

CURRICULUM VITAE

Sorin G. Gal

EDUCATION

Graduated in 1976 from Faculty of Mathematics, "Babes-Bolyai" University in Cluj, Romania.

Master degree in Analysis in 1977, at the same university.

Ph.D. in Mathematics from "Babes-Bolyai" University of Cluj (1993), "Approximations with restrictions of the real functions", advisor Professor I. Muntean.

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ACADEMIC EXPERIENCE

2009-2011 - Nominated by the Tennessee Board of Regents as adjunct teaching professor at the Department of Mathematical Sciences, University of Memphis, TN, U.S.A.

Visiting Professor for research and teaching at the Department of Mathematical Sciences, University of Memphis, TN, U.S.A. : 2009 (spring semester), 2005 (spring semester), 2000 (fall semester).

1996 - present, Full Professor at the Department of Mathematics, University of Oradea

1993 - 1996, Associate Professor at the Department of Mathematics, University of Oradea

1990 - 1993, Lecturer at the Department of Mathematics, University of Oradea

1978 - 1990, Programmer at Computer Center "Infratirea" Oradea

RESEARCH ACTIVITY

- **10** research monographs published at Birkhauser, Springer and World Scientific ;

- **1** research monograph published at Nova Sci. Publ., New York ;

- over **260** published papers in research journals.

WEB OF SCIENCES (search after Gal, sg*).

- 111 ISI papers in Web of Science ;

- Web of Science H-index = 12 ;

- Web of Science Citations (without self citations) : 754 ;

GOOGLE SCHOLAR citations : 3415 ; **H-index Google Scholar**
: 25

RESEARCH GRANTS

- Director of the research grant **PN-II-ID-PCE-2011-3-0861/5.10.2011-5.10.2017**, "Approximation by nonlinear max-product operators and by distance type methods in the fuzzy number theory, applied to signal and image processing", **2011-2017** ;

- Mentor of the research postdoc grant, **2018-2019**.

AREAS OF INTEREST

Approximation Theory; Real, Complex and Hypercomplex Analysis; Evolution Equations of Complex Spatial Variable, Fuzzy Mathematics; Semi-groups of Operators and Fuzzy Differential Equations; Measure Theory; Functional Analysis.

TEACHING ACTIVITY

Courses and seminars of:

Complex Analysis, Fuzzy Mathematics, Special Functions, Differential and Integral Equations, Differential and Integral Calculus, Special Mathematics for Engineering, Geometric Function Theory of Hypercomplex Variables.

Five courses published by Oradea University Press :

1. Real Functions and Elements of Topology, 1993

2. Numerical Analysis, Part I. Approximation of Functions, 1994

3. Elements of Fuzzy Mathematics (course for master degree), 1996 (with A.I. Ban)

4. Numerical Analysis, Part II. Numerical Methods, 1998 (with Al. Bica)

5. Special Mathematics for Engineering, 1998 (with S. Scurtu)

6. Laboratory Guide of Numerical Analysis, 1999 (with A. Tripe, Al. Bica and C. Popescu)

OTHER ACTIVITIES

- Habilitation : OMEN nr. 5633 MD, from 11.12.2013

- Head of the Department of Mathematics, 1994 - 1996, 1998 - 2000;

- Editor-in-Chief of "Anal. Univ. Oradea" fasc. math. ;
- Managing Associate Editor to Results in Mathematics (Springer ISI journal)
- Associate Editor to International Journal of Evolution Equations (USA)
- ;
- Associate Editor to European Journal of Pure and Applied Mathematics (Istanbul, Turkey)
- Reviewer to Mathematical Reviews (USA) and Zentralblatt für Mathematik (Germany).
- Referee reports to numerous international mathematics journals:
 - Acta Math. Hung., Publ. Math. Debrecen, Fuzzy Sets and Systems, Bol. Soc. Mat. Mexicana, Approx. Theor. and Appl., J. Fuzzy Math., Intern. J. Math. and Math. Sci., J. Math. Anal. and Appl., Constr. Approx., Nonlinear Analysis, Comp. Math. Appl., Neural Networks, Appl. Math. Comput., Applied Math. Letters, Results in Math., J. Approx. Theory, etc.
- Member of the Romanian Society of Mathematical Sciences, member of the American Mathematical Society, 1994 - .
- Participations to numerous national and international conferences.

LIST OF BOOKS AND PAPERS

-RESEARCH MONOGRAPHS-

1. (with G. A. Anastassiou), *Approximation Theory: Moduli of Continuity and Global Smoothness Preservation*, Birkhauser Publ. Co., Boston, Basel, Berlin, 2000, **525** pages., ISBN 0-8176-4151-3. (MR 2000k:41001)
2. *Chapters 12 and 13 in Handbook on Analytic-Computational Methods in Applied Mathematics* (G.A. Anastassiou ed.), Chapman and Hall/CRC, Boca Raton, London, New York, Washington, D.C., 2000. (MR 2001g:41028 and MR 2001g:41029) **100** pages.
3. (with A.I. Ban) *Defects of Properties in Mathematics. Quantitative Characterizations*, World Scientific Publ. Comp., New Jersey, London, Singapore, Hong Kong, 2002, **350** pages, ISBN 981-02-4924-1. (MR 2003b:0001)(Zbl 1035.0001)
4. *Introduction to Geometric Function Theory of Hypercomplex Variable*, Nova Science Publ. Inc., New York, 2002, xvi + **319** pages, ISBN 1-59033-363-0. (MR 2005f :30084)

5. *Global Smoothness and Shape Preserving Interpolation by Classical Operators*, Birkhauser Publ. Co., Boston, Basel, Berlin, 2005, **153** pages, ISBN 0-8176-4387-7 . (MR 2006c:41001, Zbl.1087.41001)
6. *Shape-Preserving Approximation by Real and Complex Polynomials*, Birkhauser Publ. Co., Boston, Basel, Berlin, **352** pages, 2008, ISBN: 978-0-8176-4702-5.
7. *Approximation by Complex Bernstein and Convolution Type Operators*, World Scientific Publ., New Jersey, London, Singapore, Hong Kong, **349** pages, 2009, ISBN: 978-9-8142-8242-0.
8. *Overconvergence in Complex Approximation*, **200** pages, Springer, 2013, ISBN : 978-1-4614-7097-7.
9. (with Gal, Ciprian G. and Goldstein, Jerome A.) *Evolution Equations with a Complex Spatial Variable*, World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2014. x+**191** pages, ISBN: 978-981-4590-59-4.
10. (with Bede, Barnabas and Coroianu, Lucian) *Approximation by Max-Product Type Operators*, Springer, New York, 2016, vii+**485** pages, ISBN : 978-3-319-34188-0.
11. (with Sabadini, Irene) *Quaternionic Approximation with Application to Slice Regular Functions*, to appear at Birkhauser.

-PAPERS IN JOURNALS-

11. Differences divisees et representations sous forme des integrales du polynome d'interpolation....., Bull. Math. Soc. Sci. Roum., 5(73), 2,(1981), 147-15. (MR 83e:41003).
12. Sur les theoremes d'approximation de Weierstrass, Mathematica (Cluj), 23(46), 1, (1981), 25-30. (MR 83e:41009).
13. Sur les theoremes d'approximation de Stone-Weierstrass, Studia Univ. "Babes-Bolyai" (Cluj), ser. math. 26(1981), 33-39. (MR 84b:41029).

14. Sur l'approximation par des polynomes dans $C^p[a, b]$, *Studia Univ. "Babes-Bolyai" (Cluj)*, ser. math., 27(1982), 57-64. (MR 84f:41034).
15. Sur l'approximation par des suites dans un espace norme reel, avec applications aux espaces des fonctions, *Seminar "Th. Anghelutza"*, Politeh. Inst. of Cluj, vol. I (1983), 5-13.
16. Sur les ensembles denses dans quelques espaces des fonctions, *Mathematica (Cluj)*, 26(49)(1984), 45-51. (MR 87c:41016).
17. On the approximation by polynomials in $C^q[0, 1]$, *J. Approx. Theory*, 42(1984), 27-29. (MR 86c:41006).
18. Sur l'approximation des fonctions semi-continues par des suites de polynome, *Studia Univ. "Babes-Bolyai" (Cluj)*, ser. math., 30(1985), 5-8.(MR 87f:41009).
19. Dense linear subspaces in $L^p(E)$, *Rendiconti di Matematica (Roma)*, ser. VII, vol. 6, Nr. 1-2(1986), 125-130. (MR 89j:41052).
20. (with I. Muntean) Dini theorems for sequences which satisfy a generalized Alexandrov condition, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1987, 97-102.(MR 90f:54021).
21. Approximation of continuous functions by monotone sequences of polynomials with restricted coefficients, *Publ. Inst. Math. (Beograd)*, 44(56)(1988), 45-48. (MR 90d:41010).
22. Approximation of real-valued functions by monotone sequences of polynomials, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1988, 55-64. (MR 90c:41008).
23. Approximation of continuously differentiable functions by monotone sequences of polynomials of two variables, *Studia Univ. "Babes-Bolyai" (Cluj)*, ser. math. , 34(1989), Nr.2, 41-43. (MR 91k:41013).
24. Approximation in $L^p[a, b]$ by sequences having properties of global monotony and applications to Fourier series, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1989, 61-68. (MR 91c:41052).

25. New Dini theorems for sequences which satisfy generalized Alexandrov conditions, *Studia Univ. "Babes-Bolyai", ser. math.*, 34(1989), 20-23. (MR 91g:26005).
26. Constructive approximation by monotonous polynomial sequences in $Lip(M, \alpha)$, with α in $(0, 1]$, *J. Approx. Theory*, 59(1989), 356-358. (MR 90k:41010).
27. A construction of monotonically convergent sequences from successive approximations in certain Banach spaces, *Numerische Mathematik*, 56(1989), 67-71. (MR 90g:47118).
28. Extensions d'un resultat sur l'approximation par des polynomes dans $C^p[0, 1]$, *Mathematica(Cluj)*, 31(54)(1989), 47-51. (MR 91m:41013).
29. Calculus of the modulus of continuity for non-concave functions and applications, *Calcolo (Pisa)*, 3-4(1990), 195-202. (MR 92k:41014).
30. Approximation of continuous functions on $[0, 1]$ by monotone sequences of polynomials having interpolating properties at 0 and 1, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint Nr. 7, 1990, 45-52. (MR 93e:41011).
31. Approximation of continuous functions by monotone sequences of polynomials with integral coefficients, *Publ. Inst. Math. (Beograd)*, 49(63), (1991), 92-96. (MR 92h:41013).
32. Calculus of higher order modulus of smoothness for convex functions of higher order and applications, *Calcolo (Pisa)*, 3-4, 28(1991), 275-282. (MR 94e:26014).
33. Characterization of elements of best approximation in normed module over F-ordered rings, *Anal. Univ. Oradea, fasc. mat.*, 1(1991), 79-86.
34. (with J. Szabados) On monotone and doubly monotone polynomial approximation, *Acta Math. Hungar.*, 59(3-4)(1992), 395-399. (MR 94e:41014).
35. Calculus of the modulus of continuity for convex function defined on unbounded intervals and applications, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1992, 60-70. (MR 94e:26006).

36. Properties of the modulus of smoothness for convex function of higher order, *Anal. Univ. Oradea, fasc. mat.*, 2(1992), 48-52.
37. Calculus of higher order averaged modulus of smoothness in L^p -norm for convex functions of higher order, *Serdica Bulg. Math. Publ.*, 18(1992), 232-239. (MR 95d:41048).
38. Approximation of continuous functions by monotonous sequences of generalized polynomials with restricted coefficients, *Publ. Inst. Math. (Beograd)*, 52(66)(1992), 61-66. (MR 95f:41008).
39. Concave moduli of continuity and approximation of monotone convex derivatives by derivatives of Bernstein polynomials, *Mathematica (Cluj)*, 35(58)(1993), 232-239. (MR 95e:41011).
40. Remark on the degree of approximation of continuous functions by singular integrals, *Mathematische Nachrichten*, 164(1993), 197-199. (MR 95b:41029).
41. Calculus of the moduli of continuity in some subclasses of piecewise monotone and convex functions and applications, *Mathematica (Cluj)*, 35(58)(1993), 147-154. (MR 96a:41032).
42. Calculus of higher L^p -modulus of smoothness for convex functions of higher order and applications, *BAM 914(1993)*, vol. LXVIII, 169-178.
43. Calculus of some moduli of continuity and applications, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1993, 47-56. (MR 96c:41053).
44. On interpolation and approximation by monotone sequences of polynomials with monotone derivatives, *Anal. Univ. Oradea, fasc. mat.*, 3(1993), 23-25.
45. Jackson type estimates in the approximation of random functions by random polynomials, *Rendiconti de Matematica (Roma)*, ser. VII, 14(1994), 543-556. (MR 95k:41012).
46. A fuzzy variant of the Weierstrass approximation theorem, *J. Fuzzy Math.*, vol. 1, No. 4(1993), 865-872. (MR 94i:46107).

47. Hausdorff distances between fuzzy sets, *J. Fuzzy Math.*, vol. 2, No. 3 (1994), 623-634. (Zentr. fur Mat. ZM:818.54006).
48. Degree of approximation of fuzzy mappings by fuzzy polynomials, *J. Fuzzy Math.*, vol. 2(1994), 847-853. (MR 95m:41036).
49. On the order of best approximation in some subclasses of functions, "Babes-Bolyai" University, Research Seminars, Seminar on Mathematical Analysis, Preprint No. 7, 1994, 5-13. (Zentr. fur Mat.: 980.00721).
50. On a new property of DeVore-Leviatan polynomials in monotone and convex approximation, *Anal. Univ. Oradea*, 4(1994), 14-18.
51. Estimates in terms of Ditzian-Totik modulus in approximation of continuously differentiable functions by some positive linear operators, *Proceeding First Internat. Romai Conf., Oradea, 1994*, p. 216-223.
52. (with V. Berinde) Elementary problems regarding the polynomial approximation of continuous functions(in Romanian), *Seminar on Mathematical Creativity, University of Baia-Mare, Department of Mathematics*, vol. 3(1993-1994), 1-22.
53. On the Kurzweil-Henstock integral in probability, *St. Cerc. Mat. (Bucharest)*, tom 47, 3-4(1995), 263-269. (Zentr. fur Mat.: 851.60050), (MR 99m:26014).
54. Fuzzy variant of the Stone-Weierstrass approximation theorem, *Mathematica (Cluj)*, 37(60), Nr. 1-2(1995), 103-108. (Zentr. fur Mat.: 970.66243),(MR 99d:46102).
55. Approximate selections for fuzzy set valued mappings and applications, *J. Fuzzy Math.*, vol. 3, No. 4(1995), 941-947. (MR 96j:54011).
56. Properties of the modulus of continuity for monotone convex functions and applications, *Intern. J. Math. and Math. Sciences*, 18(1995), No. 3, 443-446. (MR 96a:41022).
57. On some metric concepts for fuzzy sets, *J. Fuzzy Math.*, vol. 3, No. 3(1995), 645-657. (Zentr. fur Mat.: 890.54007).
58. Remarks on a paper of O. Olteanu, *St. Cerc. Mat. (Bucharest)*, tom 48(1-2)(1996), 29-30. (Zentr. fur Mat.: 960.38246).

59. On Jackson's and Timan's estimates in the approximation of random functions by random polynomials, *Proceed. of ICAOR*, vol. II, Transilvania Press, Cluj-Napoca, 1997, p. 101-106. (MR 98g:41002).
60. On the exact order of approximation by Bernstein polynomials in some subclasses of functions, *Anal. Univ. Oradea, fasc. mat.*, (5-6) (1995-1996), 82-85. (Zentr. fur Mat. 980.07687).
61. On the sufficient conditions of monogeneity for functions of complex type variable, *Rev. Union. Mat. Argentina*, 40(1996), 33-42. (MR 98d:30060).
62. Interpolation of fuzzy mappings, *Mathematica (Cluj)*, 38(61), No. 1-2 (1996), 61-65. (MR 98m:41004).
63. Approximation of continuously Gateaux derivable functionals by Markov operators, *Rev. Anal. Numér. Théor. Approx.*, **25**(1996) nos. 1-2, 111-119. (MR 98m:41035).
64. Degree of approximation of continuous functions by some singular integrals, *Rev. Anal. Numér. Théor. Approx.*, **27**(1998), no. 2, 251-261. (MR 2001k:41023)
65. Approximation and interpolation of functions of hyperbolic-complex variable, *Rev. Union Mat. Argentina*, 40(3-4)(1997), 25-35. (MR 99g:41028).
66. Measures of noncompactness for fuzzy sets, *J. Fuzzy Math.*, vol. 5, No. 2(1997), 309-320. (Zentr. fur Mat. 890.54006).
67. (with A. Villena) Random condensation of singularities and applications, *Random Operators and Stochastic Equations*, vol. 5, No. 3 (1997), 263-268. (MR 98k:46127).
68. (with J. Szabados) On the preservation of global smoothness by some interpolation operators, *Studia Sci. Math. Hung.*, 35(1999), 397-414. (MR 2001e:41009)
69. (with A.I. Ban) Measures of noncompactness in fuzzy topological spaces, *Fuzzy Sets and Systems*, vol. 109(2000), 205-216.

70. (with P. Fjelstad) n -dimensional hyperbolic complex numbers, *Adv. Appl. Clifford Alg.*, vol. 8, No. 1(1998), 47-68.(MR 99i:30067).
71. (with P. Fjelstad) n -dimensional dual complex numbers, *Adv. Appl. Clifford Alg.*, vol. 8, No. 2(1998), 309-322.(MR 2000e:15024).
72. (with P. Fjelstad) Note on monogeneity of functions of complex-type variable, *Anal. Univ. Oradea, fasc. mat., tom VI(1997-1998)*, 119-124.
- [73.] n equivalence question between the Ditzian-Totik modulus of smoothness and an usual periodic modulus of smoothness, *Gen. Math. (Sibiu)*, 6(1998), 13-14.
74. (with G. A. Anastassiou) Some shift invariant integral operators, univariate case, revisited, *J. Comput. Anal. Appl.*, vol. 1, No. 1(1999), 3-23. (MR 2001a:41014)
75. (with G. A. Anastassiou) General theory of global smoothness preservation by singular integrals, univariate case, *J. Comput. Anal. Appl.*, Vol. 1, No. 3(1999), 289-317. (MR 2001d:41019)
76. (with G. A. Anastassiou) On some shift invariant multivariate integral operators, revisited, *J.Communic.Appl.Analysis*,5(2001), 265-275. (MR 2002d:41027)
77. (with G. A. Anastassiou) Global smoothness preservation by multivariate singular integrals, *Bull. Austral. Math. Soc.* 61(2000), 489-506. (MR 2001g:41033)
78. (with G. A. Anastassiou) On some differentiated shift invariant integral operators, univariate case, revisited, *Adv. Nonlinear Var. Inequal.* 2(2)(1999), 71-83.(MR 2000h:26020).
79. (with G. A. Anastassiou) On some differentiated shift invariant integral operators, multivariate case, revisited, *Adv. Nonlinear Var. Inequal.* 2(2)(1999), 97-109.(MR 2000h:26021).
80. The order of best approximation in some classes of functions, *J. Comput. Anal. Appl.*, vol. 2, No. 3(2000), 34-45. (MR 2001f:41034)
81. Random path integrals, *Stud. Cerc. Mat. (Bucharest)*, no. 4(1999), 235-247. (MR 2002d:26010)

82. Univalent functions of hyperbolic-complex and of dual-complex variable, *Mathematica (Cluj)*, 42(65)(2000), No.1, 27-36. (Zentralblatt fur Mathematik: Zbl. 1027.30066)
83. Starlike, convex and alpha-convex functions of hyperbolic complex and of dual complex variable, *Studia Univ. Babes-Bolyai, ser. math.*, 46(2001), no. 2, 23-40. (MR 2003k:30019)
84. (with A.I. Ban) Decomposable measures and information measures for intuitionistic fuzzy sets, *Fuzzy Sets and Systems*, 123(2001), 103-117. (MR 2002e:03084)
85. Spirallike functions of hyperbolic complex and of dual complex variable, *Bull. Math. Soc. Sci. Math. Roumanie (N.S.)*, 42(90), No. 4(1999), 331-339. (MR 2002j:30080)
86. (with J. Szabados) Partial shape preserving approximation by interpolation operators, in : "Functions, Series, Operators, Alexits Memorial Conference, 1999", (L. Leidler, F. Schipp and J. Szabados eds.), J. Bolyai Math. Society, Budapest, 2002, pp. 225-246. (MR 2004b:41016)
87. (with A.I. Ban) On the defect of additivity of fuzzy measures , *Fuzzy Sets and Systems*, 127(2002), 353-362. (MR 2003e:28042)
88. Approximation of (alpha)-holomorphic functions by areolar polynomials of Bernstein type, *Anal. Univ. Oradea, fasc. mat.,tom VII(1999-2000)*, 95-100. (MR 2001b:30052)
89. (with P. Mocanu) On the analytic n-starlike and n-spirallike functions, *Mathematica(Cluj)*, 43(66)(2001), No. 2, 203-210. (MR 2004h:30015)
90. Non-analytic n-starlike and n-spirallike functions, *Studia Univ. "Babes-Bolyai"(Cluj)*, ser. math.,XLIV(1999),43-48. (MR 2004e:30071)
91. (with I. Beg) On the probabilistic domain invariance, *J. Appl. Math. Stoch. Anal.*, 15(2002), No. 1, 29-37. (MR 2003c:47091)
92. (with G.A. Anastassiou) Convergence of generalized singular integrals to the unit, univariate case, *Math. Ineq. and Appl.* ,vol.3, no. 4(2000), 511-518. (MR 2001i:41033)

93. (with G.A. Anastassiou) On the convergence of generalized singular integrals, *RGMA*, Issue 4, vol. 3, 2000, article no. 9 (electronic journal).
94. Higher order derivative of Schwarz, Salagean and Ruscheweyh in the geometric theory of complex functions, *Rev. Roum. Math. Pures Appl.*, 47(2002), No. 1, 33-42. (MR 2004c:30014)
95. Holomorphic starlike, convex and alpha-convex functions of complex-type variable, *Bull. Math. Soc. Roum. Sci. Math.*, 44(92)(2001), No. 3, 259-270. (MR 2004j:30097)
96. (with A.I. Ban) On the defect of orthogonality in real normed linear spaces, *Bull. Math. Soc. Roum. Sci. Math.*, 44(92)(2001), No. 4, 331-343. (MR 2004i:15023)
97. Nonanalytic starlike and convex functions of dual complex and of hyperbolic complex variable, *Complex Variables, Theory and Application*, vol. 46(2001), 1-14. (MR 2002m:30062)
98. Elements of geometric theory for functions of quaternionic variable, *Adv. Appl. Clifford Algebras*, 10(2000), 91-106. (MR 2001m:30060)
99. (with G.A. Anastassiou) Nonpositive Jackson-type approximations to definite integrals, in *Trends in Approximation Theory (Proceed. Internat. Conf. Approx., K. Kopotun et al. eds.)*, Vanderbilt University Press, Nashville, TN, 2001, pp. 11-17, ISBN 0-8265-1379-4. (MR 2004b:41031)
100. (with G.A. Anastassiou) Partial shape preserving approximation by bivariate Hermite-Féjer polynomials, *Comp. and Math. with Appl.*, 42(2001), 57-64. (MR 2002c:41027)
101. (with G.A. Anastassiou) Partial shape-preserving approximation by bivariate Shepard operators, *Comp. and Math. with Appl.*, 42(2001), 47-56. (MR 2002c:41028)
102. (with G.A. Anastassiou) On a fuzzy trigonometric approximation theorem of Weierstrass-type, *J. Fuzzy Math.*, 9(2001), No. 3, 701-708. (Zentral. fur Math.: Zbl.1004.42005)

103. (with G.A. Anastassiou) On global smoothness preservation in complex approximation, *Ann. Polon. Math.*, LXXIX, 3(2002), 199-205. (MR 2003m:41026)
104. (with A.I. Ban) On the defect of complementarity of fuzzy measures, *Fuzzy Sets and Systems*, 131(2002), 365-380. (MR 2003h:28030)
105. (with A.I. Ban) Defect of monotonicity of fuzzy measures, *Anal. Univ. Oradea, fasc. mat.*, 8(2001), 33-45. (MR 2002g:28020)
106. (with A.I. Ban) On the minimal displacement of points under mappings, *Arch. Math. (Brno)*, 38(2002), 273-284. (MR 2003h:47096)
107. On some determinants associated to the sequences of real numbers, *Octogon Math. Mag.*, vol. 8, No. 2(2000), 379-381.
108. On an identity derived from interpolation theory, *Octogon Math. Mag.*, vol. 8, No. 2(2000), 429-430.
109. (with G.A. Anastassiou) Convergence of generalized singular integrals to the unit, multivariate case, in : *Applied Mathematics Reviews* (G.A. Anastassiou ed.), vol. 1, World Scientific, Singapore-New Jersey-London-Hong Kong, 2000, ISBN 981-02-4339-1, pp. 1-8. (MR 2001e:42032)
110. (with A.I. Ban) On the defect of equality for inequalities, *Octogon Math. Mag.*, 8(2001), 713-719.
111. (with P. Fjelstad) Two-dimensional geometries, topologies, trigonometries and physics generated by complex-type numbers, *Adv. Appl. Clifford Algebras*, 11, No.1,(2001), 87-107. (MR 2003k:83009)
112. Convolution-type integral operators in complex approximation on the unit disk, *J. of Computational Methods and Function Theory* 1(2001), No. 2, 417-432. (MR 2003h:30048)
113. Necessary and sufficient conditions for univalence for holomorphic functions of some hypercomplex variables, *Anal.Univ. Oradea, fasc. mat.*, tome 9(2002), 33-42. (MR 2004c:30081)
114. On the lower pointwise estimate by Bernstein polynomials, in : *Mathematical Analysis and Approximation Theory, Proceeding of the Romanian-German Research Seminar, ROGER, Sibiu, June 2002*, (H. Gonska and

- A. Lupas editors), pp. 103-108, Burg Verlag, Sibiu, 2002, ISBN 973-85647-4-3. (Zentral. fur Math. : Zbl.1032.41017)
115. On the Beatson convolution operators in the unit disk, *Journal of Analysis*, 10(2002), 101-106. (Zbl.pre1995598)
 116. Shape preserving bivariate polynomial approximation in $C([-1,1] \times [-1,1])$, *Approx. Theor. and Its Appl.*, vol. 18(2002), no. 1, 26-33. (MR 2003c:41024)
 117. Jackson-type estimate in monotone approximation by bivariate polynomials, *J. of Concrete and Applicable Mathematics*, vol. 1, No. 1 (2003), 63-74. (MR 2006e:41008)
 118. (with B. Bede) Quadrature rules for integrals of fuzzy-number-valued functions, *Fuzzy Sets and Systems*, 145(2004), No. 3, 359-380. (MR 2005f:65033)
 119. (with B. Bede) Fuzzy-number-valued almost periodic functions, *Fuzzy Sets and Systems*, vol. 147(2004), no. 3, 384-403. (MR 2006a:26051)
 120. (with B. Bede) Best approximation and Jackson-type estimates by generalized fuzzy polynomials, *J. Concr. Appl. Math.*, vol. 2(2004), No. 3, 213-232 (MR 2006k : 41052, Zbl. pre05038947).
 121. (with J. Szabados) Global smoothness preservation by bivariate interpolation operators, *Anal. Theory Appl.*, no. 3, 19(2003), 193-208. (MR 2004m:41009)
 122. (with A.I. Ban) On some pointwise defects of properties in Real Analysis, *Real Analysis Exchange*, vol. 29(1), 2003/2004, 1-23. (MR 2005f:26006)
 123. (with C.S. Gal) Shape preserving multivariate polynomial approximation in $C([-1, 1]^m)$, $m \geq 2$, *Intern. J. of Math. and Math. Sci.*, 7(2004), 325-333. (MR 2005i:41006)
 124. (with B. Bede) Generalizations of differentiability for fuzzy-number-valued functions and applications to fuzzy differential equations, *Fuzzy Sets and Systems*, 151(2005), No. 3, 581-599. (MR 2005i:34013)

125. (with C.S. Gal) Zeta functions and the Riemann's hypothesis in some hypercomplex variables, *Anal. Univ. Oradea, fasc. matem.*, vol. 10(2003), 23-40. (MR 2005c:11106)
126. (with G.M. N'Guerekata) Almost automorphic fuzzy-number-valued functions, *J. Fuzzy Math.*, vol. **13**, no. 1(2005), 185-208. (MR 2005k:34043)
127. Geometric and approximate properties of convolution polynomials in the unit disk, *Bull. Inst. Math. Acad. Sinica, New Series*, Vol. **1**, No. 2 (2006), 307-336. (Zbl. pre 0507452, MR 2007e:30055)
128. Remarks on the approximation of normed spaces valued functions by some linear operators, in : *Mathematical Analysis and Approximation Theory, Proceeding of the 6th Romanian-German Research Seminar, RoGer 6, June 2004*, Mediamira Science Publishers, Cluj-Napoca, 2005, pp. 99-109.
129. Tchebycheff orthogonal expansions for vector-valued functions, *Anal. Univ. Oradea, fasc. Matem.*, vol. **11**(2004), 111-118. (MR 2006b:41044)
130. (with C.S. Gal and G.M. N'guerekata) Almost automorphic functions in Frechet spaces and applications to differential equations, *Semigroup Forum*, **71**(2005), No. 2, 201-230 (MR 2007c:43004, Zbl. 1085.43004).
- 131 Shape preserving approximation in vector ordered spaces, *Applied Mathematics Letters*, **18**(2005), No. 2, 1408-1411 (Zbl. 1092.41020).
- 132 (with C.S. Gal) Semigroups of operators on spaces of fuzzy-number-valued functions with applications to fuzzy differential equations, *J. Fuzzy Mathematics*, vol. **13**(2005), No. 3, 647-682 (MR 2006e:47128).
- 133 (with C.S. Gal) Laplace, Fourier and Mellin integral transforms of dual complex and of hyperbolic complex variables, *Anal. Univ. Oradea, fasc. math.*, **12**(2005), 101-115. (MR 2006k:42008)
- 134 (with B. Bede and I.J. Rudas) Almost periodic solutions of fuzzy differential equations, *Proceedings Internat. Sympos. on Computational Intelligence and Intelligent Informatics, 2005, ISCIII' 05, October 14-16, 2005, Tunis, Tunisia*, pp. 58-61.

- 135 (with G.A. Anastassiou) Geometric and approximation properties of a complex Post-Widder operator in the unit disk, *Applied Mathematics Letters*, **19**(2006), No. 4, 393-402 (Zbl. 1093.30025, MR 2006j:30067).
- 136 (with G.A. Anastassiou) Geometric and approximation properties of generalized singular integrals in the unit disk, *J. Korean Math. Soc.*, **43**(2006), No. 2, 425-443 (MR 2007b:30051).
- 137 (with G.A. Anastassiou) On fuzzy trigonometric Korovkin theory, *Nonlin. Funct. Analysis and Appl.*, **11**(2006), No. 3, 385-395. (MR 2007k:41057)
- 138 (with C.S. Gal and G.M. N'guerekata) Almost automorphic groups and semigroups in Frechet spaces, *Communic. in Math. Analysis*, vol. **1** (2006), No. 1.(MR 2007g:47063)
- 139 (with G.A. Anastassiou) Approximation of vector-valued functions by polynomials with coefficients in normed spaces and applications, *Demonstratio Mathem.*, vol. **39**(2006), No. 3, 539-552. (MR 2007e:41035)
- 140 (with G.A. Anastassiou) Geometric and approximation properties of some rotation-invariant integral operators in the unit disk, *J. Comp. Anal. Appl.*, vol. **8** (2006), No. 4, 357-368 (Zbl.1095. 30029, MR 2007b:30047).
- 141 (with G.A. Anastassiou) Geometric and approximation properties of some singular integrals in the unit disk, *J. Ineq. Appl.*, vol. 2006, Article ID 17231, 19 pages, 2006. (MR 2007d:42018)
- 142 Bivariate copositive approximation, *J. Math. Anal. Approx. Theory*, vol. **1**, No.2, 2006, 141-149. (MR 2008f:41012)
- 143 Uniform approximation by bivariate polynomials preserving convexity, in : *Proc. Int. Conf. Numer. Anal. and Approx. Theory, NAAT 2006, July 5-8, 2006* , Cluj-Napoca, Romania, pp. 205-220. (MR 2007j:41013)
- 144 (with C.S. Gal and G.M. N'guerekata) Existence and uniqueness of almost automorphic mild solutions to some semilinear fuzzy differential equations, *Trends in African diaspora math. research*, Nova Sci. Publ., Huntington, NY, 2007, pp. 23-35. (MR 2008f:34145)

- 145 Bernstein-Markov inequalities for bivariate convex functions of higher order, *Anal. Univ. Oradea, fasc. mat.*, **14**(2007), 123-132. (MR 2008g:41019).
- 146 (with G.M. N'guerekata) Almost periodic functions with values in p -Fréchet spaces, $0 < p < 1$, *Global J. Pure Appl. Math.*, **3**(2007), No. 1, 89-103. (MR 2008i:43005)
- 147 (with J.A. Goldstein) Semigroups of linear operators on p -Fréchet spaces, $0 < p < 1$, *Acta Math. Hungarica*, **114**(2007), No. 1-2, 13-36. (MR 2008h:47080, Zbl. 1127.47039)
- 148 (with G.A. Anastassiou) On the best approximation of vector valued functions by polynomials with coefficients in vector spaces, *Annali di Matematica Pura ed Applicata*, **186**(2007), No. 2, 251-265. (MR 2007k:41022)
- 149 Kurepa's function in some hypercomplex variables, *Proc. Int. Conf., on Fundamental Sciences, ICFS 2007, Applied Mathematics and Computer Science Section, 2007*, pp. 51-57.
- 150 On some limits and series arising from semigroup theory, *General Mathematics*, vol. **15**(2007), No. 1, 35-40. (MR 2365425)
- 151 Approximation and geometric properties of some complex Bernstein-Stancu polynomials in compact disks, *Rev. Anal. Numér. Théor. Approx.*, **36**(2007), no. 1, 67-77.
- 152 (with G.A. Anastassiou) Geometric and approximation properties of some complex Sikkema and spline operators in the unit disk, *J. Concr. Applic. Math.*, **6**(2008), 177-188.
- 153 (with A. Aral) q -generalizations of the Picard and Gauss-Weierstrass singular integrals, *Taiwanese J. Math.*, **12**(2008), no. 9, 2501-2515.
- 154 Approximation and geometric properties of some nonlinear complex integral convolution operators, *Integral Transforms and Special Functions*, **19**(2008), No. 5, 367-375.
- 155 Shape preserving approximation by complex polynomials in the unit disk, *Bull. Inst. Math. Acad. Sinica, New Series*, **3**(2008), No. 2, 323-338.

- 156 Voronovskaja's theorem and iterations for complex Bernstein polynomials in compact disks, *Mediterranean J. of Mathematics*, **5**(2008), no.3, 253-272.
- 157 Approximation and geometric properties of complex Favard-Szász-Mirakjan operators in compact disks, *Computers and Mathematics with Applications*, **56**(2008), 1121-1127.
- 158 (with C. Gal and J.A. Goldstein) Evolution equations with real time variable and complex spatial variables, *Complex Variables and Elliptic Equations*, 53(2008), No. 8, 753-774.
- 159 (with C.S. Gal and G.M. N'guerekata) Almost automorphic functions with values in p -Fréchet spaces, $0 < p < 1$, *Electr. J. Diff. Eq.*, 2008, No. 21, 18 pp. (MR 2383385, Zbl 1052.41502)
- 160 Exact orders in simultaneous approximation by complex Bernstein-Stancu polynomials, *Rev. Anal. Numér. Théor. Approx.*, **37**(2008), no. 1, 47-52.
- 161 Approximation by complex Bernstein-Kantorovich and Stancu-Kantorovich polynomials and their iterates in compact disks, *Rev. Anal. Numér. Théor. Approx.*, **37**(2008), no. 2, 159-168.
- 162 Voronovskaja's theorem and the exact degree of approximation for the derivatives of complex Riesz-Zygmund means, *General Mathematics (Sibiu)*, 16(2008), no. 4, 61-71.
- 163 Approximation by complex Bernstein-Stancu polynomials in compact disks, *Results in Mathematics*, **53**(2009), No. 3-4, July, 245-256.
- 164 Generalized Voronovskaja's theorem and approximation by Butzer's linear combinations of complex Bernstein polynomials in compact disks, *Results in Mathematics*, **53**(2009), No. 3-4, July, 257-268.
- 165 (with G.A. Anastassiou) Approximation by complex Bernstein-Schurer and Kantorovich-Schurer polynomials in compact disks, *Computers and Mathematics with Applications*, **58**(2009), No. 4, August, 734-743.
- 166 Exact orders in simultaneous approximation by complex Bernstein polynomials, *J. Concrete Applic. Math.*, **7**(2009), no. 3, 215-220.

- 167 Linear continuous functionals on FN-type spaces, *J. Fuzzy Mathematics*, vol. 17(2009), No. 3, 535-553.
- 168 Remarks on the strong approximation by Taylor series in the unit disk, *Anal. Univ. Oradea, fasc. math.*, 16(2009), 229-232.
- 169 (with V. Gupta) Approximation of vector-valued functions by q -Durrmeyer operators with applications to random and fuzzy approximation, *Anal. Univ. Oradea, fasc. math.*, 16(2009), 233-240.
- 170 (with G.A. Anastassiou) Quantitative estimates in the overconvergence of Chebyshev and Legendre orthogonal expansions on $[-1,1]$, *Nonlinear Studies*, 17(2010), no. 2, 139-149.
- 171 (with G.A. Anastassiou) Quantitative estimates in the overconvergence of some singular integrals, *Communications in Applied Analysis*, 14(2010), No. 1, 13-20.
- 172 (with Ciprian Gal and Jerome Goldstein) Higher order heat and Laplace type equations with real time variable and complex spatial variable, *Complex Variables and Elliptic Equations*, Vol. 55(2010), No. 4 (April), 357-373.
- 173 (with B. Bede) Approximation by nonlinear Bernstein and Favard-Szász-Mirakjan operators of max-product kind, *J. Concrete and Applicable Mathematics*, vol. 8(2010), No. 2, 193-207.
- 174 (with G.A. Anastassiou and M. Ganzburg) A note on shape preserving weighted uniform approximation, *Journal of Computational Analysis and Applications*, vol. 12(2010), No. 1-B, 263-267.
- 175 Voronovskaja's theorem, shape preserving properties and iterations for complex q -Bernstein polynomials, *Studia Sci. Math. Hungar.*, vol. 48(2011), No. 1, 23-43.
- 176 (with G.A. Anastassiou and L. Coroianu) Approximation by a nonlinear Cardaliaguet-Euvrard neural network operator of max-product kind, *Journal of Computational Analysis and Applications*, vol. 12(2010), No. 2, 396-406.

- 177 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the Bernstein operator of max-product kind, Intern. J. Math. and Math. Sci., volume 2009, Article ID 590589, 26 pages, doi:10.1155/2009/590589
- 178 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the nonlinear Baskakov operator of max-product kind, Studia Univ. Babeş-Bolyai, ser. math., vol. **LV**(2010), 193–218.
- 179 (with R. Greiner) Convolution polynomials through Beatson kernels in the unit disk, Anal. Univ. Oradea, fasc. math., **XVII**(2010), No. 2, 213-217.
- 180 Approximation by complex Bernstein-Durrmeyer polynomials with Jacobi weights in compact disks, Mathematica Balkanica (N.S.), 24(2010), no. 1-2, 103–119.
- 181 Remarks on the generation of semigroups of nonlinear operators on p -Fréchet spaces, $0 < p < 1$, CUBO Math. J., 13(2011), No. 2, 37-57.
- 182 (with G.A. Anastassiou) Approximation by complex Bernstein- Durrmeyer polynomials in compact disks, Mediterr. J. Math., 7(2010), No. 4, 471-482.
- 183 (with B. Bede and L. Coroianu) Approximation by truncated Favard-Szász-Mirakjan operator of max-product kind, Demonstratio Mathematica, vol. XLIV(2011), No. 1, 105-122.
- 184 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the nonlinear Bleimann-Butzer-Hahn operators of max-product kind, Comment. Math. Univ. Carol., 51(2010), No. 3, 397-415.
- 185 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the nonlinear Meyer-König and Zeller operator of max-product kind, Numerical Functional Analysis and Optimization, 31(3)(2010), 232-253.
- 186 (with L. Coroianu) Approximation by nonlinear Lagrange interpolation operators of max-product kind on Chebyshev knots of second kind, J. Comp. Anal. Appl., vol. 13(2011), no. 2, 211-224.

- 187 (with L. Coroianu) Approximation by Nonlinear Hermite-Fejér Interpolation operators of max-product kind on Chebyshev nodes, *Rev. Anal. Numér. Théor. Approx.*, **39**(2010), no. 1, 21-31.
- 188 (with Ciprian Gal and Jerome Goldstein) Wave and telegraph equations with real time variable and complex spatial variables, *Complex Variables and Elliptic Equations*, vol. 57(2012), Issue No. 1, 91-109.
- 189 (with L. Coroianu) Approximation by nonlinear generalized sampling operators of max-product kind, *Sampling Theory in Signal and Image Processing* , vol. 9(2010), No. 1-3, 59-75.
- 190 (with B. Bede) Solutions of fuzzy differential equations based on generalized differentiability, *Commun. Math. Analysis*, vol. 9(2010), No. 2, 1-20.
- 191 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the nonlinear Favard-Szász-Mirakjan operators of max-product kind, *Filomat*, vol. 24(2010), No. 3, 55-72.
- 192 Approximation by complex genuine Durrmeyer type polynomials in compact disks, *Appl. Math. Comput.*, 217(2010), 1913-1920.
- 193 Approximation of analytic functions without exponential growth conditions by complex Favard-Szász-Mirakjan operators, *Rendiconti del Circolo Matematico di Palermo*, 59(2010), No. 3, 367-376.
- 194 Approximation by complex Lorentz polynomials, *Mathematical Communications*, **16**(2011), 67–75.
- 195 (with G. A. Anastassiou) Quantitative estimates in the overconvergence of some multivariate singular integrals, *Journal of Applied Functional Analysis*, vol. 7(2012), No. 1-2, 42-53.
- 196 (with G. A. Anastassiou) Approximation properties of some multivariate generalized singular integrals in the unit polydisk, *J. Comp. Anal. Appl.*, vol. 13(2011), no. 1, 11-19.
- 197 (with G. A. Anastassiou) Approximation properties of some multicomplex singular integrals in the unit polydisk, *J. Comp. Anal. Appl.*, vol. 13(2011), no. 1, 127-156.

- 198 (with G.A. Anastassiou) Quantitative estimates in the overconvergence of some generalized singular integrals, *Mathematics in Engineering, Science and Aerospace (MESA)*, 2(2011), No. 2, 105-113.
- 199 Approximation by complex potentials generated by the Gamma function, *Turkish J. Math.*, 35(2011), 1-14.
- 200 (with B. Bede and L. Coroianu) Approximation and shape preserving properties of the truncated Baskakov operator of max-product kind, *Revista de la Unión Matemática Argentina*, **52**(2011), No. 1, 89-107.
- 201 Approximation by complex potentials generated by the Euler's Beta function, *European Journal of Pure and Applied Mathematics*, Vol. 3(2010), No. 6, 1150-1164.
- 202 (with L. Coroianu) Classes of functions with improved estimates in approximation by the max-product Bernstein operator, *Analysis and Applications*, vol. 9(2011), No. 3, 249-274.
- 203 (with G.A. Anastassiou) Quantitative estimates in the overconvergence of some complex multivariate generalized singular integrals in polystrips, *J. Comp. Anal. Appl.*, vol. 13(2011), no. 1, 84-97.
- 204 (with L. Coroianu) Global smoothness preservation by some nonlinear max-product operators, *Matematicki Vesnik*, vol. 64(2012), No. 4, 303-315.
- 205 Approximation in compact sets by q -Stancu-Faber polynomials, $q > 1$, *Comp. Math. Appl.* 61(2011), No. 10, 3003-3009.
- 206 (with L. Coroianu) Approximation by max-product Lagrange interpolation operators, *Studia Univ. Babeş-Bolyai, Math.*, 56(2011), No. 2, 315-325.
- 207 Approximation by max-product type nonlinear operators, *Studia Univ. Babeş-Bolyai, Math.*, 56(2011), No. 2, 341-352.
- 208 (with V. Gupta) Approximation by a Durrmeyer-type operator in compact disks, *Annali dell'Università di Ferrara*, 57(2011), 261-274.

- 209 (with L. Coroianu) Approximation by max-product sampling operators based on sinc-type kernels, *Sampling Theory in Signal and Image Processing*, 10(3)(2011), 211-230.
- 210 Differentiated generalized Voronovskajas theorem in compact disks, *Results in Mathematics*, **61**(2012), No. 3, 347-353.
- 211 (with C.S. Gal and J.A. Goldstein) Schrödinger type equations with real time variable and complex spatial variables, *Complex Variables and Elliptic Equations*, 58 (2013), no. 3, 415-430.
- 212 (with B. Bede and L. Stefanini) Solutions of fuzzy differential equations with L-R fuzzy numbers, in : *Soft Computing Applications*, SOFA, 2010, 197-202.
- 213 (with V. Gupta) Approximation by certain integrated Bernstein-type operators in compact disks, *Lobachevski Journal of Mathematics*, Vol. **33**(2012), No. 1, pp. 39-46.
- 214 (with V. Gupta) Approximation by complex Beta operators of first kind in strips of compact disks, *Mediterranean Journal of Mathematics*, **10**(2013), No. 1, pp. 31-39.
- 215 (with V. Gupta) Quantitative estimates for a new complex Durrmeyer operator in compact disks, *Applied Mathematics and Computation*, **218**(2011), No. 6, 2944-2951.
- 216 Approximation by quaternion q -Bernstein polynomials, $q > 1$, *Advances in Applied Clifford Algebras*, **22**(2012), No. 2, 313-319.
- 217 (with G. Tachev) The lower estimate for Bernstein operator, *Mathematica Balkanica (N.S.)*, **27** (2013), no. 1-2, 39-51.
- 218 Voronovskaja-type results in compact disks for quaternion q -Bernstein operators, $q \geq 1$, *Complex Analysis and Operator Theory*, **6**(2012), No. 2, Page 515-527.
- 219 (with V. Gupta, D. K. Verma and P. N. Agrawal) Approximation by complex Baskakov-Stancu operators in compact disks, *Rendiconti del Circolo Matematico di Palermo*, Volume 61(2012), Issue 2, pp. 153-165.

- 220 (with C.S. Gal and J.A. Goldstein) Burgers and Black-Merton-Scholes equations with real time variable and complex spatial variable, *Applicable Analysis*, 92(2013), no. 8., 1766-1786.
- 221 Approximation by complex q -Lorentz polynomials, $q > 1$, *Mathematica(Cluj)*, **54(77)**, No. 1, 2012, 53-63.
- 222 (with L. Coroianu) Saturation Results for the Lagrange Max-Product Interpolation Operator Based on Equidistant Knots, *Rev. Anal. Numér. Théor. Approx.*, **41**(2012), no. 1, 27-41.
- 223 (with M. Balaj, L. Coroianu and S. Muresan), Iterations and fixed points for the Bernstein max-product operator, *Fixed Point Theory*, 14(2013), No. 1, 39-52.
- 224 (with I. Sabadini) Approximation in compact balls by convolution operators of quaternion and paravector variable, *Bulletin of the Belgian Mathematical Society (Simon Stevin)*, 20(2013), 481-501.
- 225 (with N.I. Mahmudov and M. Kara) Approximation by complex q -Szász-Kantorovich operators in compact Disks, $q > 1$, *Complex Anal. Oper. Theory*, 7(2013), no. 6, 1853-1867.
- 226 (with L. Coroianu) Saturation results for the truncated max-product sampling operators based on sinc and Fejér-type kernels, *Sampling Theory in Signal and Image Processing*, Vol. 11, No. 1, 2012, pp. 113-132.
- 227 (with L. Coroianu) Localization results for the Meyer-Konig and Zeller max-product operator, *Numerical Functional Analysis and Optimization*, 34(7)(2013), 713-727.
- 228 Erratum to : Differentiated generalized Voronovskajas theorem in compact disks, *Results in Mathematics*, Volume **63**, Issue 1 (2013), 713-716
- 229 (with C. Gal) On Fokker-Planck and linearized Korteweg-de Vries type equations with complex spatial variables, *Cubo Journal*, Vol.15(2013), No. 1, 33-47.
- 230 (with L. Coroianu) Localization results for the Lagrange max-product interpolation operator based on equidistant knots, *Rev. Anal. Numér. Théor. Approx.*, **42**(2013), no. 2, 2013, pp. 121-131.

- 231 (with Bede, B. and Coroianu L.) Approximation of fuzzy numbers by max-product Bernstein operators, *Fuzzy Sets and Systems*, **257** (2014), 41-66.
- 232 (with Gupta, V.) Approximation by complex Stancu beta operators of second kind in semidisks, *Rev. Anal. Numér. Théor. Approx.*, **42**(2013), no. 1, 21-36.
- 233 (with Sabadini, I.) Walsh equiconvergence theorems in the quaternionic setting, *Complex Var. Elliptic Equ.* 59 (2014), no. 12, 1589-1607.
- 234 (with Sabadini, I.) Carleman type approximation theorem in the quaternionic setting and applications, *Bull. Belg. Math. Soc. Simon Stevin* 21 (2014), no. 2, 231-240.
- 235 (with Gupta, V.) Approximation by complex Szász-Durrmeyer operators in compact disks, *Acta Math. Sci. Ser. B Engl. Ed.* 34 (2014), no. 4, 1157-1165.
- 236 Approximation with an arbitrary order by generalized Szász-Mirakjan operators, *Stud. Univ. Babeş-Bolyai Math.* 59 (2014), no. 1, 77-81.
- 237 A possibilistic approach of the max-product Bernstein kind operators, *Results Math.* 65 (2014), no. 3-4, 453-462.
- 238 (with Gupta, V.) Approximation by complex Phillips-Stancu operators in compact disks under exponential growth conditions, *Appl. Math. Comput.* 234 (2014), 309-315.
- 239 (with Coroianu, L.) On copositive approximation by bivariate polynomials on rectangular grids, *J. Appl. Funct. Anal.* 9 (2014), no. 3-4, 272-276.
- 240 (with Coroianu, L.) Localization results for the Bernstein max-product operator, *Appl. Math. Comput.* 231 (2014), 73-78.
- 241 (with Coroianu, L.) Saturation and Inverse Results for the Bernstein max-product operator, *Period. Math. Hungar.*, **69** (2014), no. 2, 126-133.

- 242 (with Gupta, V.) Approximation by complex Durrmeyer type operators in compact disks, in : *Mathematics without Boundaries : Surveys in Interdisciplinary Research*, P.M. Pardalos and T.M. Rassias (editors), Springer, New York-Heidelberg-Dordrecht-London, 2014, pp. 263-284.
- 243 (with Gonzalez-Cervantes, J. Oscar; Sabadini, Irene) On some geometric properties of slice regular functions of a quaternion variable, *Complex Var. Elliptic Equ.* **60** (2015), no. 10, 1431-1455.
- 244 (with Gonzalez-Cervantes, J. Oscar; Sabadini, Irene) Univalence results for slice regular functions of a quaternion variable, *Complex Var. Elliptic Equ.* **60** (2015), no. 10, 1346-1365.
- 245 (with Opris, Bogdan D.) Approximation with an arbitrary order by modified Baskakov type operators, *Appl. Math. Comput.* **265** (2015), 329-332.
- 246 (with Gupta, V.) Approximation by complex Szász-Mirakjan-Stancu-Durrmeyer operators in compact disks under exponential growth, *Filomat*, **29** (2015), no. 5, 1127-1136.
- 247 (with Sabadini, I.) Universality properties of the quaternionic power series and entire functions, *Math. Nachr.* **288** (2015), no. 8-9, 917-924.
- 248 (with Gupta, V.) Approximation by complex Baskakov-Szász-Durrmeyer operators in compact disks, *Anal. Theory Appl.* **31** (2015), no. 2, 207-220.
- 249 Approximation of analytic functions by generalized Favard-Szász-Mirakjan-Faber operators in compact sets, *Complex Anal. Oper. Theory* **9** (2015), no. 5, 975-984.
- 250 (with Gupta, V.) Approximation by the complex form of a link operator between the Phillips and the Szász-Mirakjan operators, *Results Math.* **67** (2015), no. 3-4, 381-393.
- 251 (with Sabadini, I.) Arakelian's approximation theorem of Runge type in the hypercomplex setting, *Indag. Math. (N.S.)* **26** (2015), no. 2, 337-345.

- 252 (with Sabadini, I.) On Bernstein and Erdős-Lax's inequalities for quaternionic polynomials, *C. R. Math. Acad. Sci. Paris* **353** (2015), no. 1, 5-9.
- 253 (with Opris, B. D.) Uniform and pointwise convergence of Bernstein-Durrmeyer operators with respect to monotone and submodular set functions, *J. Math. Anal. Appl.* **424** (2015), no. 2, 1374-1379.
- 254 (with V. Gupta) Approximation by complex Lupas-Durrmeyer polynomials based on Polya distribution, *Banach J. Math. Anal.*, Volume 10, Number 1 (2016), 209-221.
- 255 (with Bascanbaz-Tunca, Gulen; Cetin, Nursel) Complex operators generated by q -Bernstein polynomials, $q \geq 1$. *Stud. Univ. Babeş-Bolyai Math.* 61 (2016), no. 2, 169-176.
- 256 (with (Mahmudov, N. I.; Opris, B. D.) Approximation with an arbitrary order of Szasz, Szasz-Kantorovich and Baskakov complex operators in compact disks. *Azerb. J. Math.* 6 (2016), no. 2, 3-12.
- 257 Approximation by Choquet integral operators. *Ann. Mat. Pura Appl.* (4) 195 (2016), no. 3, 881-896.
- 258 (with Coroianu, L.) Localization results for the non-truncated max-product sampling operators based on Fejer and sinc-type kernels. *Demonstr. Math.* 49 (2016), no. 1, 38-49.
- 259 (with Opris, B. D.) Approximation of analytic functions with an arbitrary order by generalized Baskakov-Faber operators in compact sets. *Complex Anal. Oper. Theory* 10 (2016), no. 2, 369-377.
- 260 (with Gonska, H.H.) Gruss and Grüss-Voronovskaya-type estimates for some Bernstein-type polynomials of real and complex variables. *Jaen J. Approx.* 7 (2015), no. 1, 97-122.
- 261 (with Sabadini, I.) Approximation by polynomials on quaternionic compact sets. *Math. Methods Appl. Sci.* 38 (2015), no. 14, 3063-3074.
- 262 Approximation under exponential growth conditions by Szasz and Baskakov type operators in the complex plane, in : *Mathematical Analysis Approximation Theory and their Applications*, T.M. Rassias and V. Gupta

- (editors), Springer Optimization and its Applications, vol. 111, Springer, New York, 2016, pp. 235-266.
- 263 Approximation by Bernstein-Faber-Walsh and Szasz-Mirakjan-Faber-Walsh Operators in Multiply Connected Compact Sets of \mathbb{C} , in: *Progress in Approximation Theory and Applicable Complex Analysis* - In the memory of Q. I. Rahman, 401-428, Springer Optim. Appl., 117, Springer, Cham, 2017.
- 264 (with Trifa, S.) Quantitative estimates in uniform and pointwise approximation by Bernstein-Durrmeyer-Choquet operators, *Carpathian J. Math.* 33 (2017), no. 1, 49-58.
- 265 (with Coroianu, L.) L^p -approximation by truncated max-product sampling operators of Kantorovich-type based on Fejer kernel, *Journal of Integral Equations and Applications*, 29 (2017), no. 2, 349-364.
- 266 (with Coroianu, L.; Opris, B.D. ; Trifa, S.) Feller's scheme in approximation by nonlinear possibilistic integral operators, *Numerical Functional Analysis and Optimization*, 38 (2017), no. 3, 327-343.
- 267 (with Sabadini, I.) Faber polynomials on quaternionic compact sets, *Complex Analysis and Operator Theory*, 11 (2017), no. 5, 1205-1220.
- 268 Quantitative approximations by convolution polynomials in Bergman spaces, *Complex Anal. Oper. Theory* 12 (2018), no. 2, 355-364.
- 269 (with Trifa, S.) Quantitative estimates in L_p -approximation by Bernstein-Durrmeyer-Choquet operators with respect to distorted Borel measures. *Results Math.* 72 (2017), no. 3, 1405-1415.
- 270 (with Gal, C.G.) Heat and Laplace type equations with complex spatial variables in weighted Bergman spaces. *Electron. J. Differential Equations* 2017, Paper No. 236, 8 pp.
- 271 Convolutions with probability densities and applications to PDEs. *Electron. J. Differential Equations* 2017, Paper No. 216, 9 pp.
- 272 Uniform and pointwise quantitative approximation by Kantorovich-Choquet type integral operators with respect to monotone and submodular set functions. *Mediterr. J. Math.* 14 (2017), no. 5, Art. 205, 12 pp.

- 273 (with Sabadini, I.) Overconvergence of Chebyshev and Legendre expansions in quaternionic ellipsoids. *Adv. Appl. Clifford Algebr.* 27 (2017), no. 1, 125133.
- 274 (Sabadini, I.) Approximation by polynomials in Bergman spaces of slice regular functions in the unit ball. *Math. Methods Appl. Sci.* 41 (2018), no. 4, 1619-1630.
- 275 Quantitative Approximation by Nonlinear Picard-Choquet, Gauss-Weierstrass-Choquet and Poisson-Cauchy-Choquet Singular Integrals. *Results Math.* 73 (2018), no. 3, 73:92
- 276 (with Coroianu, L.) Approximation by truncated max-product operators of Kantorovich-type based on generalized (ϕ, ψ) -kernels, *Math. Methods Appl. Sci.*, first online, DOI:10.1002/mma.5262
- 277 The Choquet integral in capacity, *Real Anal. Exchange*, Volume 43, Number 2(2018), 263-280.
- 278 (with Gupta, V.) Approximation by a complex Post-Widder type operator, *Anal. Theory Appl.*, Vol. 34, No. 4 (2018), pp. 297-305
- 279 Fredholm-Choquet integral equations, *J. Integr. Eq. and Appl.*, to appear, <https://projecteuclid.org/euclid.jiea/1542358961>.
- 280 Volterra-Choquet integral equations, *J. Integr. Eq. and Appl.*, to appear, <https://projecteuclid.org/euclid.jiea/1541668067>
- 281 Quantitative approximation by Stancu-Durrmeyer-Choquet-Sipos operators, *Mathematica Slovaca*, accepted for publication.
- 282 Shape preserving properties and monotonicity properties of the sequences of Choquet type integral operators, *J. Numer. Anal. Approx. Theory*, accepted for publication.
- 283 (with Coroianu, L.) Approximation by max-product operators of Kantorovich type, *Studia Univ. "Babes-Bolyai", ser. math.*, accepted for publication.
- 284 (with Coroianu, L., Costarelli, D. and Vinti, G.) The max-product generalized sampling operators: convergence and quantitative estimates, submitted.

285 (with Coroianu, L., Costarelli, D. and Vinti, G.) Approximation by max-product sampling Kantorovich operators with generalized kernels, submitted.

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