

LIST OF SCIENTIFIC PUBLICATIONS

DOCTORAL THESIS

Adrian Nicoale Branga, *Contributions to the theory of spline functions and applications* (in Romanian), Babeş-Bolyai University, Cluj- Napoca, 200 pg, 2003, supervisor: Professor Ph.D. Alexandru Lupaş.

BOOKS AND MONOGRAPHS

1. Adrian Nicolae Branga, Alina Totoi, *Numerical methods. Seminar lecture notes and practical laboratory work* (in Romanian), Techno Media Publishing House, Sibiu, ISBN 978-606-616-384-2, 202 pg, 2020.
2. Adrian Nicoale Branga, *Advanced numerical computation* (in Romanian), Lucian Blaga University Publishing House, Sibiu, ISBN 978-606-12-0917-0, 200 pg, 2014.
3. Adrian Nicoale Branga, *Numerical methods* (in Romanian), vol. 1, Alma Mater Publishing House, Sibiu, ISBN 978-973-632-793-3, ISBN vol. 978-973-632-794-0, 202 pg, 2013.
4. Adrian Nicoale Branga, *Approximation and optimization by spline functions* (in Romanian), Casa Cărţii de Ştiinţă Publishing House, Cluj-Napoca, ISBN 978-973-133-550-6, 350 pg, 2009.
5. Adrian Nicolae Branga, Silviu Crăciunaş, Nicolae Secelean, *Functional analysis and approximation theory* (in Romanian), Casa Cărţii de Ştiinţă Publishing House, Cluj-Napoca, ISBN 978-973-133-545-2, 303 pg, 2009.
6. Adrian Nicolae Branga, Dana Simian, *The Radon transform and applications* (in Romanian), Transilvania University Publishing House, Braşov, ISBN 973-635-338-9, 121 pg, 2004.
7. Adrian Nicolae Branga, *Programming problems* (in Romanian), Lucian Blaga University Publishing House, Sibiu, ISBN 973-651-020-4, 376 pg, 1999.
8. Emil Marin Popa, Adrian Nicolae Branga, *The C/C++ programming language: theory and programs* (in Romanian), Lucian Blaga University Publishing House, Sibiu, ISBN 973-95604-1-4, 260 pg, 1997.
9. Alexandru Lupaş, Florin Sofonea, Adrian Nicolae Branga, *Numerical analysis: algorithms and problems* (in Romanian), Lucian Blaga University Publishing House, Sibiu, ISBN 973-9280-39-0, 142 pg, 1997.

ARTICLES

PUBLISHED IN INTERNATIONAL SCIENTIFIC JOURNALS

a) Scientific Articles indexed in

Web of Science - Science Citation Index Expanded

1. Adrian Nicolae Branga, Ion Marian Olaru, *An Application of the Fixed Point Theory to the Study of Monotonic Solutions for Systems of Differential Equations*, Mathematics, ISSN 2227-7390, vol. 8, issue



- 7, art. 1183, pp 1-8, 2020 (Clarivate Analytics - Web of Science - Science Citation Index Expanded, Q1)
2. Adrian Nicolae Branga, Ion Marian Olaru, *Cone Metric Spaces over Topological Modules and Fixed Point Theorems for Lipschitz Mappings*, Mathematics, ISSN 2227-7390, vol. 8, issue 5, art. 724, pp 1-14, 2020 (Clarivate Analytics - Web of Science - Science Citation Index Expanded, Q1)
 3. Ion Marian Olaru, Adrian Nicolae Branga, *Some fixed point results in D^* -quasimetric spaces*, Journal of Fixed Point Theory and Applications, ISSN 1661-7738, vol. 20, issue 2, art. 78, pp 1-10, 2018. (Web of Science - Science Citation Index Expanded, Q1)
 4. Adrian Nicolae Branga, Mugur Acu, *A remarkable equality referring to spline functions, in Hilbert spaces*, Filomat, ISSN 0354-5180, vol. 24, no. 4, pp 121-127, 2010. (Web of Science - Science Citation Index Expanded, Q2)
 5. Adrian Nicolae Branga, *Natural splines of Birkhoff type and optimal approximation*, Journal of Computational Analysis and Applications, ISSN 1521-1398, vol. 7, no. 1, pp 81-88, 2005. (Web of Science - Science Citation Index Expanded, Q3)

b) Scientific Articles indexed in other International Databases

6. Eugen Constantinescu, Adrian Nicolae Branga, *Applications of the improved Fejer's sum*, General Mathematics, ISSN 1221-5023, vol. 20, no. 5, pp 31-36, 2012. (IDB: Zentralblatt Math)
7. Ion Marian Olaru, Adrian Nicolae Branga, Anca Oprea, *Common fixed point results in b-cone metric spaces over topological vector spaces*, General Mathematics, ISSN 1221-5023, vol. 20, no. 1, pp 57-67, 2012. (IDB: Zentralblatt Math)
8. Ion Marian Olaru, Adrian Nicolae Branga, *Common fixed point results in b-K-metric spaces*, General Mathematics, ISSN 1221-5023, vol. 19, no. 4, pp 51-59, 2011. (IDB: Zentralblatt Math)
9. Adrian Nicolae Branga, Eugen Constantinescu, *On a property of the spline functions*, Journal of Science and Arts, ISSN 1844-9581, vol. 11, no. 4 (17), pp 413-416, 2011. (IDB: Zentralblatt Math)
10. Adrian Nicolae Branga, *A generalization of some classical quadrature formulas*, General Mathematics, ISSN 1221-5023, vol. 18, no. 1, pp 19-23, 2010. (IDB: Zentralblatt Math)
11. Mugur Acu, Adrian Nicolae Branga, Daniel Breaz, Nicoleta Breaz, Eugen Constantinescu, Alina Totoi, *On some integral operators on analytic functions*, General Mathematics, ISSN 1221-5023, vol. 17, no. 4, pp 205-210, 2009. (IDB: Zentralblatt Math)
12. Adrian Nicolae Branga, *A structural theorem of the generalized spline functions*, General Mathematics, ISSN 1221-5023, vol. 17, no. 2, pp 135-143, 2009. (IDB: Zentralblatt Math)
13. Adrian Nicolae Branga, *A best approximation property of the generalized spline functions*, General Mathematics, ISSN 1221-5023, vol. 16, no. 4, pp 25-33, 2008. (IDB: Zentralblatt Math)



14. Adrian Nicolae Branga, *Development in series of orthogonal polynomials with applications in optimization*, General Mathematics, ISSN 1221-5023, vol. 15, no. 1, pp 101-110, 2007. (IDB: Zentralblatt Math)
15. Adrian Nicolae Branga, *Spline functions with applications to optimal approximation*, General Mathematics, ISSN 1221-5023, vol. 14, no. 4, pp 135-146, 2006. (IDB: Zentralblatt Math)
16. Adrian Nicolae Branga, *Optimal approximation of linear functionals using natural splines of Hermite type*, Buletinul Științific al Universității Politehnica din Timișoara, seria Matematică- Fizică, ISSN 1224-6069, pp. 23-30, 1999. (IDB: Zentralblatt Math)
17. Adrian Nicolae Branga, *On Hermite interpolation formula*, General Mathematics, ISSN 1221-5023, vol. 6, pp 11-15, 1998. (IDB: Zentralblatt Math)
18. Adrian Nicolae Branga, *A fundamental property of B-splines*, General Mathematics, ISSN 1221-5023, vol. 4, pp 33- 39, 1996. (IDB: Zentralblatt Math)
19. Adrian Nicolae Branga, *A property of divided differences with multiple nodes*, General Mathematics, ISSN 1221- 5023, vol. 4, pp 21-32, 1996. (IDB: Zentralblatt Math)
20. Adrian Nicolae Branga, *Some properties of interpolating polynomials*, General Mathematics, ISSN 1221-5023, vol. 3, no. 1-2, pp 29-40, 1995. (IDB: Zentralblatt Math)
21. Adrian Nicolae Branga, *A sufficient condition for univalence*, General Mathematics, ISSN 1221-5023, vol. 2, no. 3, pp 145-150, 1994. (IDB: Zentralblatt Math)

ARTICLES

PUBLISHED IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

1. Eugen Constantinescu, Adrian Nicolae Branga, *Solving a certain extremal problem with polynomials*, Proceedings of „The Thirteenth International Conference on Mathematics and its Applications – ICMA 2012” (Eds: I. Cuculescu, J. Jarić, P. Găvruta, I. Golet, L. Cădariu), Politehnica University Publishing House, Timișoara, ISSN 1224-6069, pp 77-82, 2013.
2. Adrian Nicolae Branga, *A necessary and sufficient condition for characterization of spline functions*, Proceedings of „The Fifth International Conference on Dynamical Systems and Applications”, Ovidius University Publishing House, Constanța, ISSN 1584-5990, pp 231-236, 2009.
3. Adrian Nicolae Branga, *An inequality for generalized spline functions*, Proceedings of „The Fifth International Symposium on Mathematical Inequalities” (Eds: E. C. Popa, D. Acu, A. M. Acu, F. Sofonea), Lucian Blaga University Publishing House, Sibiu, ISBN 978-973-739-740-9, pp 33-39, 2008.
4. Adrian Nicolae Branga, *A new property of B-spline functions*, Mathematical Analysis and Approximation Theory, Proceedings of „The Fifth Romanian-German Seminar on Approximation Theory

and its Applications" (Eds: Al. Lupaş, H. Gonska, L. Lupaş), Burg Publishing House, Sibiu, ISBN 973-85647-4-3, pp 45-50, 2002.

5. Adrian Nicolae Branga, *Natural splines and optimal approximation*, Schriftenreihe des Fachbereichs Mathematik der Gerhard-Mercator Universität, Proceedings of „The Fourth Romanian-German Seminar on Approximation Theory and its Applications" (Eds: H. Gonska, D. Kacsó, L. Beutel), Gerhard-Mercator University Publishing House, Duisburg, SM-DU- 485, pp 26-33, 2000.
6. Adrian Nicolae Branga, *An optimal property of the Chebyshev polynomials*, Proceedings of „The Seventh Symposium of Mathematics and its Applications" (Eds: N. Boja), Politehnica University Publishing House, Timișoara, ISSN 1224- 6069, pp 61-66, 1997.

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