGebra in rezolvarea problemelor de programare liniara, *Proceedings al Conferintei " Cercetare si Practica in Didactica Moderna, Conferinta anuala de didactica"*, Alba-Iulia, ISSN 2344-4142, ISSN-L 2344-4142., pp. 456-464, 2013.
134. Acu Ana Maria, Sofonea Florin, Utilizarea softului educational GeoGebra in predarea elementelor de probabilitati si statistica, *Proceedings al Conferintei "Cercetare si Practica in Didactica Moderna, Conferinta anuala de didactica"*, Alba-Iulia, ISSN 2344-4142, ISSN-L 2344-4142., pp. 598-607, 2013.
135. Carmen Muraru, Ana Maria Acu, Some approximation properties of  $q$ -Durrmeyer-Schurer operators, "Vasile Alecsandri" University of Bacau, Faculty of Sciences, Scientific Studies and Research Series Mathematics and Informatics, Vol. 23 , No. 1, 77 – 84, 2013.
136. Alina Babos, Ana Maria Acu, Carmen Muraru, Cubature formulas on a triangle with one curved side , *Proceedings of The 19th International Conference The Knowledge Based Organization-Applied Technical Sciences and Advanced Military Technologies Conference, Proceedings 3*, pp. 13-17, 2013.
137. Carmen Muraru, Ana Maria Acu, Alina Babos, On a modified Schurer-Stancu Operator, *The 19th International Conference The Knowledge Based Organization-Applied Technical Sciences and Advanced Military Technologies Conference, Proceedings 3*, pp. 108-112, 2013.
138. Ana Maria Acu, Alina Babos, Some Optimal Quadrature Formulas and Error Bounds, *Appl. Math. Inf. Sci.* 6, No. 1, pp.429-437, 2012. (WoS)
139. Carmen Violeta Muraru, Ana Maria Acu, Some approximations properties of Schurer-Bernstein operators based on  $q$  integers, *General Mathematics Vol. 20, No. 5 , Special Issue*, pp. 61-70, 2012.
140. Alina Babos, Ana Maria Acu, Some corrected optimal quadrature formulas in sense Nikolski and error bounds, *General Mathematics Vol. 20, No. 5, Special Issue*, pp. 3-11, 2012.
141. Saman Shahbaz, Muhammad Qaiser Shahbaz, Arif Rafiq, Ana Maria Acu, On trivariate Pseudo Weibull distribution , *Acta Universitatis Apulensis*, No. 31, pp. 241-247, 2012.
142. Ana Maria Acu, Alina Babos, Petru Blaga, Some corrected optimal quadrature formulas, *Stud. Univ. Babeş-Bolyai Math*, 57, No. 4, pp. 561-578, 2012.
143. Ana Maria Acu, Daniel Florin Sofonea, Asymptotic expressions for the remainder term in the quadrature formula of Gauss-Jacobi type, *Creat. Math. Inform.*, 21, No.1, pp. 1-11, 2012.
144. Ana Maria Acu, Daniel Florin Sofonea, Some optimal quadrature formulas in sense Nikolski and

- error bounds, Proceedings of the XIIIth Conference on Mathematics and its Applications University "Politehnica" of Timisoara, 1-3 November, ISSN 1224-6069, pp.59-64, 2012.
145. Arif Rafiq, Ana Maria Acu, A new implicit iteration process for two strongly pseudocontractive mappings, *Creat. Math. Inform.*, 21, No.2, pp. 197 – 201, 2012.
  146. Ana Maria Acu, H. Gonska, I. Rasa, Gruss-type and Ostrowski-type inequalities in Approximation Theory, *Ukrainian Mathematical Journal*, Vol. 63, No. 6, November, pp. 843-864, 2011. (WoS)
  147. C. Boitor, A. Fratila, L. Stanciu, A. Pitic, Ana Maria Acu, Socio-economic factors and hygienic food-illness involved in determining dental caries of 12-year-old children in rural and urban area, *Review of research and social intervention*, vol.33, pp.167-177, 2011. (WoS)
  148. Ana Maria Acu, Daniel Florin Sofonea, On an inequality of Ostrowski type, *Journal of Science and Arts*, Year 11, No. 3(16), pp. 281-287, 2011.
  149. A. Babos, Ana Maria Acu, Cubature formulas on tetrahedron, *The 17-th International Conference, The Knowledge-Based Organisation, Applied Technical Sciences and Advanced Military Technologies, Conference proceedings 3, 24-26 Nov. , ISSN: 1843-6722*, pp. 216-219, 2011.
  150. Ana Maria Acu, Florin Sofonea, A class of optimal quadrature formula, *Acta Universitatis Apulensis, Special Issue*, pp. 481-489, 2011.
  151. Ana Maria Acu, Alina Babos, Florin Sofonea, The mean value theorems and inequalities of Ostrowski type, *Scientific Studies and Research Series Mathematics and Informatics, Bacau*, Vol. 21, No. 1, pp. 5 – 16, 2011.
  152. Acu Ana Maria, Natural splines of Birkhoff type approximating the solution of differential equations, *General Mathematics*, Vol. 18, No. 1, pp 3-17 , 2010.
  153. Acu Ana Maria, Rafiq Arif, Multistep fixed point iterations for asymptotically pseudocontractive mappings in real Banach space, *ISST Journal of Mathematics & Computing System*, ISSN 0976 - 9048, Vol. 1 No.1, pp. 1-7, 2010
  154. Ana Maria Acu, Arif Rafiq, Florin Sofonea, Some new four-point quadrature formulas, *An. St. Univ. Ovidius Constanta* Vol. 17(3), 1-13, 2009. (WoS)
  155. Ana Maria Acu, Heiner Gonska, Ostrowski-type inequalities and moduli of smoothness, *Results in Mathematics*, Volume 53, No. 3-4, pp. 217-228, July 2009. (WoS)
  156. Ana Maria Acu, Nicoleta Breaz, Generalized monosplines and inequalities for the remainder term of quadrature formulas, *Journal of Computational Analysis and Applications*, Vol. 11, No. 1, pp. 106-118, 2009 (WoS)
  157. Ana Maria Acu, Generalizations of some classical quadrature formulas, *Proceedings of the International Conference on Theory and Applications of Mathematics and Informatics, Acta Universitatis Apulensis-Special Issue, Alba-Iulia*, pp.573-584, 2009.
  158. Arif Rafiq, Ana Maria Acu, Florin Sofonea, An Iterative Algorithm for Two Asymptotically Pseudocontractive Mappings, *Int. J. Open Problems Compt. Math.*, Vol. 2, No. 3, pp. 372-382, 2009
  159. Arif Rafiq, Ana Maria Acu, Florin Sofonea, On weighted Chebyshev type inequalities, *The Land Forces Academy Review*, No. 2(54), pp.79-84, 2009.
  160. Acu Ana Maria, Rafiq Arif, About a linear positive functional, *Proceedings of the twelfth Symposium of Mathematics and its Applications, Timișoara*, ISSN:1224-6069, pp. 23-28, 2009.
  161. Ana Maria Acu, Arif Rafiq, Carmen Violeta Muraru, The remainder term of some quadrature formulae, *Studii si Cercetari stiintifice, seria Matematica, Bacau*, No.19 , pp. 249-259, 2009.
  162. Arif Rafiq, Ana Maria Acu, Mugur Acu, Iteration of asymptotically pseudocontractive mappings in Banach space, *General Mathematics* Vol. 17, No. 1, pp. 113-124, 2009.
  163. Arif Rafiq, Ana Maria Acu, Strong convergence of an implicit iteration process with errors for a finite family of strongly pseudocontractive mappings, *Analele Universitatii Oradea, Fasc. Matematica*, Tom XVI, pp. 133-139, 2009.
  164. Ana Maria Acu, A. Babos, An error analysis for a quadrature formula, *Revista Academiei Fortelor Terestre, Anul XIV, Nr. 1 (53), Trimestrul I*, pp. 96-102, 2009

165. A. Rafiq, Q. Shahbaz, A.M. Acu, The Generalized Cebysev type inequality, *Scientific Studies and Research, Series Mathematics and Informatics* Vol. 19 , No. 1, pp. 195-200, 2009.
166. Ana Maria Acu, Mugur Acu , Gauss-Lobatto formulae and extremal problems with polynomials, *Journal of Inequalities and Applications* , Volume 2008, Article ID624989, 10 pages. (WoS)
167. Ana Maria Acu , Florin Sofonea, Monosplines and quadrature formulas, *Automation Computers Applied Mathematics*, Vol. 17 , pp. 181-189, 2008.
168. Ana Maria Acu, Mugur Acu, Arif Rafiq, Extremal problems with polynomials, *Proceedings of The 8th Romanian German Seminar on Approximation Theory and its Applications*, Sibiu, 28 May-1 June, 2008, *General Mathematics*, Vol.16. No 4., pp. 3-14, 2008.
169. Ana Maria Acu, About some quadrature formulas, *Annali dell'Universit di Ferrara*, Volume 54, Issue 2, pp. 171-181, 2008.
170. Ana Maria Acu, About an intermediate point property in some quadrature formulas, *Acta Universitatis Apulensis*, Nr. 15, pp 19-32, 2008.
171. Arif Rafiq, Ana Maria Acu, Common fixed points of Ciric quasi-contractive operators through Ishikawa iteration process with errors, *General Mathematics* Vol. 16, No. 3, 145–157, 2008.
172. Ana Maria Acu, Mugur Acu, A quadrature formula based on a spline quasi-interpolant, *WSEAS Transaction on Business and Economics*, Issue 7, Volume 5, ISSN: 1109-9526, pp 414-423, 2008.
173. A.M. Acu, Mugur Acu, Arif Rafiq, The estimates for the remainder term of some quadrature formulae, *Acta Universitatis Apulensis*, Nr. 16, 53-62, 2008.
174. Arif Rafiq, Ana Maria Acu, Mugur Acu, Steepest descent approximations in Banach Space, *General Mathematics* Vol.16, No. 3 , pp. 133–143, 2008.
175. Arif Rafiq, Ana Maria Acu, On fixed points of pseudocontractive mappings, *Acta Universitatis Apulensis*, Nr. 16, pp 63-69, 2008.
176. Ana Maria Acu, Alina Babos, An error analysis for a quadrature formula, *The 14-the International Conference The Knowledge-based organization Technical Sciences Computer Science, Modelling & Simulation and E-learning Technologies. Physics, Mathematics and Chemistry. Conference Proceedings 8*, ISSN: 1843-6722, pp. 290-298, 2008.
177. F. Sofonea, Ana Maria Acu, A. Rafiq, An error analysis for a family of four-point quadrature formulas, *Proceedings of the Fifth International Symposium " Mathematical Inequalities"* , ISBN 978-973-739-740-9., pp. 136-145 , 2008.
178. Ana Maria Acu, M. Acu, A. Rafiq, Some inequalities of Ostrowski type in the case of weighted integrals, *Proceedings of the Fifth International Symposium " Mathematical Inequalities"* , ISBN 978-973-739-740-9, pp. 9-22 , 2008.
179. Ana Maria Acu, Mugur Acu, A quadrature formula associated with a spline quasiinterpolant operator, *Proceedings of the 12th WSEAS International Conferences on COMPUTERS*, Heraklion, Greece, July 23-25, pp 212-217, 2008. (Proceedings WoS)
180. Ana Maria Acu, An intermediate point property in the quadrature formulas, *Proceedings of International Workshop " New Trends in Approximation, Optimization and Classification"* , Sibiu, October 1-5, pp. 9-20, 2008.
181. Ana Maria Acu, Eugen Constantinescu, Some preserving properties of an integral operator, *Proceedings of International Symposium on Complex Analysis*, Sibiu-Romania, August 26-29, *General Mathematics*, Vol. 15, No.2-3, pp.184-189, 2007.
182. Ana Maria Acu, Spline quasi-interpolants and quadrature formulas, *Acta Universitatis Apulensis*, Nr. 13, pp 21-36, 2007.
183. A.M. Acu, Moment preserving spline approximation on finite intervals and Chakalov-Popoviciu quadratures, *Acta Univ. Apulensis*, Nr. 13, 37-56, 2007
184. Ana Maria Acu , A quadrature rule for Beta operators, *Journal of Approximation Theory and Applications*, Vol. 3, No. 1-2, pp. 23-30, 2007.
185. Ana Maria Acu , A generalized quadrature rule, *Journal of Approximation Theory and Applications*,

- India, Vol.3, No. 1-2, pp. 1-8, 2007.
186. Ana Maria Acu, Monosplines and inequalities for the remainder term of quadrature formulas, General Mathematics, Vol. 15, Nr.1, pp 81-92, 2007.
  187. Ana Maria Acu, Optimal quadrature formulas in the sense of Nikolski, General Mathematics, Vol.14, No.2 , pp 109-119, 2006.
  188. Ana Maria Acu, Generalizations of some problems from Gazeta Matematica, Mathematical Education , Vol.1 , No1 , pp. 89-94, 2005.
  189. Ana Maria Acu, M.Acu, On a arithmetical problem, Mathematical Education, Vol.1, No1, pp. 109-112, 2005.
  190. Ana Maria Acu, New results in extremal problems with polynomials, General Mathematics, Vol.12, No.1 , pp 53-60, 2004.
  191. A.M. Acu, Asupra unor probleme date la Concursul Interjudetean de Matematica " Grigore Moisil" 2003, Anuar Matematic 2003 , Vol. VII, 23-26, 2003.
  192. Ana Maria Acu , Mugur Acu, On the exponential diophantine equations of the form  $ax - bycz = +1$ , General Mathematics , Vol.9, No.1-2, pp. 53-56, 2001.
  193. Ana Maria Acu , Mugur Acu, On the exponential diophantine equations of the form  $ax - bycz = +1$ , with  $a, b, c$  prime numbers, General Mathematics , Vol.8, No.3-4, pp. 73-77, 2000